

**Drug Recognition Expert 7-Day  
Instructor Manual  
HS 172 R1/07, January 2007**

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Drug Recognition Expert 7-Day Instructor Manual, HS 172 R1/07, January 2007 DRE3B Feedback Report (Form B Answer Sheet)	211-215	<b>Exam information scoring keys - Employment and Licensing - RCW 42.56.250(1)</b>	Test questions, scoring keys, and other examination data used to administer a license, employment, or academic examination are exempt from production.

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**DRUG EVALUATION AND CLASSIFICATION TRAINING  
"THE DRUG RECOGNITION EXPERT SCHOOL"**

**ADMINISTRATOR'S GUIDE**

JANUARY 2007

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## A. Purpose of this Document

This Administrator's Guide provides an introduction to and an overview of the seven-day classroom training course on drug evaluation and classification. This course is perhaps better known as **The DRE School**. It is the second in a series of three stages of training that, collectively, prepare persons to serve as Drug Recognition Experts (DREs).

Throughout this manual, the term "DRE" is used to designate an individual who is specially-trained to conduct examinations of drug-impaired drivers. In some participating agencies, the term stands for "Drug Recognition Expert"; in others, it means "drug recognition evaluator", and in others, "drug recognition examiner". In addition, some agencies use the term "DRT" -- Drug Recognition Technician -- and others prefer "DRS" -- Drug Recognition Specialist. All of these and similar terms are acceptable and considered synonymous. But for this training program, the standard term is DRE.

It is worth repeating that this seven-day DRE School is neither the beginning nor the end of an officer's preparation to serve as a DRE. No one can be admitted to this course unless he or she has successfully completed the two-day program titled "Preliminary Training for Drug Evaluation and Classification" (the "PRE-School"), or demonstrates that he or she has mastered the subject-matter of that PRE-School via previous training and experience. And, the fact that an officer successfully completes this seven-day program does not qualify him or her to serve as a DRE. He or she still must complete the Certification Phase of training, a supervised on-the-job phase in which the trainee conducts examinations of persons actually under arrest on suspicion of drug impairment.

This seven-day course, then, is only the middle phase of DRE training. But it is a very important phase. It is during this phase that the student will learn to conduct systematic and standardized examinations of persons suspected of drug impairment to determine:

- (1) Whether the suspect actually is impaired; and if so,
- (2) Whether the impairment is drug- or medically-related; and if drugs,
- (3) The broad category or combination of categories of drugs that is the likely cause of the observed impairment.

This Administrator's Guide is concerned only with the second phase of training. During this phase, the student becomes familiar with the various types of drugs that people use and -- too often -- abuse. The student learns how the different drugs affect people, and especially how they affect a person's ability to operate a vehicle. The student learns how the different drugs manifest their presence in an individual. In particular, the student learns how to examine a suspect's eyes and vital signs to detect evidence of various kinds of drugs. By the time the student successfully completes the training, he or she is able to conduct a complete drug evaluation and classification examination, and is able to describe the evidence that the examination will disclose to help determine if the suspect suffers a medical condition or if a suspect is under the influence of a particular category or combination of categories of drugs.

This Administrator's Guide is intended to facilitate planning and implementation of the Drug Evaluation and Classification Classroom Training Program. The Guide overviews the 7-day course of instruction, and the documents and other materials that make up the curriculum package for the course. It describes course administrative requirements and offers guidelines for discharging those requirements satisfactorily. It outlines the preparatory work that must be accomplished by a law enforcement agency before the course can be offered to that agency's personnel. And, it outlines the follow-up work that should be undertaken to ensure that the highest possible quality of instruction continues to be delivered, during all phases of a DRE's training.

Before addressing the details of this classroom training in Drug Evaluation and Classification Program procedures, a few words are appropriate concerning the procedures themselves. **In particular, it is important to make clear what the Drug Evaluation and Classification Program procedures are not:**

- o These procedures are not a field test, or a pre-arrest investigative tool. It is highly unlikely that they could be conducted with adequate care in an outdoors, scene-of-investigation setting. In any event, they are not designed to provide probable cause for a suspect's arrest. Rather, they are a post-arrest investigative tool, intended for application to arrestees for whom there is at least some articulable suspicion of drug use or drug impairment.

- o These procedures do not, generally speaking, disclose what specific drug or drugs the suspect has used. That may seem to be a startling, and upsetting statement. Nevertheless, it is true. What the procedures will do, however, is to disclose (with reasonable accuracy) the broad category or combination of categories that produce distinguishable "signatures" visible to a qualified DRE. Some of the categories include relatively few individual drugs. Others include many drugs. The DRE can tell, usually, if a particular category is present. But except in special circumstances, he or she cannot tell which individual member of that category is the drug in question. Thus for example, a DRE usually will not be able to distinguish a person impaired by diazepam from a person impaired by secobarbital. Will not be able to tell the difference between a codeine-impaired subject and someone under the influence of Demerol. Won't see a difference between someone under the influence of peyote and someone under the influence of psilocybin.
- o The procedures are not a substitute for chemical testing. Laboratory analysis of blood samples by qualified personnel remains an important step in the acquisition of evidence in drug-related cases. The drug evaluation and classification procedures provide articulable bases for requesting a suspect to supply the urine or blood sample; guide the laboratory technicians toward the general categories of drugs they can expect to find in the sample; and, disclose important evidence to supplement the laboratory analysis. But the drug recognition expert does not eliminate the need for the laboratory technician.

None of the foregoing remarks is intended to lessen the importance of the drug evaluation and classification procedures. A cadre of skilled DREs definitely will enhance a department's ability to recognize and convict persons under the influence of drugs. The DRE is a very important "weapon" in law enforcement's anti-drug arsenal. But the DRE is not the entire arsenal.

One final word of introduction: the primary orientation of this course is toward traffic law enforcement. Without doubt, persons under the influence of drugs endanger society in many ways. But it is the danger they cause as drivers of motor vehicles that is of principal interest here. This course assumes that the DRE will devote his or her skills in large part to conducting examinations of suspected impaired drivers. This is not to say that the skills that this training seeks to develop do not have many non-traffic applications. Nevertheless, it is the traffic applications that will receive most of the student's attention.

## B. Overview of the Course

### 1. For whom is the training intended?

This training definitely is not intended for just anyone. The candidate DRE isn't just any police officer, but an officer who already has some very special knowledge and skills, and a very definite commitment to DWI and drug enforcement. And, that officer isn't employed by just any department. Instead, he or she works for a department that has taken pains to provide the command and logistics support needed to allow the DRE to function at maximum effectiveness. And the department has concrete proof of its commitment to deterring impaired driving. Finally, that department doesn't serve just any community or state. Instead, it operates in a jurisdiction that has a legal and political framework that is consistent with effective enforcement of drug-impaired driving violations.

The following lists the prerequisites and desirable characteristics of the students for whom this training is intended; of the departments that employ those students; and, of the communities served by those departments.

#### a. Student Prerequisites

To be considered a qualified candidate for this training, the proposed student must be a law enforcement officer or an employee of a public criminal justice agency or an institution providing law enforcement training, and must:

- o have achieved the learning objectives of the two-day PRE-School;
- o have demonstrated proficiency in the use of the Standardized Field Sobriety Tests (i.e., Horizontal Gaze Nystagmus, walk and turn and one leg stand);
- o have good communications skills, and a demonstrated ability to testify in court;
- o be willing to continue to serve as a DRE for at least two years following completion of the training.

Of course, it is highly desirable, although not essential, that the proposed student have prior knowledge of drug symptomatology and experience in drug enforcement.

b. Departmental Prerequisites

To be considered qualified to submit students for this training, the interested law enforcement agency must:

- o have active drug enforcement and DWI enforcement programs;
- o be pro-active in training officers in Standardized Field Sobriety Testing; also, the training must be consistent with NHTSA guidelines, and the agency must maintain records of officers' Standardized Field Sobriety Testing enforcement activities;
- o have access to adequate chemical testing resources to support the drug evaluation and classification program, and ensure effective prosecution of drug-impaired subjects;
- o have adequate facilities and equipment to support the drug evaluation and classification examinations;
- o have a management information system (MIS) capable of accurately tracking alcohol and drug enforcement activities;
- o demonstrate the firm support and commitment of the chief law enforcement officer and other appropriate officials for the drug evaluation and classification program. Evidence of this support includes but is not limited to:
  - Willingness to assign at least one person of supervisory rank to become a certified DRE and to manage and coordinate the agency's Drug Evaluation and Classification Program.
  - Willingness to upgrade the agency's MIS, as necessary, to track progress of DRE training; drug and DWI arrests; DRE evaluations; results of toxicological examinations; and, case filings and dispositions.
  - Willingness to conduct DRE training in a manner that complies fully with NHTSA curricula and guidelines.
  - Willingness to adopt NHTSA-approved DRE evaluation forms.
  - Willingness to authorize DREs and DRE candidates to devote sufficient time to the DRE function to develop and maintain proficiency.

- Willingness to provide the services of qualified DRE instructors to assist NHTSA in training candidate DREs from other agencies.

c. Legal and Political Prerequisites

To be considered qualified to recommend a law enforcement agency for this training, a state or community must have laws or court-established precedents that :

- o specifically allow for the analysis of chemical samples obtained from persons suspected of impaired driving, to determine the presence and/or concentration of drugs other than alcohol;
- o allow the arresting officer or law enforcement agency to specify the chemical test or tests (e.g., blood, breath or urine) to be given to suspected impaired drivers;
- o specifically facilitate testing for drugs other than alcohol.

In addition, it is desirable that the state or community have laws that:

- o make the fact of the driver's refusal to submit to the test or tests admissible in court;
- o make it an offense to be under the influence of alcohol and/or illicit drugs, whether or not the person is operating a vehicle.

Furthermore, the state's or community's prosecutors must:

- o demonstrate a willingness to introduce Standardized Field Sobriety Test evidence in alcohol/drug cases;
- o express a willingness to participate in this training to become familiar with drug evaluation and classification procedures and related information.

The state's or community's judges must:

- o demonstrate a willingness to accept and consider Standardized Field Sobriety Test evidence in alcohol/drug cases;
- o express a willingness to consider drug evaluation and classification evidence in alcohol/drug cases.

Finally, it is desirable that the jurisdiction's political and community leaders express support for the drug evaluation and classification program.

2. What are the purposes of the course?

The ultimate goal of this course is to help prevent crashes, deaths and injuries by improving enforcement of drug-impaired driving violations. It is not exactly clear how many drug-impaired drivers are on our nation's roads, or how many crashes they cause. But even the most conservative estimates indicate that these drivers kill thousands of Americans, and injure at least tens of thousands of others each year.

3. What will the students get out of this course?

The classroom training course is designed to help the students achieve three broad goals, and eight specific learning objectives.

Goals: The student who successfully completes this phase of DRE training will be able to...

- ... distinguish if an individual is under the influence of a drug or drugs other than alcohol, or under the combined influence of alcohol and other drugs, or suffering from some injury or illness that produces signs similar to alcohol/drug impairment;
- ... identify the broad category or categories of drugs inducing the observable signs of impairment; and,
- ... progress to the Certification Phase of the training.

Objectives: In order to pass this course, the student must be able to...

- ... describe the involvement of drugs in impaired driving incidents;
- ... name the seven categories of drugs and recognize their effects;
- ... describe and properly administer the psychophysical and physiologic evaluations used in the drug evaluation and classification procedures;
- ... document the results of the drug evaluation and classification examination;
- ... properly interpret the results of the examination;

- ... prepare a narrative drug influence report;
- ... discuss appropriate procedures for testifying in typical drug evaluation and classification cases; and,
- ... maintain an up-to-date relevant resume.

4. What subject matter does the course cover?

The course focuses primarily on two broad topics:

- (1) The examinations, observations, measurements, etc. that constitute the drug evaluation and classification procedures.
- (2) The nature, effects, signs and symptoms of each of the seven categories of drugs, and of the combination of categories.

More specifically, the course provides formal presentations on:

- o Drugs in Society and in Motor Vehicle Operation.
- o Development and Effectiveness of the Drug Evaluation and Classification Program Procedures.
- o An Overview of Physiology and Drugs.
- o An Overview of the DEC Program Procedures.
- o Eye Examinations  
(Horizontal Gaze Nystagmus; Vertical Gaze Nystagmus; Lack of Convergence; Estimation of Pupil Size; Pupil Reaction to Light).
- o Vital Signs Examinations  
(Pulse Rate; Blood Pressure; Temperature)
- o The Physician's Desk Reference, and other reference materials.
- o The Seven Categories of Drugs  
(Central Nervous System Depressants; Central Nervous System Stimulants; Hallucinogens; Dissociative Anesthetics; Narcotic Analgesics; Inhalants; Cannabis).
- o Drug Combinations.
- o Narrative Arrest Report in Drug Evaluation Cases.

- o Case Preparation and Testimony.
- o Curriculum Vitae (C.V.) Preparation and Maintenance.

5. What activities take place during the training?

Formal presentations, or lectures, occupy approximately one-half of the course. These presentations cover the content topics outlined earlier. The presentations are supplemented by video tape segments, and by reading material contained in the Student's Manual.

Most of the remainder of the course is devoted to demonstrations and hands-on practice of the drug evaluation and classification procedures. Students repeatedly practice in teams, developing and sharpening their skills in administering eye examinations, vital signs examinations, and other components of the drug recognition expert's job. Students also participate in several test interpretation practice sessions, in which they review sample drug evaluation and classification reports and identify the category or categories of drugs responsible for the "evidence" described in the reports.

The remaining major activity is testing of the students' knowledge and proficiency. A written knowledge examination is administered, at the end of the course. A formal assessment of each student's skill in administering the drug evaluation and classification procedures is conducted during the next-to-last session.

6. How long does the training take?

This classroom training course occupies 7 training days. A typical schedule calls for each class day to begin at 8:00 am and conclude at 5:00 pm. A one-hour lunch period and hourly breaks of 10 minutes are accommodated in that schedule.

The course is divided into thirty-two (32) sessions. Of those, two are review sessions, conducted after normal class hours on the fourth and sixth days of the School. No student can progress to the Certification Phase of training until he or she has attended all mandatory sessions. In the event that some emergency causes a student to miss all or a portion of a session, after-hours tutoring must be conducted for that student prior to his or her enrollment in Certification training.

The titles, durations and sequence of the sessions are given below.

Session I  
Introduction and Overview (1 hour, 50 minutes)

Session II  
Drugs in Society and in Motor Vehicle Operation (50 minutes)

Session III  
Development and Effectiveness of the  
DRE Program (50 minutes)

Session IV  
Overview of Drug Recognition Expert Procedures (2 hours, 30 minutes)

Session V  
Eye Examinations (1 hour, 45 minutes)

Session VI  
Physiology & Drugs: An Overview (2 hours)

Session VII  
Examination of Vital Signs (2 hours)

Session VIII  
Demonstration of the Evaluation Sequence (1 hour, 20 minutes)

Session IX  
Central Nervous System Depressants (1 hour, 45 minutes)

Session X  
Central Nervous System Stimulants (1 hour, 45 minutes)

Session XI  
Practice: Eye Examinations (1 hour)

Session XII  
Alcohol Workshop (1 hour, 45 minutes)

Session XIII  
Physician's Desk Reference and Other  
Reference Sources (30 minutes)

Session XIV  
Hallucinogens (1 hour, 45 minutes)

Session XV Practice: Test Interpretation	(45 minutes)
Session XVI Dissociative Anesthetics (PCP)	(1 hour, 40 minutes)
Session XVII Narcotic Analgesics	(3 hours)
REVIEW SESSION (Mid-Course Review)	(2 hours, 30 minutes)
Session XVIII Practice: Test Interpretation	(45 minutes)
Session XIX Inhalants	(1 hour, 35 minutes)
Session XX Practice: Vital Signs Examinations	(50 minutes)
Session XXI Cannabis	(1 hour, 35 minutes)
Session XXII Overview of Signs and Symptoms	(1 hour)
Session XXIII C.V. Preparation and Maintenance	(50 minutes)
Session XXIV Drug Combinations	(1 hour, 50 minutes)
Session XXV Practice: Test Interpretation	(45 minutes)
Session XXVI Preparing the Narrative Report	(50 minutes)
Session XXVII Practice: Test Administration	(1 hour, 45 minutes)
Session XXVIII Case Preparation and Testimony	(1 hour 30 minutes)

REVIEW SESSION

Review of the DRE School (2 hours, 30 minutes)

Session XXIX

Classifying a Suspect (Role Play) (4 hours)

Session XXX

Transition to the Certification (2 hours, 30 minutes)

Phase of Training

**NOTE: All sessions of this course are absolutely essential. No short-cuts are permissible.**

A model schedule for the seven-day course is given on the next page.

Alternate Schedule #1 combines the Pre-School and Seven-Day School.

Alternate Schedule #2 combines the DWI Detection and Standardized Field Sobriety Testing, Pre-School, and Seven-Day School.

If you use Alternate Schedule #1 or #2, you will need to make copies of those schedules for the students.

## THE DRE SCHOOL - SCHEDULE (page 1)

WEDNESDAY	THURSDAY	FRIDAY
0800-0850 SESSION I: Intro & Overview	0800-0850 SESSION V: (cont)	0800-0850 SESSION IX: CNS Depressants
0850-0900 BREAK	0850-0900 BREAK	0850-0900 BREAK
0900-1000 SESSION I: (cont)	0900-1005 SESSION VI: Physiology & Drugs (Overview)	0900-1000 SESSION IX: (cont)
1000-1010 BREAK	1005-1015 BREAK	1000-1010 BREAK
1010-1030 Pre-Test	1015-1110 SESSION VI: (cont)	1010-1100 SESSION X: CNS Stimulants
1030-1120 SESSION II: Drugs In Society	1110-1120 BREAK	1100-1110 BREAK
1120-1130 BREAK	1120-1200 SESSION VII: Vital Signs	1110-1200 SESSION X: (cont)
1130-1230 SESSION III: Development of DEC Program	1200-1300 LUNCH	1200-1300 LUNCH
1230-1330 LUNCH	1300-1400 SESSION VII: (cont)	1300-1400 SESSION XI: Eye Examinations
1330-1440 SESSION IV: Overview of DEC Procedures	1400-1410 BREAK	1400-1415 BREAK
1440-1450 BREAK	1410-1430 SESSION VII: (cont)	1415-1700 SESSION XII: Alcohol Workshop
1450-1550 SESSION IV: (cont)	1430-1515 SESSION VIII: Demo's of the Evaluation Sequence	
1550-1600 BREAK	1515-1530 BREAK	
1600-1630 SESSION IV: (cont)	1530-1605 SESSION VIII: (cont)	
1630-1730 SESSION V: Eye Examinations	1605-1635 QUIZ NUMBER ONE	

## THE DRE SCHOOL - SCHEDULE (page 2)

MONDAY		TUESDAY		WEDNESDAY		THURSDAY	
0800-0830	SESSION XIII: PDR & Other References	0800-0820	QUIZ NUMBER TWO	0800-0915	SESSION XXIV: Drug Combinations	0800-1000	FINAL EXAM
0830-0915	SESSION XIV: Hallucinogens	0820-0850	SESSION XVII: (cont)	0915-0930	SESSION XXIV: (cont)	1000-1015	BREAK
0915-0930	BREAK	0850-0900	BREAK	1005-1050	SESSION XXV: Practice Test Interp.	1015-1200	SESSION XXIX: Classifying a Suspect-Role Play
0930-1030	SESSION XIV: (cont)	0900-0945	SESSION XVIII: Practice Test Interp.	1050-1100	BREAK	1200-1300	LUNCH
1030-1045	BREAK	0945-1020	SESSION XIX: Inhalants	1100-1200	SESSION XXVI: Narrative Report	1300-1600	ADMINISTRATION OF THE TEST VALIDATION
1045-1130	SESSION XV: Test Interpret.	1020-1030	BREAK	1200-1300	LUNCH	1600-1630	SESSION XXX: Transition to Certification Training
1130-1200	SESSION XVI: Dissociative Anesthetics	1030-1130	SESSION XIX: (cont)	1300-1430	SESSION XXVII: Test Interpretation	1630-1700	Course Critique; Closing Remarks/Certificates
1200-1300	LUNCH	1130-1145	BREAK	1430-1445	BREAK		
1300-1410	SESSION XVI: (cont)	1145-1300	SESSION XX: Vital Signs & Exams	1445-1530	SESSION XXVIII: Case Preparation and Testimony		
1410-1420	BREAK	1300-1400	LUNCH	1530-1545	BREAK		
1420-1515	SESSION XVII: Narcotics	1400-1530	SESSION XXI: Cannabis	1545-1630	SESSION XXVIII: (cont)		
1515-1530	BREAK	1530-1540	BREAK	1630-1700	QUIZ NUMBER FOUR		
1530-1630	SESSION XVII: (cont)	1540-1640	SESSION XXII: Overview of Signs and Symptoms	1700-1800	BREAK		
1630-1730	SESSION XVII: (cont)	1640-1650	BREAK	1800-2000	OPTIONAL REVIEW SESSION #2		
1730-1800	BREAK	1650-1730	SESSION XXIII: C.V. Preparation & Maintenance				
1800-2030	OPTIONAL REVIEW SESSION #1	1730-1800	QUIZ NUMBER THREE				

**ALTERNATE SCHEDULE #1  
COMBINED PRE-SCHOOL AND 7-DAY SCHOOL**

Time	Session Title	D - 7-day DRE School P - Pre-School	Duration
8:00A - 10:00A	Introduction and Overview	D	2hrs
10:00A - 11:00A	Drugs and Society	D	1hr
11:00A - 12:00P	Development and Effectiveness	D	1hr
12:00P - 1:00P	Lunch		1hr
1:00P - 3:30P	Overview of DRE Classification Procedures	D	2.5hrs
3:30P - 5:00P	Psychophysical Tests	P	1.5hrs
	END OF DAY		
8:00A - 11:00A	Eye Examinations	D	3hrs
11:00A - 12:00P	Vital Signs	D	1hr
12:00P - 1:00P	Lunch		1hr
1:00P - 2:30P	Vital Signs (cont.)	D	1.5hrs
2:30P - 4:00P	Overview of Signs and Symptoms	P	1.5hrs
4:00P - 5:00P	Alcohol as a Drug	P	1hr
	END OF DAY		
8:00A - 9:30A	Demonstration of the Evaluation Sequence	D	1.5hrs
9:30A - 12:00P	Physiology of Drugs	D	2.5hrs
12:00P - 1:00P	Lunch		1hr
1:00P - 2:30P	Central Nervous System Depressants	D	1.5hrs
2:30P - 5:00P	Alcohol Workshop All Instructors	P	2.5hrs
	END OF DAY		

Time	Session Title	D - 7-day DRE School P - Pre-School	Duration
8:00A - 9:00A	Central Nervous System Depressants (cont.)	D	1hr
9:00A - 11:30A	Central Nervous System Stimulants	D	2.5hrs
11:30A - 12:00P	Quiz Number One	D	.5hr
12:00P - 1:00P	Lunch		1hr
1:00P - 2:00P	Eye Examinations	D	1hr
2:00P - 2:30P	PDR and Other Drug References	D	.5hr
2:30P - 5:00P	Review and Pre-School Final Examination	P	2.5hrs
	END OF DAY		
8:00A - 10:00A	Hallucinogens	D	2hrs
10:00A - 11:00A	Practice Test Interpretation	D	1hr
11:00A - 12:00P	Dissociative Anesthetics	D	1hr
12:00P - 1:00P	Lunch		1hr
1:00P - 2:00P	Dissociative Anesthetics (cont.)	D	1hr
2:00P - 4:00P	Mid-Course Review All Instructors	D	2hrs
	END OF DAY		
8:00A - 11:00A	Narcotic Analgesics	D	3hrs
11:00A - 12:00P	Practice Test Interpretation	D	1hr
12:00P - 1:00P	Lunch		1hr
1:00P - 2:00P	Inhalants	D	1hr
2:00P - 3:00P	Practice Vital Signs All Instructors	D	1hr
3:00P - 4:00P	Quiz Number Two	D	.5hr
	END OF DAY		

Time	Session Title	D - 7-day DRE School P - Pre-School	Duration
8:00A - 11:00A	Cannabis	D	3hrs
11:00A - 12:00P	Overview of Signs and Symptoms	D	1hr
12:00P - 1:00P	Lunch		1hr
1:00P - 2:00P	Drug Combinations	D	1hr
2:00P - 2:30P	Quiz Number Three	D	.5hr
2:30P - 5:00P	Alcohol Workshop All Instructors	D	2.5hrs
	END OF DAY		
8:00A - 9:00A	Drug Combinations	D	1hr
9:00A - 10:00A	Practice Test Interpretation	D	1hr
10:00A - 11:00A	Preparing the Narrative Report	D	1hr
11:00A - 12:00P	Practice Test Administration All Instructors	D	1hr
12:00P - 1:00P	Lunch		1hr
1:00P - 2:30P	Case Preparation and Testimony	D	1.5hrs
2:30P - 3:00P	Quiz Number Four	D	.5hr
3:00P - 5:00P	Final Course Review All Instructors	D	2hrs
	END OF DAY		
8:00A - 11:00A	Final Examination All Instructors	D	3hrs
11:00A - 12:00P	Transition to Certification Training	D	1hr
12:00P - 1:00P	Lunch		1hr
1:00P - 3:00P	Classifying a Suspect (Role Play) All Instructors	D	2hrs
3:00P - 4:00P	Graduation		2hrs

**ALTERNATE SCHEDULE #2  
COMBINED DWI DETECTION AND STANDARDIZED FIELD SOBRIETY,  
PRE-SCHOOL AND 7-DAY SCHOOL**

WEEK ONE Day One	DURATION
<b>Block 1</b> - <i>Introduction and Overview</i> (merger of DWI Detection and SFST manual session I and the DRE manual session I)  <i>SFST and DRE School Pre-tests</i>	2hrs
<b>Block 2</b> - <i>Definition of drug and overview of the drug categories</i> (modified Pre-School session I, Introduction and Overview)	1hr
<b>Block 3</b> - <i>Detection and Deterrence</i> (SFST manual session II)	1hr
<b>Block 4</b> - <i>The Legal Environment</i> (SFST manual session III)	45min
<b>Block 5</b> - <i>Overview of Detection, Notetaking and Testimony</i> (SFST manual session IV)	45min
<b>Block 6</b> - <i>Phase One: Vehicle in Motion</i> (SFST manual session V)	1hr
<b>Block 7</b> - <i>Phase Two: Personal Contact</i> (SFST manual session VI)	1hr
<b>Block 8 - Phase Three: Pre-Arrest Screening</b> (SFST manual session VII)	30min
DAY TWO	
<b>Block 9</b> - <i>Concepts and Principles of the SFST</i> (SFST manual session VIII, segments A (development and validity) and B (types of nystagmus))	1hr
<b>Block 10</b> - <i>Eye examinations</i> (Pre-School manual session IV, segments A (purposes of the eye examinations) and B 1, 2 and 3 (procedures and clues for HGN, VGN, and Lack of Convergence))	1hr
<b>Block 11</b> - <i>Psychophysical Tests</i> (Pre-School manual session III, segments A and B, Romberg and Walk and Turn)	1hr
<b>Block 12</b> - <i>Psychophysical Tests</i> (Pre-School manual session III, segments C and D, One Leg Stand and Finger to Nose)	1hr
<b>Block 13</b> - <i>SFST Battery Demonstrations</i> (SFST manual session IX, plus Romberg and Finger to Nose, utilizing the DRE order)	1hr
<b>Block 14</b> - <i>SFST Dry Run Practice</i> (SFST manual session X, plus Romberg and Finger to Nose, in the DRE order)	1hr
<b>Block 15</b> - <i>Alcohol Correlation Study #1</i> (merger of SFST manual session XI and Pre-School manual session V)	2hrs

<b>DAY THREE</b>	<b>DURATION</b>
<b>Block 16 - <i>Alcohol as a Drug</i></b> (Pre-School manual session VIII)	2hrs
<b>Block 17 - <i>Overview of Signs and Symptoms</i></b> (Pre-School manual session VII)	1hr
<b>Block 18 - <i>Eye Examinations</i></b> (Pre-School manual session IV, beginning with B4 (estimation of pupil size) through 5 (reaction to light)).	1hr
<b>Block 19 - <i>Drugs in Society and in Motor Vehicle Operation</i></b> (DRE manual session II)	1hr
<b>Block 20 - <i>Development and Effectiveness</i></b> (DRE manual session III)	2hrs
<b>Block 21 - <i>Review Session - SFST curriculum</i></b>	1hr
<b>DAY FOUR</b>	
<b>Block 22 - <i>SFST Course Final Examination</i></b> (SFST manual session X)	30min
<b>Block 23 - <i>Eye Examinations - Practice Session</i></b> (merger of the practice sessions in DRE manual session XI and Pre-School manual session IV)	30min
<b>Block 24 - <i>Examination of Vital Signs</i></b> (merger of Pre-School manual session VI and DRE manual session VII)	3hrs
<b>Block 25 - <i>Overview of Drug Evaluation and Classification Procedures</i></b> (merger of Pre-School manual session II and DRE manual session IV)	1hr
<b>Block 26 - <i>Demonstrations of the Evaluation Sequence</i></b> (DRE manual session VIII)	2hrs
<b>Block 27 - <i>Review Session - Pre-School Curriculum</i></b>	1hr
<b>DAY FIVE</b>	
<b>Block 28 - <i>Pre-School Final Examination</i></b> (Pre-School manual session X)	30min
<b>Block 29 - <i>Physiology and Drugs: An Overview</i></b>	4hrs
<b>Block 30 - <i>SFST Report Writing</i></b> (SFST manual session XIII and SFST practice session)	1hr, 30min
<b>Block 31 - <i>Alcohol Correlation Study #2</i></b> (merger of Pre-School manual session V and SFST manual session XIV; includes SFST Proficiency Test)	2hrs

<b>WEEK TWO DAY SIX</b>	<b>DURATION</b>
<i>Quiz #1</i>	30min
<b>Block 32</b> - <i>Physician's Desk Reference, CPS and Additional Resources</i> (DRE manual session XIII)	2hrs
<b>Block 33</b> - <i>Methods of Administration and Elimination</i> (Note: This is not a current standard manual session, but is an LAPD curriculum addition)	30min
<b>Block 34</b> - <i>Central Nervous System Depressants</i> (DRE manual session IX)	2hrs
<b>Block 35</b> - <i>Central Nervous System Stimulants</i> (DRE manual session X)	3hrs
<b>DAY SEVEN</b>	
<i>Quiz #2</i>	30min
<b>Block 36</b> - <i>Hallucinogens</i> (DRE manual session XIV)	2hrs
<b>Block 37</b> - <i>Practice: Test Interpretation</i> (DRE manual session XV)	1hr
<b>Block 38</b> - <i>Dissociative Anesthetics</i> - (DRE manual session XVI)	2hrs
<b>Block 39</b> - <i>Narcotic Analgesics</i> (DRE manual session XVII, including examination of injection marks)	2hrs, 30min
<b>DAY EIGHT</b>	
<i>Quiz #3</i>	30min
<b>Block 40</b> - <i>Inhalants</i> (DRE manual session XIX)	1hr, 30min
<b>Block 41</b> - <i>Practice: Test Interpretation</i> (DRE manual session XVIII)	1hr
<b>Block 42</b> - <i>Cannabis</i> (DRE manual session XXI)	2hrs
<b>Block 43</b> - <i>C.V. Preparation and Maintenance</i> (DRE manual session XXIII)	1hr
<b>Block 44</b> - <i>Practice: Vital Signs</i> (DRE session XX)	30min
<b>Block 45</b> - <i>Alcohol Correlation Study #3</i> (DRE manual session XII)	1hr, 30min
<b>DAY NINE</b>	
<i>Quiz #4</i>	30min
<b>Block 46</b> - <i>Overview of Signs and Symptoms</i> (DRE manual session XXII)	1hr
<b>Block 47</b> - <i>Drug Combinations</i> (DRE manual session XXIV)	2hrs
<b>Block 48</b> - <i>Practice Session: Eye Examinations</i> (Note: Students practice the pupil size examinations in this segment. There is no standard lesson plan for this segment.)	1hr

<b>DAY NINE (cont)</b>	
<b>Block 49 - Practice: Test Interpretation</b> (DRE manual session XXV)	1hr
<b>Block 50 - Practice: Test Administration</b> (DRE manual session XXVII)	30min
<b>Block 51 - Review of the DRE School</b> <i>Quiz #5 is also incorporated into this session.</i>	2hrs
<b>DAY TEN</b>	
<b>Block 52 - DRE School Final Examination</b> (DRE manual session XXX)	1hr
<b>Block 53 - Preparing the Narrative Report</b> (DRE manual session XXVI)	1hr
<b>Block 54 - Case Preparation and Testimony</b> (DRE manual session XXVIII)	1hr
<b>Block 55 - Classifying a Suspect (Role Plays)</b> (DRE manual session XXIX)	3hrs
<b>Block 56 - Transition to Certification Phase of Training</b> (DRE manual session XXX)	1hr
<b>Block 57 - Graduation - Presentation of Certificates and Achievement Awards</b> (Note: Course critiques are finished during this segment.)	1hr

**ALTERNATE SCHEDULE #3  
ACCELERATED DRE SCHOOL**

Week One				
Day	Time	Manual	Session/Segment	Title
<b>Monday</b>	(1) 1000 to 1200	SFST DRE	Session I Session I	<i>Introduction &amp; Overview (SFST Script and Matrix Handouts); student/instructor introductions</i>
	1200 to 1300			<i>SFST &amp; DRE Pre-tests</i>
	(2) 1300 to 1400	Pre-School	Session I	<i>Introduction</i>
	1400 to 1500			Lunch Break
	(3) 1500 to 1545	SFST	Session II	<i>Detection and Deterrence</i>
	(4) 1545 to 1630	SFST	Session III	<i>The Legal Environment</i>
	(5) 1630 to 1730	SFST	Session IV	<i>Overview of Detection, Notetaking &amp; Testimony</i>
<b>Tuesday</b>	(6) 1730 to 1815	SFST	Session V	<i>Phase One: Vehicle in Motion &amp; Explanation of Divided Attention Impairment</i>
	(7) 1815 to 1900	SFST	Session VI	<i>Phase Two: Personal Contact</i>
	(8) 1200 to 1230	SFST	Session VII	<i>Phase Three: Pre-Arrest Screening (modified PBT Session)</i>
	(9) 1230 to 1330	SFST	Session VIII/A, B	<i>Concepts and Principles of the SFST (development and types of nystagmus)</i>
	(10) 1330 to 1400	Pre-School	Session IV/A & B, 1, 2, & 3	<i>Eye Exams (Purpose of Eye examinations, procedures and clues for HGN, VGN and LOC)</i>
	(11) 1400 to 1500	Pre-School	Session III/A & B	<i>Romberg &amp; Walk and Turn</i>
	(12) 1500 to 1600	Pre-School	Session III/C&D	<i>One Leg Stand &amp; Finger to Nose</i>
	1600 to 1700			Lunch Break
	(13) 1700 to 1800	SFST	Session IX	<i>SFST Test Battery Demonstrations (includes Romberg, Finger to Nose in DRE order)</i>
	(14) 1800 to 1900	SFST	Session X	<i>SFST "Dry Run" Practice (includes Romberg, Finger to Nose, in DRE order)</i>
(15) 1900 to 2100	SFST Pre-School	Session IX Session V	<i>Alcohol Correlation Study #1 - coordinator; wrap-up; bartender; log; vitals</i>	

<b>Wednesday</b>	(16) 1000 to 1200	Pre-School	Session VIII	<i>Alcohol as a Drug</i> (Magic Mountain Video alcohol driving study)
	(17) 1200 to 1300	Pre-School	Session VII	<i>Overview of Signs and Symptoms</i> (distribution of blank drug matrix)
	(18) 1300 to 1400	Pre-School	Session IV/B4, 5	<i>Eye Exams</i> (pupil size & reaction to light)
	1400 to 1500			Lunch Break
	(19) 1500 to 1600	DRE	Session II	<i>Drugs in Society and Motor Vehicle Operation</i>
	(20) 1600 to 1800	DRE	Session III	<i>Development and Effectiveness</i>
	(21) 1800 to 1900			<i>SFST Review Session</i>
<b>Thursday</b>	(22) 1000 to 1030	SFST	Session X	<i>Final Examination</i>
	(23) 1030 to 1100	DRE Pre-School	Session XI Session IV	<i>Eye Exams: Practice Session</i>
	(24) 1100 to 1300	Pre-School DRE	Session VI Session VII	<i>Examination of Vital Signs</i>
	1300 to 1400			<i>Vital Signs: Practice</i>
	1400 to 1500			Lunch Break
	(25) 1500 to 1600	Pre-School DRE	Session II Session IV	<i>Overview: Drug Evaluation and Classification Process</i> (LETN & Chevron tapes)
	(26) 1600 to 1800	DRE	Session VIII	<i>Demonstrations of the Evaluation Sequence</i>
	(27) 1800 to 1900			<i>Pre-School Review Session</i>
<b>Friday</b>	(28) 1200 to 1230	Pre-School	Session X	<i>Final Examination</i>
	(29) 1230 to 1530	DRE	Session VI	<i>Physiology and Drugs: An Overview</i>
	1530 to 1630			Lunch Break
	1630 to 1730			<i>Physiology and Drugs: Physiological Pursuit</i>
	(30) 1730 to 1800	SFST	Session XIII	<i>Report Writing</i>
	1800 to 1900			<i>SFST Practice</i>
	(31) 1900 to 2100	Pre-School SFST	Session V Session XIV	<i>Alcohol Correlation Study #2 &amp; SFST Proficiency Test</i> - coordinator; wrap-up; log; vitals; bartender

<b>Week Two</b>				
<b>Day</b>	<b>Time</b>	<b>Manual</b>	<b>Session/Segment</b>	<b>Title</b>
<b>Monday</b>	1000 to 1030			<i>DRE Quiz #1</i>
	(32) 1030 to 1230	DRE	Session XIII	<i>Physician's Desk Reference &amp; Additional Resources</i>
	(33) 1230 to 1330	non-manual session		<i>Methods of Administration &amp; Elimination</i>
	(34) 1330 to 1400	DRE	Session IX	<i>CNS Depressants</i>
	1400 to 1500			Lunch Break
	1500 to 1630	DRE	Session IX	<i>continued</i>
	(35) 1630 to 1900	DRE	Session X	<i>CNS Stimulants</i>
<b>Tuesday</b>	1000 to 1030			<i>DRE Quiz #2</i>
	1030 to 1130	DRE	Session X/E	<i>continued</i>
	(36) 1130 to 1230	DRE	Session XIV	<i>Hallucinogens</i>
	1230 to 1300	DRE	Session XIV	<i>continued</i>
	(37) 1300 to 1400	DRE	Session XV	<i>Practice: Test Interpretation (includes Clinton Williams evaluation)</i>
	1400 to 1500			Lunch Break
	(38) 1500 to 1600	DRE	Session XVI	<i>Dissociative Anesthetics</i>
	1600 to 1700	DRE	Session XVI/E	<i>continued</i>
	(39) 1700 to 1900	DRE	Session XVII/ includes E	<i>Narcotic Analgesics</i>
<b>Wednesday</b>	1200 to 1230			<i>DRE Quiz #3</i>
	1230 to 1330	DRE	Session XVII	<i>Injection Marks Examination</i>
	(40) 1330 to 1430	DRE	Session XIX	<i>Inhalants</i>
	(41) 1430 to 1530	DRE	Session XVIII	<i>Practice: Test Interpretation</i>
	(42) 1530 to 1700	DRE	Session XXII	<i>Cannabis</i>
	1700 to 1800			Lunch Break
	(43) 1800 to 1900	DRE	Session XXIII	<i>C.V. Preparation &amp; Maintenance</i>
	(44) 1900 to 1930	DRE	Session XX	<i>Practice: Vital Signs</i>
	(45) 1930 to 2100	DRE	Session XII	<i>Alcohol Correlation Study #3 - coordinator; wrap-up; vitals; bartender; log</i>

<b>Thursday</b>	1000 to 1030			<i>DRE Quiz #4</i>
	(46) 1030 to 1130	DRE	Session XXII	<i>Overview of Signs &amp; Symptoms</i>
	(47) 1130 to 1330	DRE	Session XXIV	<i>Drug Combinations</i>
	(48) 1330 to 1430	non- manual session		<i>Practice: Eye Exams</i>
	1430 to 1530			Lunch Break
	(49) 1530 to 1630	DRE	Session XXV	<i>Practice: Test Interpretation</i>
	(50) 1630 to 1700	DRE	Session XXVII	<i>Practice: Test Administration</i>
	(51) 1700 to 1900			<i>DRE Full Course Review "Your Brain on DRE"</i>  <i>DRE Quiz #5</i>
<b>Friday</b>	(52) 1000 to 1100			<i>Final Examination: DRE School</i>
	(53) 1100 to 1200	DRE	Session XXVI	<i>Preparing the Narrative Report</i>
	(54) 1200 to 1300	DRE	Session XXVIII	<i>Case Preparation &amp; Testimony</i>
	1300 to 1400			Lunch Break
	(55) 1400 to 1700	DRE	Session XXIX	<i>Classifying a Suspect: Role Plays - coordinator</i>
	(56) 1700 to 1800	DRE	Session XXX	<i>Transition to the Certification Phase of Training</i>
	(57) 1800 to 1900			<i>Graduation: Presentation of Certificates and Achievement Awards</i>

### C. Overview of the Curriculum Package.

In addition to this Administrator's Guide, the curriculum package for the classroom training program in DEC Program training consists of the following documents and materials:

- o Instructor's Lesson Plans Manual
- o Audio-Visual Aids
- o Student's Manual
- o Set of Drug Evaluation Exemplars

#### 1. Instructor's Lesson Plans Manual

The Instructor's Lesson Plans Manual is a complete and detailed blueprint of what the course covers and of how it is to be taught. It is organized into thirty-two modules, with each module corresponding to one of the training sessions.

Each module consists of a cover page, an outline page, the lesson plans themselves, and master (paper) copies of visual aids referenced in the lesson plans.

The cover page presents the module's (or session's) title and the estimated instructional time required to complete the module.

The outline page lists the specific performance objectives of the module, i.e., the capabilities that the participants will achieve once they have successfully completed the module. The outline page also lists the module's major content segments and the major types of learning activities that are employed during the module.

The lesson plans themselves are arranged in a standard, side-by-side content/instructional notes format. The "content" (left-side) of each page outlines what is to be taught. This content includes:

- o facts
- o concepts
- o procedural steps
- o rules and regulations
- o etc.

The "Instructional Notes" (right-side) portion of each page specifies how the content is to be taught. That is, it defines how the instructor is to present the material and involve the students in the presentation and ensure that they understand and assimilate the material. Typical entries under the "Instructional Notes" column include:

- o the approximate amount of time to be devoted to each major content segment
- o indications of what visual aids are to be used and when they are to be used
- o questions to be posed to students to involve them actively in the presentation
- o indications of points requiring special emphasis
- o guidelines for conducting particular demonstrations to clarify how drug examinations are to be performed
- o specifications of group exercises and other methods of involving students more actively in the lesson

The Instructor's Lesson Plans Manual serves, first, as a means of preparing the instructor to teach the course. He or she should review the entire set of lesson plans and become familiar with the content and develop a clear understanding of how the course "fits together". He or she is also expected to become thoroughly familiar with each module that he or she is assigned to teach, to prepare acetate copies of the visual aids, to assemble all "props" and other instructional equipment referenced in the lesson plans, and to augment the "instructional notes" as necessary to ensure that his or her own teaching style is applied to the content.

Subsequently, the Instructor's Lesson Plans Manual serves as an in-class reference document for the instructor, to help him or her maintain the sequence and pace of presentations and other learning activities.

It is worth emphasizing that the Instructor's Lesson Plans Manual does not contain the text of a speech. Although its outlines of content information are fairly well detailed and comprehensive, those outlines are not to be read verbatim to the participants. This training program is intended to be a dynamic, highly interactive learning experience in which the students are active participants. It should not be permitted to degenerate into a series of mere lectures.

## 2. Audio-Visual Aids

Five types of audio-visuals are used in this course:

- o wall charts
- o dry-erase board/flip-chart presentations
- o "visuals" (overhead transparencies/PowerPoint)
- o 35mm photographic slides
- o videos

The wall charts are permanently-displayed items. They consist of sketches with brief captions, intended to depict major themes and segments of the training. The wall charts should be handmade, using colored marker pens, on flip chart sheets. The sketches and text must be large enough so that they may be viewed from any seat in the classroom.

Standard-sized paper copies of the suggested wall charts are included in the Instructor's Lesson Plans Manual. The copies may be photocopied onto acetate, to produce overhead transparencies. The transparencies, in turn, can be projected onto flip chart sheets and traced with colored markers, to produce the wall charts themselves.

Wall charts should be placed high on the far left and right sides of the classroom's front wall, or on the side walls, where they will be visible without distracting from the screen or dry-erase board.

The dry-erase board/flip chart presentations, as recommended in the lesson plans, are self-explanatory.

The "visuals" (overhead transparencies/PowerPoint slides) are simple displays of graphic and/or narrative material that emphasize key points and support the instructor's presentation. Paper copies of those "visuals" are found in various modules of the Instructor's Lesson Plans Manual. Those paper copies must be photocopied onto acetate to produce the overhead transparencies. Each "visual" is numbered to indicate the session to which it belongs and its sequence within that session. For example, Visual VII-3 would be the third overhead transparency used in Session VII.

The videos consist of a number of segments that demonstrate the drug evaluation and classification procedures, and that exhibit the kinds of evidence associated with various categories of drugs. Some of these segments feature persons who are actually under the influence of various drugs and who have been arrested for offenses relating to their drug impairment.

### 3. Student's Manual

The Student's Manual is the basic textbook and study source for the course. It provides a session-by-session summary of the subject matter, and a list of study topics to help the students assimilate the material.

During the course, the Student's Manual will be primarily useful for previewing the sessions, and for studying the subject matter in preparation for the final knowledge and proficiency examinations. After the classroom training is completed, the student will find that the manual is a useful reference document, especially during the Certification Phase of training.

Students are expected to be familiar with all of the contents of their Student Manual. Instructors must encourage the students to study the manual carefully as they progress through the school. Note: Students are expected to be able to answer the "topics for study" review questions that appear at the end of various sections of their Student Manual.

### 4. Set of Drug Evaluation Exemplars

The exemplars are the documented results of simulated drug evaluation and classification examinations. A standardized reporting form is used for the exemplars. This is the same form that the students use as a test recording instrument when they practice administering and documenting the drug evaluation and classification examination.

The exemplars support learning activities that take place during eleven sessions:

- o Sessions IX, X, XIV, XVI, XVII, XIX, and XXI cover the seven individual drug categories. Several exemplars have been prepared for each session, to illustrate the kinds of clues that can be expected when the examination is conducted for a person under the influence of that category. For example, the exemplars designed for Session IX illustrate the results of typical examinations of suspects under the influence of CNS depressants.

These exemplars will be found in the Instructor's and Student's Manual.

- o Session XV, XVIII and XXV are "Test Interpretation Practice" sessions. Students work in small groups, reviewing exemplars and determining, from the documented "evidence" they contain, what category or categories of drugs are present in each case. These exemplars also will be found in the Student's Manual.
- o Session XXIX is the "role play" practice session. Instructors serve as "test subjects". Students work in small groups, administering the entire drug evaluation and classification examination to each instructor. Each instructor uses an exemplar to inform the students as to what data they should record at each stage of the examination. For example, as part of the examination, the students will actually measure an instructor's blood pressure. The instructor will observe the students' technique and offer constructive criticism. The instructor will inquire as to the pressure readings that the students obtain. But, the instructor will tell the students to record the blood pressure readings documented on his or her assigned exemplar. Subsequently, the students must review their completed exemplars and determine what category or categories of drugs the instructor was "simulating". These exemplars are found at the end of the lesson plans for Session XXIX.

#### D. General Administrative Requirements

##### 1. Facility Requirements

Several types of facilities are needed to support this training. First, a standard classroom is required. This should provide comfortable seating and adequate desk/table space for each student, and should be equipped with a large screen, projectors, dry-erase boards and/or flip-charts and video players and monitors. All visuals should be readily and fully visible from all seating locations. The classroom should also provide adequate unobstructed space to allow the instructors to demonstrate examination procedures. A "U"-shaped seating arrangement is preferable for the classroom.

A large, open area also is needed to support the hands-on practice sessions. A gymnasium or similar facility will serve this need very well. Ideally, it should be possible to control the lighting in this practice facility to the point of total darkness, to demonstrate and practice key elements of the drug evaluation and classification procedures that take place in a darkroom.

A separate room must be available, ideally adjacent to the gymnasium or practice facility. This room will serve as the "staging area" for the volunteer drinkers who will participate in the alcohol workshop (Session XII).

Another separate room must be provided to serve as the instructors' "office", i.e., the place where they can prepare for their teaching assignments, store materials, etc.

## 2. Special Instructional Equipment and Personnel.

For the alcohol workshop, volunteer drinkers must be available. The volunteer drinkers cannot be members of the class. There should be one volunteer for every three or four students. For example, if there are 25 students in the class, there should be 7-9 volunteer drinkers. Sufficient alcohol, mixers, cups, napkins, ice, etc. must be provided. Adequate breath testing devices must be available to provide for monitoring volunteers' blood alcohol concentrations. At least three people must be assigned to monitor and escort the volunteers; ideally, each volunteer should have his or her own monitor.

Note: Every volunteer must read and sign the "Statement of Informed Consent" prior to receiving any alcohol. Any person who refuses to sign the Statement cannot serve as a volunteer drinker.

For the hands-on practice sessions involving eye examinations, at least one pupillometer and one onset angle template should be provided for every two students. Ideally, each student should have his or her own pupillometer and template. The pupillometer should be capable of measuring pupil diameters across the range from 1.0 mm to 9.0 mm, in one-half millimeter increments. The template should display angles between 30 and 50 degrees, in 5 degree increments.

For the hands-on practice sessions involving vital signs examinations, a sphygmomanometer and stethoscope must be provided for every three students. Ideally, each student should have his or her own. Also, it is desirable that several training stethoscopes be available. These are stethoscopes that have two sets of earpieces, and allow an instructor to monitor exactly what the student is hearing.

Each student should be provided with a penlight suitable for conducting the various eye examinations.

At the beginning of DRE training, it is essential that every student have his or her own full complement of DRE equipment. In addition, every student must have access to a PDR, and ideally should own a PDR.

### 3. Instructor Qualifications.

The principal instructors for this course must be IACP-certified Drug Recognition Expert Instructors. That means that they (1) hold currently-valid certificates as DREs; (2) have completed the NHTSA DRE Instructor Training Course; and, (3) have completed the required delivery of both classroom and certification training, under the supervision of teacher-trainers. Only a certified DRE instructor can credibly teach:

- o Session IV (Overview of Drug Evaluation and Classification Procedures)
- o Session V (Eye Examinations)
- o Session VIII (Demonstrations of the Evaluation Sequence)
- o The segment entitled "Expected Results of the Evaluation" in Sessions IX, X, XIV, XVI, XVII, XIX XXI and XXIV (The sessions covering individual drug categories and combinations of categories)
- o The hands-on practice sessions (Sessions XI, XX, XVIII and XXIX)
- o The Test Interpretation Practice Sessions (Sessions XV, XVII and XXV)
- o Session XXVI (Narrative Drug Report)
- o Session XXIII (C.V. Preparation and Maintenance)

The above-listed sessions and segments constitute approximately 75% of the course.

A qualified DRE could instruct the remaining 25% of the course, as well. However, some agencies may wish to enlist instructors with special credentials for certain blocks of instruction. For example, a physician would be well qualified to teach Session VII (Examination of Vital Signs), and a prosecutor might be a good choice as the instructor for Session XXVIII (Case Preparation and Testimony), and for Session XXVI (Preparing the Narrative Report).

In addition to their occupational competencies, all instructors must be qualified teachers. They need to understand, and be able to apply, fundamental principles of instruction. Perhaps most importantly, they need to be competent coaches. Much of this classroom training is devoted to hands-on practice. The quality of coaching will have a major impact on the success of those practice sessions. It is highly recommended that every instructor be a graduate of the NHTSA DRE Instructor Training School.

For the hands-on practice sessions, there should be at least one instructor for every three students, to permit adequate monitoring and coaching.

#### 4. Class Size Considerations.

The recommended maximum class size for this course is 25 students. Larger classes make it difficult to devote sufficient attention to each student to ensure that he or she develops examination skills to a level sufficient to progress to the Certification Phase. The preferred class size is 15-20 students.

### E. Course Planning and Preparation Requirements

The fundamental preparatory step for any law enforcement agency desiring this training is to ensure that the agency and its community or state satisfy the prerequisites outlined in Section B, part 1 of this Administrator's Guide.

The next step is to select a cadre of appropriate candidate DREs. Make sure that each candidate satisfies the student prerequisites outlined in Section B.

The third step is to provide preliminary training to the candidate DREs. The National Highway Traffic Safety Administration (NHTSA) has developed a curriculum to support preliminary training for potential DREs. This training enables the candidates to become familiar with, and to start to develop skills in, the vital signs examinations and other elements of the drug evaluation and classification procedures.

The next step will be to schedule the class. States with well-established DEC Programs, including a cadre of experienced DRE instructors, are expected to plan and manage their own DRE Schools. However, they can receive the services of additional (in-State and out-of-State) instructors, at NHTSA's expense. And of course, NHTSA supplies Student Manuals and other standard instructional materials at no charge. For States whose DEC Programs are new or developing, NHTSA assists with the planning and management of the Schools, and supplies most or all instructors.

In general, this classroom training course is conducted at facilities operated by the delivery agency or at other suitable locations. Departments are responsible for all costs associated with transporting their personnel to and from the training site, and for their lodging and subsistence during the training.

#### F. Examinations of Students' Knowledge and Proficiency

It is very important to test the students' knowledge and skill development. Testing in this course is conducted for two principle reasons: (1) to assess students' progress, and identify deficiencies that need correction; and, (2) as a learning activity for the students. Knowledge testing starts in the very first session of the course, when a PRE-Test is given. After the students have finished the PRE-Test, you will give them a new, blank copy of the test, so that they can use it as a study guide throughout the course. Five formal quizzes also will be given. The first of these is given at the start of the third day of the school. The second quiz is given at the start of the fifth day, and the third quiz at the start of the sixth day. The fourth quiz is given at the end of the sixth day. The fifth quiz is given during the Optional Review Session that occurs during the evening of the sixth day. In addition, a self-study quiz is provided in the Student's Manual.

The most important knowledge test, of course, is the Final Examination. It is given on the afternoon of the final day of the School. The student must achieve a grade of at least 80% in order to progress to certification training. If a student fails the examination, the National minimum Standards permit one additional attempt. The additional attempt must be based on an examination approved for that purpose by NHTSA and IACP, and cannot occur earlier than two weeks, nor later than four weeks, following completion of the DRE School.

A skill examination also occurs during the next-to-last session of the DRE School. That is the session in which the students will examine instructors who are "playing the roles" of drug-impaired person. A Proficiency Examination Checklist (found in Session XXX of this Manual) is used to evaluate the students' performance.

#### G. Follow-Up Requirements

Upon completion of the classroom training, students will commence the Certification Phase, i.e., the application of drug evaluation and classification procedures in an actual enforcement context. During certification training, the students are supervised by certified DRE instructors. Under the national minimum standards for certification established by the International Association of Chiefs of Police (IACP), each student must participate in conducting at least 12 drug examinations, at least six of which he or she must personally administer.

The student must also identify at least three of the seven drug categories in his or her examinations. And, toxicologic specimens must be submitted from at least nine of the examined subjects, and analysis of those specimens must corroborate the student's opinion for at least 75% of the specimens submitted. Most importantly, the numbers and percentages cited here are minimum requirements: no student can be certified as a DRE until two instructors attest that he or she qualifies for certification.

The training delivery agency will compile the information needed to support an assessment of the classroom training each time it is conducted. This assessment will be based primarily on the (anonymous) Student's Critique Form, which appears in Session XXX of the Instructor's Lesson Plans Manual. Guidelines for preparing a post-course evaluation report based on the Student's Critique Form are covered in Section H.

#### H. Guidelines for Preparing Post-Course Evaluation

A standard NHTSA/TSI participant's critique form is provided to document participant's initial ratings of course content and activities. The form is divided into eight parts:

- A. Workshop/Seminar Objectives
- B. Course Activities
- C. Course Design
- D. Topic Deletions
- E. Topic Additions
- F. Ability to Identify Drug Categories
- G. Overall Quality of the Course
- H. Quality of Instruction
- I. Final Comments or Suggestions

The following instructions are provided to guide review, analysis and interpretation of participant's comments:

## Section A - Workshop/Seminar Objectives

Determine raw tabulation and percentages for each objective:

- o If the "no"/"not sure" responses total 20% or more, some explanation should be provided. Assess the problem and explain or recommend changes as appropriate.

## Section B - Course Activities

The rating choices are as follows:

1. Very Important
2. Somewhat Important
3. Un-Important
4. Not Sure

### Analysis Procedures

Step 1: Tabulate total number of responses in each category for each activity.

Step 2: The following values should be applied:

- o +2 for each "very important"
- o 0 for each "somewhat important"
- o -2 for each "un-important"
- o -1 for each "not sure"

Step 3: Determine total number of points for each activity.

Step 4: Divide the totals by twice the number of votes (N).

Step 5: The result is the final rating.

Any rating of +.5 or higher indicated the participant's consensus was that the activity (segment) was "very important".

If the rating is below +.2, some explanation should be provided...assess the reason(s) and explain or recommend changes as appropriate.

If the rating is below 0 there is a serious problem...assess the problem(s) and explain or recommend changes as appropriate.

### **Section C - Course Design**

Determine raw tabulation and percentage for each statement.

Some comment or explanation should be provided if the inappropriate ("agree"/"disagree") or "not sure" responses exceed 20%.

### **Section D & E - Topic Deletion/Additions**

Prepare a summary of responses for each section. Comment as appropriate.

### **Section F - Ability to Identify Drug Categories**

Total the numerical ratings, and divide by the number of responding participants. That gives the average rating for the section, on the scale from 1 ("very confident") to 3 ("not confident"). Comment as appropriate.

### **Section G - Overall Quality of the Seminar**

Total the numerical ratings, and divide by the number of responding participants. That gives the average rating for the seminar, on the scale from 1 ("poor") to 5 ("excellent"). Comment as appropriate.

### **Section H - Quality of Instruction**

For each instructor, tabulate his or her numerical ratings, and divide by the number of responding participants. Comment as appropriate.

### **Section I - Final Comments**

Prepare a summary of responses for each section. Comment as appropriate.

NOTE: A copy of the completed post course evaluation report should be forwarded to the appropriate State Highway Safety Office and/or NHTSA Region Office as they are completed. These reports will be used to assist in determining what revisions are needed to the course curriculum in the future when periodic course reviews are conducted by the NHTSA.

#### **I. Requests for Information, Assistance or Materials**

Departments interested in this program should contact their state's Office of Highway Safety. Formal requests for this training should come from the State Highway Safety Office, and should be directed to the cognizant NHTSA Regional Office.

## PRINTING AND COLLATING GUIDE

Title DRE 7-Day School Instructor Manual - 1/07 Edition							
Cover	Prints				Stock	Ink	Size
	1	2	3	4			
Description	Number of Pages	First Printed Page	Last Printed Page	Blank Page	Size of Page	Special Instructions or Stock	
<b>Cover</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>per guide</b>	<b>White Index, Color Copy</b>	
<b>Spine</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>per guide</b>		
<b>Tab - Administrator's Guide</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>		
Acknowledgments	1	1		1	8 ½ x 11		
Cover Page	1	1		1	8 ½ x 11		
Table of Contents	1	1		1	8 ½ x 11		
Administrator Guide Contents	37	1	37	1	8 ½ x 11		
<b>Tab - Session I</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>		
Cover Page/Objectives	2	1	2		8 ½ x 11		
Contents	9	I-1	I-9	1	8 ½ x 11		
PPT Slides	3	1	3	1	8 ½ x 11		
Pre-Test	7	1	7	1	8 ½ x 11		
Quiz Number One	6	1	6		8 ½ x 11		
Quiz Number Two	7	1	7	1	8 ½ x 11		
Quiz Number Three	6	1	6		8 ½ x 11		
Quiz Number Four	6	1	6		8 ½ x 11		
Quiz Number Five	11	1	11	1	8 ½ x 11		
Instructor's Guidelines	2	1	2		8 ½ x 11		
Final Exam Form A Cover Page	1	1		1	8 ½ x 11		
Form A	22	1	22		8 ½ x 11		
Form A Answer Sheet	5	1	5	1	8 ½ x 11		
Final Exam Form B Cover Page	1	1		1	8 ½ x 11		
Form B	21	1	21	1	8 ½ x 11		
Form B Answer Sheet	5	1	5	1	8 ½ x 11		
Glossary of Terms	14	1	14		8 ½ x 11		
<b>Tab - Session II</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>		
Cover Page/Objectives	2	1	2		8 ½ x 11		
Contents	16	II-1	II-16		8 ½ x 11		
PPT Slides	3	1	3	1	8 ½ x 11		

<b>Tab - Session III</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	18	III-1	III-18		8 ½ x 11	
PPT Slides	3	1	3	1	8 ½ x 11	
Attachment A	6	1	6		8 ½ x 11	
Attachment B	28	1	28		8 ½ x 11	
Attachment C	5	1	5	1	8 ½ x 11	
<b>Tab - Session IV</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	32	IV-1	IV-32		8 ½ x 11	
PPT Slides	7	1	7	1	8 ½ x 11	
Drug Influence Evaluation	1	1		1	8 ½ x 11	
<b>Tab - Session V</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	23	V-1	V-23	1	8 ½ x 11	
PPT Slides	3	1	3	1	8 ½ x 11	
<b>Tab - Session VI</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	29	VI-1	VI-29	1	8 ½ x 11	
PPT Slides	4	1	4		8 ½ x 11	
Instructions	2	1	2		8 ½ x 11	
Questions	5	1	5	1	8 ½ x 11	
<b>Tab - Session VII</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	18	VII-1	VII-18		8 ½ x 11	
PPT Slides	3	1	3	1	8 ½ x 11	
<b>Tab - Session VIII</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	6	VIII-1	VIII-6		8 ½ x 11	
PPT Slides	1	1		1	8 ½ x 11	
<b>Tab - Session IX</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	22	IX-1	IX-22		8 ½ x 11	
PPT Slides	4	1	4		8 ½ x 11	
Forms	4	1	4		8 ½ x 11	

<b>Tab - Session X</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	18	X-1	X-18		8 ½ x 11	
PPT Slides	4	1	4		8 ½ x 11	
Forms	4	1	4		8 ½ x 11	
<b>Tab - Session XI</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	3	XI-1	XI-3	1	8 ½ x 11	
PPT Slides	1	1		1	8 ½ x 11	
<b>Tab - Session XII</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	5	XII-1	XII-5	1	8 ½ x 11	
PPT Slides	1	1		1	8 ½ x 11	
<b>Tab - Session XIII</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	5	XIII-1	XIII-5	1	8 ½ x 11	
PPT Slides	2	1	2		8 ½ x 11	
<b>Tab - Session XIV</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	19	XIV-1	XIV-19	1	8 ½ x 11	
PPT Slides	4	1	4		8 ½ x 11	
Forms	6	1	6		8 ½ x 11	
<b>Tab - Session XV</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	6	XV-1	XV-6		8 ½ x 11	
PPT Slides	1	1		1	8 ½ x 11	
Forms	10	1	10		8 ½ x 11	
<b>Tab - Session XVI</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	16	XVI-1	XVI-16		8 ½ x 11	
PPT Slides	5	1	5	1	8 ½ x 11	
Forms	6	1	6		8 ½ x 11	
<b>Tab - Session XVII</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	29	XVII-1	XVII-29	1	8 ½ x 11	

PPT Slides	5	1	5	1	8 ½ x 11	
Forms	6	1	6		8 ½ x 11	
<b>Tab - Mid-Course Review</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	13	MCR-1	MCR-13	1	8 ½ x 11	
PPT Slides	3	1	3	1	8 ½ x 11	
<b>Tab - Session XVIII</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	6	XVIII-1	XVIII-6		8 ½ x 11	
PPT Slides	1	1		1	8 ½ x 11	
Forms	12	1	12		8 ½ x 11	
<b>Tab - Session XIX</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	12	XIX-1	XIX-12		8 ½ x 11	
PPT Slides	3	1	3	1	8 ½ x 11	
Forms	4	1	4		8 ½ x 11	
<b>Tab - Session XX</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	4	XX-1	XX-4		8 ½ x 11	
PPT Slides	1	1		1	8 ½ x 11	
<b>Tab - Session XXI</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	13	XXI-1	XXI-13	1	8 ½ x 11	
PPT Slides	2	1	2		8 ½ x 11	
Forms	6	1	6		8 ½ x 11	
<b>Tab - Session XXII</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	10	XXII-1	XXII-10		8 ½ x 11	
PPT Slides	1	1		1	8 ½ x 11	
Symptomatology Sources	15	1	15	1	8 ½ x 11	
<b>Tab - Session XXIII</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	6	XXIII-1	XXIII-6		8 ½ x 11	
PPT Slides	2	1	2		8 ½ x 11	
Sample C.V. Number One	4	1	4		8 ½ x 11	

Sample C.V. Number Two	3	1	3	1	8 ½ x 11	
<b>Tab - Session XXIV</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	16	XXIV-1	XXIV-16		8 ½ x 11	
PPT Slides	3	1	3	1	8 ½ x 11	
Cannabis and Stimulant	1	1		1	8 ½ x 11	
Phencyclidine and Heroin	1	1		1	8 ½ x 11	
Indicators	2	1	2		8 ½ x 11	
Worksheets	3	1	3	3	8 ½ x 11	One Side Only
<b>Tab - Session XXV</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	6	XXV-1	XXV-6		8 ½ x 11	
PPT Slides	1	1		1	8 ½ x 11	
Forms	10	1	10		8 ½ x 11	
<b>Tab - Session XXVI</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	11	XXVI-1	XXVI-11	1	8 ½ x 11	
PPT Slides	2	1	2		8 ½ x 11	
Drug Evaluation Form	1	1		1	8 ½ x 11	
Narrative	2	1	2		8 ½ x 11	
<b>Tab - Session XXVII</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	3	XXVII-1	XXVII-3	1	8 ½ x 11	
PPT Slides	1	1		1	8 ½ x 11	
Template	1	1		1	8 ½ x 11	#110 White Index
<b>Tab - Session XXVIII</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	10	XXVIII-1	XXVIII-10		8 ½ x 11	
PPT Slides	2	1	2		8 ½ x 11	
Attachment A	2	1	2		8 ½ x 11	
<b>Tab - Review Session</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	13	RS-1	RS-13	1	8 ½ x 11	
PPT Slides	8	1	8		8 ½ x 11	
Self-Test	7	1	7	1	8 ½ x 11	

Self-Test Answer Key	5	1	5	1	8 ½ x 11	
<b>Tab - Session XXIX</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	6	XXIX-1	XXIX-6		8 ½ x 11	
PPT Slides	1	1		1	8 ½ x 11	
Forms	24	1	24		8 ½ x 11	
Guidelines	3	1	3	1	8 ½ x 11	
<b>Tab - Session XXX</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>8 ½ x 11</b>	
Cover Page/Objectives	2	1	2		8 ½ x 11	
Contents	6	XXX-1	XXX-6		8 ½ x 11	
PPT Slides	2	1	2		8 ½ x 11	
Instructor Guidelines	2	1	2		8 ½ x 11	
Proficiency Exam Checklist	4	1	4		8 ½ x 11	
Critique	6	1	6		8 ½ x 11	
<b>TOTAL BLANK PAGES</b>	<b>61</b>					
<b>TOTAL INDEX PAGES</b>	<b>915</b>					
<b>TOTAL PAGES</b>	<b>976</b>					
<b>TOTAL TABS</b>	<b>33</b>					

Two Hours and Thirty Minutes

**MID-COURSE REVIEW**

## MID-COURSE REVIEW

This is an after-normal-class-hours session that students are free to attend or not, but are encouraged to attend. Its principal purpose is to help solidify the knowledge and skills they have begun to acquire, from the Pre-School and from the first four days of the DRE School.

This session must be conducted in a highly interactive fashion. Don't simply present information or conduct demonstrations. Make the students do it. Ask questions, and call upon students to conduct the demonstrations that are required. Try to involve everybody, and convey your gratitude for the fact that they have attended the session.

### Content Segments

### Learning Activities

- |   |                                |
|---|--------------------------------|
| A. Drugs, Drug Categories and the Drug Influence Evaluation | o Instructor/Student Dialogues |
| B. Eyes and Vital Signs                                     | o Student-Led Demonstrations   |
| C. Physiology   |                                |
| D. Questions and Answers                                    |                                |



Aids	Lesson Plan	Instructor Notes
	a. Xanax	CNS Depressant
	b. Desoxyn	CNS Stimulant
	c. Secobarbital	CNS Depressant
	d. Dilaudid	Narcotic Analgesic
	e. Alprazolam	CNS Depressant
	f. Phenyl Cyclohexyl Peperidine	Dissociative Anesthetics
	g. "Ecstasy"	Hallucinogen
	h. ETOH	CNS Depressant
	i. Numorphan	Narcotic Analgesic
	j. Psilocybin	Hallucinogen
	4. List the twelve components of the Drug Influence Evaluation in the proper sequence.	Breath Alcohol test; Interview of Arresting Officer; Preliminary Examination; Eye Examinations; Divided Attention Tests; Vital Signs Examinations; Darkroom Examinations; Check for Muscle Tone; Injection Sites Inspection; Statements of Suspect; Evaluator's Opinion; Toxicological Examination.
	a. Demonstrate the Preliminary Examination.	Allow student-demonstrations to refer to the standard Drug Influence Evaluation Form.
	b. Demonstrate the Eye Examinations.	Be sure to provide appropriate positive feedback and constructive criticism of the demonstrators' performances.
	c. Demonstrate the Administration of the Divided Attention Tests.	

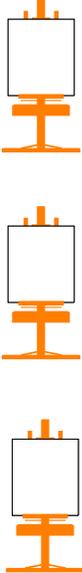
Aids	Lesson Plan	Instructor Notes
 <p><b>MCR-3</b> (Name the...)</p>	<p>d. Demonstrate the Vital Signs Examinations.</p> <p>e. Demonstrate the Darkroom Examinations.</p> <p>f. Demonstrate the Check for Muscle Tone <u>and</u> the inspection for Injection Sites.</p> <p>5. Identify the category for each of the listed drugs.</p> <p>a. Demerol</p> <p>b. Cylert</p> <p>c. Chlordiazepoxide</p> <p>d. Ketamine</p> <p>e. Percodan</p> <p>f. Ritalin</p> <p>g. Isopropanol</p> <p>h. Bufotenine</p> <p>i. Thebaine</p> <p>j. Methaqualone</p>	<p>Narcotic Analgesic</p> <p>CNS Stimulant</p> <p>CNS Depressant</p> <p>Dissociative Anesthetics</p> <p>Narcotic Analgesic</p> <p>CNS Stimulant</p> <p>CNS Depressant</p> <p>Hallucinogen</p> <p>Narcotic Analgesic</p> <p>CNS Depressant</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>50 Minutes</b></p>  <p><b>MCR-4 (Eyes and Vital...)</b></p>	<p><b>B. Eyes and Vital Signs</b></p> <ol style="list-style-type: none"> <li>1. Name the three clues of Horizontal Gaze Nystagmus.           <ol style="list-style-type: none"> <li>a. Demonstrate the check for "Lack of smooth pursuit".</li> <li>b. Demonstrate the check for "Distinct and sustained nystagmus at maximum deviation".</li> <li>c. Demonstrate the check for "Angle of Onset".</li> </ol> </li> <li>2. Name the categories of drugs that will cause Horizontal Gaze Nystagmus.           <ol style="list-style-type: none"> <li>a. Name the categories that will cause <b>Vertical</b> Gaze Nystagmus.</li> <li>b. Demonstrate the check for Vertical Gaze Nystagmus.</li> </ol> </li> </ol>	<p>Lack of smooth pursuit; distinct and sustained nystagmus at maximum deviation; angle of onset.</p> <p>Ask the student-demonstrator: How long should the eye be held at maximum deviation? (About four seconds)</p> <p>Ask the student-demonstrator: What is the formula that expresses the approximate relationships between BAC and Angle of Onset? (BAC = 50 - Angle)</p> <p>CNS Depressants, Phencyclidine, Inhalants.</p> <p>Same as above.</p> <p>Ask the student-demonstrator: How long should the eyes be held at maximum elevation? (About four seconds)</p>

Aids	Lesson Plan	Instructor Notes
	<p>3. Name the test that is always administered immediately after Vertical Gaze Nystagmus.</p> <p>a. Demonstrate the test for Lack of Convergence.</p> <p>b. Name the categories of drugs that usually will cause Lack of Convergence.</p> <p>4. Name the lighting conditions under which we make estimations of pupil size.</p> <p>a. Demonstrate the room light pupil size estimation procedure.</p> <p>b. Demonstrate the near-total darkness procedure.</p> <p>c. Demonstrate the direct light procedure.</p> <p>d. Name the other things a DRE looks for while shining the light directly into the subject's eye.</p> <p>e. How quickly must the pupil start to constrict if it is considered to exhibit normal reaction to light?</p>	<p>Lack of Convergence.</p> <p>CNS Depressants; Dissociative Anesthetics (PCP); Inhalants; Cannabis.</p> <p>Room light; near-total darkness; direct light.</p> <p>Ask the student-demonstrator: How large should the circle of light appear on the subject's face for the direct-light check? (Approximately the same as the eye socket)</p> <p>Ask the student-demonstrator: How long should the light be shined directly into the subject's eye? (Fifteen seconds)</p> <p>Pupil reaction to light; hippus; rebound dilation.</p> <p>Within one second.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>MCR-5</b> (What do these...)</p>	<p>f. Define Hippus.</p> <p>g. Define Rebound Dilation.</p> <p>5. State the normal ranges of pupil size for the three lighting conditions.</p> <p>a. Define each of the listed terms.</p> <ul style="list-style-type: none"> <li>o Miosis</li> <li>o Mydriasis</li> <li>o Ptosis</li> </ul> <p>b. What kinds of drugs will cause dilation of the pupils?</p> <p>c. What kinds of drugs will cause constriction?</p>	<p>A rhythmic pulsating of the pupils of the eyes, as they dilate and constrict within fixed limits.</p> <p>Rebound dilation is a period of constriction followed by dilation with a change equal to or greater than 2 mm.</p> <p>Room Light: 2.5 - 5.0 mm Near Total Darkness: 5.0 - 8.5 mm Direct Light: 2.0 - 4.5 mm</p> <p>Abnormally constricted pupils</p> <p>Abnormally dilated pupils</p> <p>Droopy eyelids</p> <p>CNS Stimulants; Hallucinogens; Cannabis (although sometimes only slight dilation, if any).</p> <p>Narcotic Analgesics.</p>
 <p><b>MCR-6</b> (More drugs...)</p>	<p>6. Identify the category for each of the listed drugs.</p> <p>a. Oxycodone</p> <p>b. Halcion</p> <p>c. Librium</p>	<p>Narcotic Analgesic</p> <p>CNS Depressant</p> <p>CNS Depressant</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>MCR-7A&amp;B</b> (Where are...)</p>	<p>d. Peyote</p> <p>e. Darvon</p> <p>f. Preludin</p> <p>g. Diazepam</p> <p>h. Dexedrine</p> <p>i. Hycodan</p> <p>j. Xanax</p> <p>7. Define "Pulse".</p> <p>a. Define "Pulse Rate".</p> <p>b. Define "Artery".</p> <p>c. Define "Vein".</p> <p>d. Identify the location of each listed pulse point.</p> <ul style="list-style-type: none"> <li>o Radial</li> <li>o Brachial</li> <li>o Carotid</li> </ul>	<p>Hallucinogen</p> <p>Narcotic Analgesic</p> <p>CNS Stimulant</p> <p>CNS Depressant</p> <p>CNS Stimulant</p> <p>Narcotic Analgesic</p> <p>CNS Depressant</p> <p>The expansion and relaxation of an artery, generated by the pumping action of the heart.</p> <p>(Also acceptable: The expansion and relaxation of an artery, caused by the surging flow of blood.)</p> <p>The number of pulsations in an artery per minute.</p> <p>A strong, elastic blood vessel that carries blood from the heart to the body tissues.</p> <p>A blood vessel that carries blood back to the heart from the body tissues.</p> <p>In the wrist, at the base of the thumb.</p> <p>In the crook of the arm.</p> <p>In the neck, on either side of the Adam's Apple</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>e. Demonstrate a pulse measurement, using the left Radial pulse point.</li> <li>f. State the normal range of adult human pulse rate.</li> <li>g. Name the drug categories that usually cause elevated pulse rate.</li> <li>h. Name the drug categories that usually cause lowered pulse rate.</li> </ul> <p>8. Define "Blood Pressure".</p> <ul style="list-style-type: none"> <li>a. How often does a person's blood pressure change?</li> <li>b. When does the blood pressure reach its highest value?</li> <li>c. When does the blood pressure reach its lowest value?</li> <li>d. Name the two medical instruments that are used to measure blood pressure.</li> <li>e. Name the sounds that we hear through the stethoscope when we make a blood pressure measurement.</li> <li>f. What does this "Hg" mean?</li> </ul>	<p>60 to 90 beats per minute.</p> <p>CNS Stimulants; Hallucinogens; Dissociative Anesthetics; Inhalants; Cannabis.</p> <p>CNS Depressants; Narcotic Analgesics.</p> <p>The force exerted by blood on the walls of the arteries.</p> <p>It is always changing, from instant to instant.</p> <p>When the heart is fully contracted, and blood is sent rushing into the arteries.</p> <p>When the heart is fully expanded, just before it starts to contract for the next "pumping" action.</p> <p>Select a student to come to the dry erase board or flip-chart and print "SPHYGMOMANOMETER" and "STETHOSCOPE".</p> <p>Select a student to come to the dry erase board or flip-chart and print "KOROTKOFF SOUNDS".</p> <p>Instructor: Print "Hg" on the dry erase board or flip-chart.</p>

Aids	Lesson Plan	Instructor Notes
  <b>MCR-8</b> (Some technical...)	<p>g. In what units is blood pressure measured?</p> <p>h. Suppose that, at some particular instant, a person has a blood pressure of 120 mmHg. What does that "120 mmHg" mean?</p> <p>i. Name the types of drugs that usually cause a lowered blood pressure.</p> <p>j. Name the types of drugs that elevate blood pressure.</p> <p>k. State the meaning of each of the listed terms.</p> <ul style="list-style-type: none"> <li>o Systolic</li> <li>o Diastolic</li> </ul>	<p>Chemical symbol for the element Mercury; abbreviation for the Latin word <u>Hydrargyrum</u>, meaning "Mercury".</p> <p>Millimeters of Mercury.            Instructor: Print "mm" on the dry erase board or flip-chart, right in front of the "Hg".</p> <p>It means the pressure would be strong enough to push a column of liquid Mercury up a glass tube to a height of 120 millimeters.</p> <p>Instructor: If one is available, display a Sphygmomanometer that has a liquid mercury pressure gauge.</p> <p>CNS Depressants; Narcotic Analgesics; and, the Anesthetic Gases sub-category of Inhalants.</p> <p>CNS Stimulants; Hallucinogens; Dissociative Anesthetics; Cannabis; and the other two sub-categories (Volatile Solvents and Aerosols) of Inhalants.</p> <p>The highest value of blood pressure.</p> <p>The lowest value of blood pressure.</p>



Aids	Lesson Plan	Instructor Notes
	<p>a. What is <b>M</b> for?</p> <p>b. What is <b>U</b> for?</p> <p>c. What is the first <b>R</b> for?</p> <p>d. What is <b>D</b> for?</p> <p>e. What is <b>E</b> for?</p> <p>f. What is the second <b>R</b> for?</p> <p>g. What is <b>S</b> for?</p> <p>h. What is <b>I</b> for?</p> <p>i. What is <b>N</b> for?</p> <p>j. What is <b>C</b> for?</p> <p>3. State the word that means "dynamic balance involving levels of salts, water, sugars and other materials in the body's fluids".</p> <p>4. Which artery carries blood from the heart to the lungs?</p> <p>a. What is unique about the Pulmonary artery, compared to all other arteries?</p> <p>b. What are the Pulmonary <b>veins</b>?</p> <p>c. What is unique about the Pulmonary veins?</p>	<p>Muscular (Have a student print out each name).</p> <p>Urinary</p> <p>Respiratory (or, Reproductive)</p> <p>Digestive</p> <p>Endocrine</p> <p>Reproductive (or, Respiratory)</p> <p>Skeletal</p> <p>Integumentary</p> <p>Nervous</p> <p>Circulatory</p> <p>Homeostasis.</p> <p>Pulmonary.</p> <p>(1) it is the only artery that takes blood from the right side of the heart;</p> <p>(2) it is the only artery that carries deoxygenated blood (i.e., blood that is depleted of oxygen).</p> <p>The veins that carry blood back to the heart from the <u>lungs</u>.</p> <p>(1) they are the only veins that bring blood to the left side of</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>MCR-10</b> Classification of nerves)</p>	<p>5. Name the various types of nerves.</p> <ol style="list-style-type: none"> <li>a. Sensory Nerves, carry messages to the brain.</li> <li>b. Motor Nerves, carry messages from the brain.</li> <li>c. Voluntary Nerves are motor nerves that carry messages to the muscles that we consciously control.</li> <li>d. Autonomic Nerves are motor nerves that carry messages to the muscles and organs we do not consciously control.</li> <li>e. Sympathetic Nerves are autonomic nerves that carry messages commanding the body to react to fear, stress, excitement, etc.</li> <li>f. Parasympathetic Nerves are autonomic nerves that carry messages to produce relaxed and tranquil activities.</li> </ol>	<p>the heart; (2) they are the only veins that carry oxygenated blood.</p> <p>Ask students to "fill in" the missing names.</p> <p>Also known as Afferent Nerves.</p> <p>Also known as Efferent Nerves.</p> <p>Clarification: Sympathetic nerves carry the brain's "fire alarms" and "wake up calls".</p> <p>Clarification: Para-sympathetic nerves carry the brain's "all clear" and "at ease" messages.</p>
 <p><b>MCR-11</b> (Some more technical...)</p>	<p>6. Define each of the listed terms.</p> <ol style="list-style-type: none"> <li>a. Neuron</li> </ol>	<p>A nerve cell; the basic "building block" of a nerve.</p>

Aids	Lesson Plan	Instructor Notes
	<p>b. Synapse</p> <p>c. Neurotransmitter</p> <p>d. Axon</p> <p>e. Dendrite</p> <p><b>D. Questions and Answers</b></p>	<p>The gap or space between two nerve cells.</p> <p>A chemical that flows across the synapse, to carry a message from one neuron to the next.</p> <p>The end of a neuron that sends out the neurotransmitter.</p> <p>The end of a neuron that receives the neurotransmitter.</p> <p>Segment D: As long as necessary</p> <p>Solicit and answer students' questions about anything covered thus far in their training.</p>

## Mid-Course Review

### Review of Drugs, Drug Categories, and the Drug Influence Evaluation



MCR-1

## Name the Drug Category for:

- Xanax
- Desoxyn
- Secobarbital
- Dilaudid
- Alprazolam
- Phenyl Cyclohexyl Piperidine
- "Ecstasy"
- ETOH
- Numorphan
- Psilocybin

Drug Evaluation &amp; Classification Training

MCR-2

## Name the Drug Category for:

- Demerol
- Cylert
- Chlordiazepoxide
- Ketamine
- Percodan
- Ritalin
- Isopropanol
- Bufotenine
- Thebaine
- Methaqualone

Drug Evaluation &amp; Classification Training

MCR-3

## Eyes and Vital Signs Review



Drug Evaluation &amp; Classification Training

MCR-4

## What Do These Words Mean?

- Miosis
- Mydriasis
- Ptosis

Drug Evaluation &amp; Classification Training

MCR-5

## More Drugs to Categorize

- Oxycodone
- Halcion
- Librium
- Peyote
- Darvon
- Preludin
- Diazepam
- Dexedrine
- Hycodan
- Xanax

Drug Evaluation &amp; Classification Training

MCR-6

## Where Are These Pulse Points Located?

- Radial
- Brachial
- Carotid

Drug Evaluation & Classification Training

MCR-7A

## Pulse Point Location Answers

• Radial



• Brachial



• Carotid



Drug Evaluation & Classification Training

MCR-7B

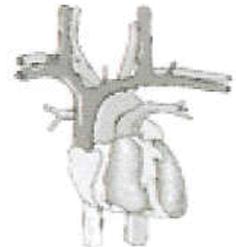
## Some Technical Terms to Define

- Systolic
- Diastolic
- Bradycardia
- Tachycardia
- Hypertension
- Hypotension

Drug Evaluation & Classification Training

MCR-8

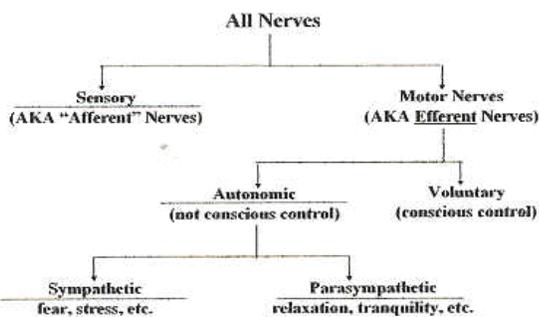
## Physiology Review



Drug Evaluation & Classification Training

MCR-9

## Classification of Nerves



Drug Evaluation & Classification Training

MCR-10

## Some More Technical Terms to Define

- Neuron
- Synapse
- Neurotransmitter
- Axon
- Dendrite

Drug Evaluation & Classification Training

MCR-11

Two Hours and Thirty Minutes

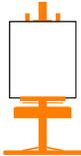
**REVIEW OF THE DRE SCHOOL**

## **REVIEW SESSION**

The principal purpose of the Review Session is to help students prepare for the final written examination. The following questions and exercises can be posed to the class to cover all of the information that will be elicited on the final exam. Try to involve all of the students actively in these questions and exercises.

Remind the students that they have a thirty-three question self test with answers in their participant manuals.

Aids	Lesson Plan	Instructor Notes
	<p><b>REVIEW OF THE DRE SCHOOL</b></p>	<p>Display Session Title Slide</p>
<p><b>RS-1</b></p>	<p>1. HOW DO WE DEFINE THE TERM "DRUG" FOR DRE PURPOSES?</p>	<p>Key Points to Emphasize:</p> <ul style="list-style-type: none"> <li>o any substance</li> </ul>
	<p><b>RS-2</b></p>	<ul style="list-style-type: none"> <li>o that impairs the ability to operate a vehicle</li> </ul>
	<p>2. BASIC DRUG STATISTICS:</p>	
<p><b>RS-3</b></p>	<p>a. What drug other than alcohol was found most frequently in the Los Angeles Field Validation Study?</p>	<p>Answer: PCP</p>
	<p>b. What does "polydrug use" mean?</p>	<p>Ingesting drugs from two or more drug categories</p>
	<p>c. How common was polydrug use in the field validation study?</p>	<p>72% of the suspects had two or more drug categories in them.</p>
	<p>d. How good were the DREs in the Field Validation Study?</p>	
	<p>o Over 80% of the time when the DREs said a particular category of drugs was present, that category was found in the suspect's blood.</p>	
<p><b>RS-4</b></p>	<p>o In more than 90% of the suspects, the DREs correctly identified at least one of the categories that were present.</p>	

Aids	Lesson Plan	Instructor Notes																																																																								
 <b>RS-5</b>	<p>f. In the University of Tennessee Study, what percentage of injured drivers had drugs other than alcohol in them?</p>	<p>40% of those drivers had evidence of other drugs in their urine.</p>																																																																								
<table border="1"> <thead> <tr> <th>CATEGORY</th> <th>HGN</th> <th>VGN</th> <th>CONV</th> <th>PULSE</th> <th>BP</th> <th>TEMP</th> <th>PUPILS</th> </tr> </thead> <tbody> <tr> <td><u>REACT</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>CNS DEP</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>CNS STIM</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>HALLUCS</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>DISS. ANESTH.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>NARCOTS</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>INHALS</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>CANNABS</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			CATEGORY	HGN	VGN	CONV	PULSE	BP	TEMP	PUPILS	<u>REACT</u>								CNS DEP								CNS STIM								HALLUCS								DISS. ANESTH.								NARCOTS								INHALS								CANNABS							
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   <b>RS-6</b>	<p>3. REVIEW OF SYMPTOMATOLOGY</p> <p>a. Name six different CNS Depressants.</p> <p>b. Name four different CNS Stimulants.</p>	<p>SOLICIT STUDENTS' QUESTIONS ABOUT DRUG STATISTICS</p> <p>Prepare a "symptomatology matrix" on the dry erase board:</p> <p>Ask students to "fill in" the matrix by stating how each category will affect these major indicators of impairment.</p> <p>Write students' responses on the dry erase board.</p> <p>Methamphetamine, Cocaine, Amphetamines, Ritalin</p>																																																																								

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>c. Name two naturally-occurring Hallucinogens.</li> <li>d. Name four different synthetic Hallucinogens.</li> <li>e. Name a major analog of PCP.</li> <li>f. Name the three sub-categories of Inhalants.</li> <li>g. What is the active ingredient in Cannabis?</li> </ul>	<p>Peyote and Psilocybin</p> <p>LSD, MDMA, MDA, TMA, STP, DMT.</p> <p>Ketamine</p> <p>Anesthetic gases, Aerosols, Volatile Solvents</p> <p>Delta 9 THC</p> <p><b>SOLICIT STUDENTS' QUESTIONS ABOUT DRUG CATEGORIES &amp; SYMPTOMATOLOGY.</b></p>
 <p><b>RS-7</b></p>	<p>4. REVIEW OF VITAL SIGNS</p> <ul style="list-style-type: none"> <li>a. Pulse Rate <ul style="list-style-type: none"> <li>(1) Define "Pulse".</li> <li>(2) True or false: Pulse rate is measured in units of "millimeters of mercury".</li> </ul> </li> </ul>	<p>Contraction and expansion of an artery, generated by the pumping action of the heart.</p> <p><b>FALSE:</b> pulse rate is measured in "beats per minute".</p>
 <p><b>RS-8</b></p>	<ul style="list-style-type: none"> <li>(3) Name three different pulse points, and indicate where they are located.</li> <li>(4) What is the "normal" range of adult human pulse rate, for DRE purposes?</li> </ul>	<p>Make sure that students point out the Radial, Brachial and Carotid pulse points.</p>
 <p><b>RS-9</b></p>	<ul style="list-style-type: none"> <li>b. Blood Pressure</li> </ul>	<p>60-90 beats per minute.</p>

Aids	Lesson Plan	Instructor Notes
	<p>(1) Define "Blood Pressure".</p> <p>(2) Name the instrument used to measure blood pressure.</p> <p>(3) When does blood pressure reach its highest value? What is the highest value called?</p>	<p>The force that the circulating blood exerts on the walls of the arteries.</p> <p><b>SPHYGMOMANOMETER:</b> Ask a student to spell this, and write the correct spelling on the chalkboard.</p> <p>The <u>systolic</u> pressure is reached when the heart contracts and pushes blood into the arteries.</p>
  <b>RS-10</b>	<p>(4) When does blood pressure reach its lowest value? What is the lowest value called?</p>	<p>The <u>diastolic</u> pressure is reached when the heart is fully expanded.</p>
  <b>RS-11</b>	<p>(5) What is the "normal" range of adult human blood pressure, for DRE purposes?</p> <p>(6) What does "Hg" stand for?</p>	<p>Systolic: 120-140 Diastolic: 70-90</p> <p>Chemical symbol for mercury ("Hydrargyrum", latin word for "Mercury"). B/P is measured in millimeters of mercury.</p>
  <b>RS-12</b>	<p>5. REVIEW OF THE EYE EXAMINATIONS</p> <p>a. Horizontal Gaze Nystagmus</p>	<p><b>SOLICIT STUDENTS' QUESTIONS ABOUT VITAL SIGNS.</b></p>

Aids	Lesson Plan	Instructor Notes
 RS-13	(1) What are the three validated clues of impairment that have been established for HGN?	<ul style="list-style-type: none"> <li>o Lack of Smooth Pursuit</li> <li>o Distinct and Sustained Nystagmus at Maximum Deviation</li> <li>o Angle of Onset Prior to 45 Degrees</li> </ul>
 RS-14	(2) What formula expresses the approximate statistical relationship between BAC and onset angle?  (3) What categories of drugs usually will cause HGN?	$\text{BAC} = 50 - \text{Angle}$ <ul style="list-style-type: none"> <li>o CNS Depressants</li> <li>o Dissociative Anesthetics</li> <li>o Inhalants</li> </ul>
 RS-15	b. Vertical Gaze Nystagmus  (1) True or False: any drug that causes HGN may also cause <u>Vertical</u> Gaze Nystagmus.  (2) What category of drugs causes Vertical Gaze Nystagmus but <u>not</u> Horizontal Gaze Nystagmus?	<p>TRUE: All drugs that cause Horizontal Gaze Nystagmus will cause Vertical Gaze Nystagmus, if the dose is large enough.</p> <p><b>NO DRUG CAUSES VERTICAL GAZE NYSTAGMUS BUT NOT HGN.</b></p>
	c. Lack of Convergence  (1) True or false: any drug that causes nystagmus will also usually cause the eyes to be unable to converge.  (2) What category of drugs usually causes Lack of Convergence but does <u>not</u> cause nystagmus?	<p>TRUE: CNS Depressants, Dissociative Anesthetics and Inhalants usually cause the eyes to be unable to converge.</p> <p>CANNABIS usually causes Lack of Convergence, but doesn't cause nystagmus.</p> <p><b>SOLICIT STUDENTS' QUESTIONS ABOUT THE EYE EXAMINATIONS.</b></p>

Aids	Lesson Plan	Instructor Notes
 <p>RS-16</p>	<p>6. REVIEW OF THE DARKROOM EXAMINATIONS</p> <p>a. What are the three lighting conditions under which we must estimate the size of the suspect's pupils?</p>	<ul style="list-style-type: none"> <li>o Room Light</li> <li>o Near Total Darkness</li> <li>o Direct Light</li> </ul>
 <p>RS-17</p>	<p>b. How long should we wait in the Darkroom before beginning to check the suspect's pupils?</p> <p>c. Name the device that we use to estimate the size of the suspect's pupils.</p>	<p>At least 90 seconds.</p> <p>Pupillometer</p>
 <p>RS-18</p>	<p>d. What do the numbers on the Pupillometer refer to?</p> <p>e. In what <u>units of measurement</u> are those number given?</p> <p>f. For DRE purposes, what is the "normal" range of the size of an adult human's pupil in room light?</p>	<p>The <u>diameters</u> of the dark circles/semi circles.</p> <p>In millimeters.</p> <p>The diameter of the pupil normally ranges from about 2.5 to 5.0 mm.</p>
 <p>RS-19</p>	<p>g. What does the term "MIOSIS" mean?</p> <p>h. What does the term "MYDRIASIS" mean?</p>	<p>"Miosis" means an abnormally small or constricted pupil.</p> <p>"Mydriasis" means an abnormally large or dilated pupil.</p>
 <p>RS-20</p>	<p>i. What category of drugs usually causes Miosis, or constricted pupils?</p> <p>j. What categories usually cause Mydriasis, or dilated pupils?</p>	<p>Narcotic Analgesics usually cause pupils to be constricted below the normal range.</p> <p>CNS Stimulants and Hallucinogens usually cause pupils to be dilated above the</p>

Aids	Lesson Plan	Instructor Notes
	<p>k. What is unique about the drug "Methaqualone" and SOMA?</p>	<p>normal range. Cannabis also may cause dilation. Some inhalants will also cause dilation.</p> <p>Methaqualone and Soma are CNS Depressants that cause pupil dilation.</p> <p><b>SOLICIT STUDENTS' QUESTIONS ABOUT THE DARKROOM EXAMS.</b></p>
 <b>RS-21</b>	<p>7. REVIEW OF THE DIVIDED ATTENTION TESTS</p> <p>a. Name the four Divided Attention Tests administered during the DRE Examination.</p>	<ul style="list-style-type: none"> <li>o Romberg Balance</li> <li>o Walk and Turn</li> <li>o One Leg Stand</li> <li>o Finger to Nose</li> </ul>
 <b>RS-22</b>	<p>b. Why is the Romberg Balance always the first test administered?</p>	<ul style="list-style-type: none"> <li>(1) For standardization.</li> <li>(2) The test requires the suspect to estimate the passage of 30 seconds; thus, it should be administered <u>before</u> the One Leg Stand test, in which the suspect is instructed to count out 30 seconds.</li> </ul>
 <b>RS-23</b>	<p>c. Four validated clues of impairment have been established for the One Leg Stand Test; name them.</p>	<ul style="list-style-type: none"> <li>o Swaying</li> <li>o Raising the arms</li> <li>o Hopping</li> <li>o Putting the foot down</li> </ul>
 <b>RS-24</b>	<p>d. How many times is One Leg Stand administered during the DRE drug influence evaluation?</p>	<p>Twice</p>

Aids	Lesson Plan	Instructor Notes
	<p>e. Which foot must the suspect <u>stand on</u> first when performing the One Leg Stand?</p>	<p>Left</p>
<p>RS-25</p> 	<p>f. How many validated clues of impairment have been established for the Walk and Turn test? Name them.</p>	<p>Eight validated clues.</p> <ul style="list-style-type: none"> <li>o Cannot keep balance during the instructions</li> <li>o Starts too soon</li> <li>o Stops while walking</li> <li>o Misses heel to toe</li> <li>o Steps of the line</li> <li>o Uses arms to balance</li> <li>o Improper turn</li> <li>o Incorrect number of steps</li> </ul>
<p>RS-26</p> 	<p>g. In what sequence is the suspect instructed to touch the index fingers to the nose on the Finger to Nose test?</p>	<p>Left, Right, Left, Right, Right, Left.</p>
<p>RS-27</p> 	<p>8. GENERAL REVIEW QUESTIONS</p> <p>a. What is the medical or technical term for "droopy eyelids"?</p> <p>b. What does "Piloerection" mean? What drug often causes piloerection?</p> <p>c. What is the medical or technical term for Heroin?</p>	<p>SOLICIT STUDENTS' QUESTIONS ABOUT THE DIVIDED ATTENTION TESTS.</p> <p>Ptosis</p> <p>"Piloerection" means "Hair Standing Up", or "Goose Bumps." Often caused by LSD.</p> <p>Diacetyl Morphine.</p>
<p>RS-28</p>		

Aids	Lesson Plan	Instructor Notes
	<p>d. Explain the terms "Null", "Additive", "Antagonistic" and "Overlapping" Effect as they apply to polydrug use. Give examples.</p>	<p>"Null": neither drug affects some specific indicator.</p> <p>"Additive": the two drugs produce some identical effects.</p> <p>"Antagonistic": the two drugs produce some directly opposite effects.</p> <p>"Overlapping": one drug affects some symptom that the other doesn't affect, and vice versa.</p>
 <b>RS-29</b>	<p>e. What is the difference between "Hippus" and "Rebound Dilation"?</p>	<p>"Hippus" refers to pupils that pulsate rhythmically in size between fixed limits; usually, Hippus develops during withdrawal from Narcotic Analgesics.</p> <p>"Rebound Dilation" is a period of constriction followed by dilation with a change equal to or greater than 2 mm.</p>
 <b>RS-30</b>	<p>f. What is the drug "Percobarb"?</p>	<p>It is a combination of the natural opiate Percodan with a barbiturate. Percobarb thus is a polydrug, a combination of a Narcotic Analgesic and a CNS Depressant.</p>
 <b>RS-31</b>	<p>g. What does "Bruxism" mean?</p> <p>h. What does the number denoting the size of an hypodermic needle refer to?</p>	<p>Grinding the teeth.</p> <p>The inside diameter of the needle.</p>
	<p>i. What does "Synesthesia" mean?</p> <p>j. What is "Sinsemilla"?</p>	<p>A mixing of senses, i.e., hearing colors or seeing sounds.</p> <p>A variety of marijuana with a high concentration of THC.</p>

Aids	Lesson Plan	Instructor Notes
  <b>RS-32</b>	<p>k. What are the twelve major components of the DRE Examination?</p>	<p>List students' responses on the flip-chart or dry erase board.</p> <ul style="list-style-type: none"> <li>o Breath Alcohol Test</li> <li>o Interview of Arresting Officer</li> <li>o Preliminary Examination</li> <li>o Examinations of the Eyes</li> <li>o Divided Attention Tests</li> <li>o Vital Signs Examinations</li> <li>o Dark Room Examinations</li> <li>o Examination of Muscle Tone</li> <li>o Examination for Injection Sites</li> <li>o Suspect's Statements</li> <li>o Opinion of the Evaluator</li> <li>o Toxicological Exam</li> </ul> <p>Ask students to describe each component briefly, and to clarify the kinds of information each component supplies.</p>
  <b>RS-33</b>	<p>9. REVIEW OF PHYSIOLOGY</p> <p>a. Name the ten major body systems.</p>	<p>List students' responses on the flipchart or dry-erase board.</p> <ul style="list-style-type: none"> <li>o Muscular System</li> <li>o Urinary System</li> <li>o Respirator System</li> <li>o Digestive System</li> <li>o Endocrine System</li> <li>o Reproductive System</li> <li>o Skeletal System</li> <li>o Integumentary System</li> <li>o Nervous System</li> <li>o Circulatory System</li> </ul>
  <b>RS-34</b>	<p>b. What is the distinction between the "Smooth" muscles and the "Striated" muscles?</p> <p>c. What do we call the chemicals that are produced by the Endocrine System?</p>	<p>We consciously control the Striated; we don't consciously control the Smooth.</p> <p>Hormones.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>RS-35</b></p>	<p>d. What is a neuron?</p> <p>e. What do we call the space between two nerve cells?</p> <p>f. What do we call the chemicals that pass from one nerve cell to the next?</p> <p>g. What do we call the part of a nerve cell that sends out the neurotransmitter?</p>	<p>A nerve cell.</p> <p>The synapse, or synaptic gap.</p> <p>Neurotransmitters.</p> <p>The axon.</p>
 <p><b>RS-36</b></p>	<p>h. What do we call the part of a nerve cell that receives the neurotransmitter?</p> <p>i. What do the Sensory Nerves do?</p> <p>j. What do the Motor Nerves do?</p>	<p>The dendrite.</p> <p>Carry messages to the brain, from the sense organs, pain sensors, etc.</p> <p>Carry messages from the brain, to the muscles, etc.</p>
 <p><b>RS-37</b></p>	<p>k. Name the two sub-divisions of Motor Nerves.</p> <p>l. Name the two sub-divisions of Autonomic Nerves and describe their functions.</p>	<p>Voluntary (control striated muscles) and Autonomic (control smooth muscles).</p> <p>Sympathetic (command the body's response to fear, excitement, etc.), and Parasympathetic (promote the body's tranquil activities).</p>
 <p><b>RS-38</b></p>	<p>m. What does it mean to say that a drug is "sympathomimetic"?</p>	<p>It means that the drug's effects mimic those caused by messages transmitted along sympathetic nerves (excitement, agitation, arousal, etc.).</p>

Aids	Lesson Plan	Instructor Notes
	<p>n. What does it mean to say that a drug is "parasympathomimetic"?</p> <p>o. Which two categories of drugs can most appropriately be called sympathomimetic?</p>	<p>The drug's effects mimic those caused by messages transmitted along parasympathetic nerves (relaxation, calm, sleep, etc.).</p> <p>CNS Stimulants and Hallucinogens.</p>
<p><b>RS-39</b></p>	<p>p. Which category can most appropriately be called parasympathomimetic?</p>	<p>Narcotic Analgesics.</p> <p>Clarification: Cannabis, Dissociative Anesthetics and Inhalants have some sympathomimetic characteristics, but not as many as do the CNS Stimulants and Hallucinogens. Depressants have some parasympathomimetic characteristics, but not as many as do the Narcotic Analgesics.</p>
	<p>q. What is an artery?</p>	<p>Strong, elastic blood vessel that carries blood from the heart to the body's tissues and organs.</p>
<p><b>RS-40</b></p>	<p>r. What is a vein?</p>	<p>Blood vessel that carries blood back to the heart from the tissues</p>
	<p>s. What is the Pulmonary Artery, and what is unique about it?</p>	<p>and organs.</p> <p>It is the artery that carries blood from the heart to the lungs. It is the only artery that carries blood depleted of oxygen.</p>
<p><b>RS-41</b></p>	<p>t. What are the Pulmonary Veins, and what is so special about them?</p>	<p>They are the veins that carry blood back to the heart from the lungs. They are the only veins that carry blood rich in oxygen.</p>

<b>Aids</b>	<b>Lesson Plan</b>	<b>Instructor Notes</b>
		<p>SOLICIT STUDENTS' QUESTIONS ABOUT PHYSIOLOGY.</p> <p>SOLICIT ANY ADDITIONAL QUESTIONS THAT THE STUDENTS MIGHT HAVE.</p> <p>ADMINISTER QUIZ NUMBER FIVE TO THE STUDENTS. ALLOW 20 MINUTES FOR THE STUDENTS TO COMPLETE THE QUIZ. REVIEW THE QUIZ WITH THE CLASS, AND ALLOW THE STUDENTS TO RETAIN THE QUIZ FOR THEIR INDEPENDENT STUDY.</p> <p>THANK THE STUDENTS FOR ATTENDING THE OPTIONAL REVIEW SESSION.</p>

## Review of the DRE School



RS-1

## How do we define the term “drug” for DRE purposes?

**“Any substance, which when taken into the human body, can impair the ability of the person to operate a vehicle safely”**

Drug Evaluation &amp; Classification Training

RS-2

## Basic Drug Statistics

- What percentage of DWI arrests involve drugs other than alcohol?
  - LAPD Estimate: 10-20%
- What drug other than alcohol was found most frequently in the Los Angeles Field Validation Study?
  - PCP
- What does “polydrug use” mean?
  - Ingesting drugs from two or more drug categories

Drug Evaluation &amp; Classification Training

RS-3

## Basic Drug Statistics

- How common was polydrug use in the LA Field Validation Study?
  - More than 70% of the suspects had two or more drug categories in them
- How good were the DREs in the Field Validation Study?
  - Nearly 80% of the time when the DREs said a particular category of drugs was present, that category was found in the suspect’s blood.
  - In more than 90% of the suspects, the DREs correctly identified at least one of the categories that were present

Drug Evaluation &amp; Classification Training

RS-4

## Basic Drug Statistics

- In the University of Tennessee Study, what percentage of injured drivers had drugs other than alcohol in them?
  - 40% of those drivers had evidence of other drugs in their urine

Drug Evaluation &amp; Classification Training

RS-5

## Review of Symptomatology

- Name six different CNS Depressants
- Name four different CNS Stimulants
- Name two naturally-occurring Hallucinogens
- Name four different synthetic Hallucinogens

Drug Evaluation &amp; Classification Training

RS-6

## Review of Symptomatology

- Name a major analog of PCP
- Name the three sub-categories of Inhalants
- What is the active ingredient in Cannabis?

Drug Evaluation &amp; Classification Training

RS-6

## Review of Vital Signs

- Pulse Rate
  - Define “Pulse”
    - \* Contraction and expansion of an artery, generated by the pumping action of the heart
  - True or false: Pulse rate is measured in units of “millimeters of mercury”.
    - \* FALSE: pulse rate is measured in “beats per minute”

Drug Evaluation &amp; Classification Training

RS-7

## Review of Vital Signs

- Pulse Rate (Cont.)
  - Name three different pulse points, and indicate where they are located.
    - \* Radial, Brachial and Carotid pulse points
  - What is the “normal” range of adult human pulse rate, for DRE purposes?
    - \* 60-90 beats per minute

Drug Evaluation &amp; Classification Training

RS-8

## Review of Vital Signs

- Blood Pressure
  - Define “Blood Pressure”.
    - \* The force that the circulating blood exerts on the walls of the arteries
  - Name the instrument used to measure blood pressure.
    - \* Sphygmomanometer
  - When does blood pressure reach its highest value? What is the highest value called?
    - \* The systolic pressure is reached when the heart contracts and pushes blood into the arteries

Drug Evaluation &amp; Classification Training

RS-9

## Review of Vital Signs

- Blood Pressure (Cont.)
  - When does blood pressure reach its lowest value? What is the lowest value called?
    - \* The diastolic pressure is reached when the heart is fully expanded
  - What is the “normal” range of adult human blood pressure, for DRE purposes?
    - \* Systolic: 120-140mmHg
    - \* Diastolic: 70-90mmHg

Drug Evaluation &amp; Classification Training

RS-10

## Review of Vital Signs

- Blood Pressure (Cont.)
  - What does “Hg” stand for?
    - \* Chemical symbol for mercury (“Hydrargyrum”, Latin word for “Mercury”). Blood pressure is measured in millimeters of mercury

Drug Evaluation &amp; Classification Training

RS-11

## Review of the Eye Examinations

### • Horizontal Gaze Nystagmus

- What are the three validated clues of impairment that have been established for HGN?
  - \* Lack of Smooth Pursuit
  - \* Distinct and Sustained Nystagmus at Maximum Deviation
  - \* Angle of Onset of Nystagmus Prior to 45 Degrees

Drug Evaluation &amp; Classification Training

RS-12

## Review of the Eye Examinations

### • Horizontal Gaze Nystagmus (Cont.)

- What formula expresses the approximate statistical relationship between BAC and the angle of onset of nystagmus?
  - \*  $BAC = 50 - \text{angle}$
- What categories of drugs usually will cause HGN?
  - \* CNS Depressants
  - \* Dissociative Anesthetics
  - \* Inhalants

Drug Evaluation &amp; Classification Training

RS-13

## Review of the Eye Examinations

### • Vertical Gaze Nystagmus

- True or False: Any drug that causes HGN may also produce Vertical Gaze Nystagmus.
  - \* TRUE: All drugs that cause Horizontal Gaze Nystagmus will cause Vertical Gaze Nystagmus, if the dose is large enough
- What category of drugs causes Vertical Gaze Nystagmus but not Horizontal Gaze Nystagmus?
  - \* NO drug causes Vertical Gaze Nystagmus but not HGN

Drug Evaluation &amp; Classification Training

RS-14

## Review of the Eye Examinations

### • Lack of Convergence

- True or False: Any drug that causes nystagmus will also usually cause the eyes to be unable to converge.
  - \* TRUE: CNS Depressants, Dissociative Anesthetics and Inhalants usually cause the eyes to be unable to converge
- What category of drugs usually causes lack of convergence but does not cause nystagmus?
  - \* CANNABIS usually causes Lack of Convergence, but doesn't cause nystagmus

Drug Evaluation &amp; Classification Training

RS-15

## Review of the Darkroom Examinations

- What are the three lighting conditions under which we must estimate the size of the suspect's pupils?
  - Room Light
  - Near Total Darkness
  - Direct Light
- How long should we wait in the Darkroom before beginning to check the suspect's pupils?
  - At least 90 seconds

Drug Evaluation &amp; Classification Training

RS-16

## Review of the Darkroom Examinations

- Name the device that we use to estimate the size of the suspect's pupils.
  - Pupillometer
- What do the numbers on the Pupillometer refer to?
  - The diameters of the dark circles/semi-circles
- In what units of measurement are those numbers given?
  - In millimeters

Drug Evaluation &amp; Classification Training

RS-17

## Review of the Darkroom Examinations

- For DRE purposes, what is the “normal” range of an adult pupil in room light?
  - The diameter of the pupil normally ranges from about 2.5 to 5.0 mm
- What does the term “MIOSIS” mean?
  - “Miosis” means an abnormally small or constricted pupil

Drug Evaluation &amp; Classification Training

RS-18

## Review of the Darkroom Examinations

- What does the term “MYDRIASIS” mean?
  - “Mydriasis” means an abnormally large or dilated pupil
- What category of drugs usually causes Miosis, or constricted pupils?
  - Narcotic Analgesics usually cause pupils to constrict below the normal range

Drug Evaluation &amp; Classification Training

RS-19

## Review of the Darkroom Examinations

- What categories usually cause Mydriasis, or dilated pupils?
  - CNS Stimulants and Hallucinogens usually cause pupils to dilate above the normal range. Cannabis also may cause dilation. Some inhalants will also cause dilation.
- What is unique about the drug Methaqualone (Quaaludes) and SOMA?
  - Both are CNS Depressants that cause pupil dilation.

Drug Evaluation &amp; Classification Training

RS-20

## Review of the Divided Attention Tests

- Name the four Divided Attention Tests administered during the DRE drug influence evaluation.
  - Romberg Balance
  - Walk and Turn
  - One Leg Stand
  - Finger to Nose

Drug Evaluation &amp; Classification Training

RS-21

## Review of the Divided Attention Tests

- Why is the Romberg Balance always the first test administered?
  - For standardization
  - The test requires the suspect to estimate the passage of 30 seconds; thus, it should be administered before the One Leg Stand test, in which the suspect is instructed to count out for 30 seconds

Drug Evaluation &amp; Classification Training

RS-22

## Review of the Divided Attention Tests

- What four validated clues of impairment have been established for the One Leg Stand Test?
  - Swaying
  - Raising the arms
  - Hopping
  - Putting the foot down

Drug Evaluation &amp; Classification Training

RS-23

### Review of the Divided Attention Tests

- How many times is the One Leg Stand administered during the DRE drug influence evaluation?
  - Twice
- Which foot must the suspect stand on first when performing the One Leg Stand?
  - Left

Drug Evaluation &amp; Classification Training

RS-24

### Review of the Divided Attention Tests

- How many validated clues of impairment have been established for the Walk and Turn test? Name them.
  - Eight validated clues
    - Cannot keep balance during the instructions
    - Starts too soon
    - Stops while walking
    - Misses heel to toe
    - Steps off the line
    - Uses arms to balance
    - Improper turn
    - Incorrect number of steps

Drug Evaluation &amp; Classification Training

RS-25

### Review of the Divided Attention Tests

- In what sequence is the suspect instructed to touch the index fingers to the nose on the Finger to Nose test?
  - Left, Right, Left, Right, Right, Left

Drug Evaluation &amp; Classification Training

RS-26

### General Review Questions

- What is the medical or technical term for “droopy eyelids”?
  - Ptosis
- What does “Piloerection” mean? What drug often causes piloerection?
  - “Piloerection” means “Hair Standing Up”, or “Goose Bumps”. It is often caused by LSD
- What is the medical or technical term for Heroin?
  - Diacetyl Morphine

Drug Evaluation &amp; Classification Training

RS-27

### General Review Questions

- Explain the terms “Null”, “Additive”, “Antagonistic” and “Overlapping” Effect as they apply to polydrug use. Give examples
  - “Null”: neither drug affects some specific indicator
  - “Additive”: the two drugs produce some identical effects
  - “Antagonistic”: the two drugs produce some directly opposite effects
  - “Overlapping”: one drug affects some symptom that the other doesn't affect, and vice versa

Drug Evaluation &amp; Classification Training

RS-28

### General Review Questions

- What is the difference between “Hippus” and “Rebound Dilation”?
  - “Hippus” refers to pupils that pulsate rhythmically in size between fixed limits; usually, Hippus develops during withdrawal from Narcotic Analgesics
  - “Rebound Dilation” is a period of constriction followed by dilation with a change equal to or greater than 2 mm.

Drug Evaluation &amp; Classification Training

RS-29

## General Review Questions

- What is the drug "Percobarb"?
  - It is a combination of the natural opiate Percodan with a barbiturate. Percobarb thus is a polydrug, a combination of a Narcotic Analgesic and a CNS Depressant
- What does "Bruxism" mean?
  - Grinding the teeth

Drug Evaluation &amp; Classification Training

RS-30

## General Review Questions

- What does the number denoting the size of a hypodermic needle refer to?
  - The inside diameter of the needle
- What does "Synesthesia" mean?
  - A mixing of senses, i.e. hearing colors or seeing sounds
- What is "Sinsemilla"?
  - A variety of marijuana with a high concentration of THC

Drug Evaluation &amp; Classification Training

RS-31

## General Review Questions

What are the twelve major components of the DRE drug influence evaluation?

- |                                  |                                   |
|----------------------------------|-----------------------------------|
| – Breath Alcohol Test            | – Examination for Muscle Tone     |
| – Interview of Arresting Officer | – Examination for Injection Sites |
| – Preliminary Examination        | – Suspect's Statements            |
| – Examinations of the Eyes       | – Opinion of the Evaluator        |
| – Divided Attention Tests        | – Toxicological Exam              |
| – Vital Signs Examinations       |                                   |
| – Dark Room Examinations         |                                   |

Drug Evaluation &amp; Classification Training

RS-32

## Review of Physiology

Name the ten major body systems.

- M is for Muscular System  
 U is for Urinary System  
 R is for Respiratory System    I is for Integumentary System  
 D is for Digestive System    N is for Nervous System  
 E is for Endocrine System    C is for Circulatory System  
 R is for Reproductive System  
 S is for Skeletal System

Drug Evaluation &amp; Classification Training

RS-33

## Review of Physiology

- What is the distinction between the "Smooth" muscles and the "Striated" muscles?
  - We consciously control the Striated; we don't consciously control the Smooth
- What do we call the chemicals that are produced by the Endocrine System?
  - Hormones
- What is a neuron?
  - A nerve cell

Drug Evaluation &amp; Classification Training

RS-34

## Review of Physiology

- What do we call the space between two nerve cells?
  - Synapse, or synaptic gap
- What do we call the chemicals that pass from one nerve cell to the next?
  - Neurotransmitters
- What do we call the part of the nerve cell that sends out the neurotransmitter?
  - The axon

Drug Evaluation &amp; Classification Training

RS-35

## Review of Physiology

- What do we call the part of a nerve cell that receives the neurotransmitter?
  - Dendrite
- What do the Sensory Nerves do?
  - Carry messages to the brain, from the sense organs, pain sensors, etc.
- What do the Motor Nerves do?
  - Carry messages from the brain, to the muscles, etc.

Drug Evaluation &amp; Classification Training

RS-36

## Review of Physiology

- Name the two sub-divisions of Motor Nerves.
  - Voluntary (control striated muscles) and Autonomic (control smooth muscles)
- Name the two sub-divisions of Autonomic Nerves and describe their functions.
  - Sympathetic (command the body's response to fear, excitement, etc.), and Parasympathetic (promote the body's tranquil activities)

Drug Evaluation &amp; Classification Training

RS-37

## Review of Physiology

- What does it mean to say that a drug is "sympathomimetic"?
  - It means that the drug's effects mimic those caused by messages transmitted along sympathetic nerves (excitement, agitation, arousal, etc.)
- What does it mean to say that a drug is "parasympathomimetic"?
  - The drug's effects mimic those caused by messages transmitted along parasympathetic nerves (relaxation, calm, sleep, etc.)

Drug Evaluation &amp; Classification Training

RS-38

## Review of Physiology

- Which two categories of drugs can most appropriately be called sympathomimetic?
  - CNS Stimulants and Hallucinogens
- Which category can most appropriately be called parasympathomimetic?
  - Narcotic Analgesics
  - Clarification: Cannabis, Dissociative Anesthetics, and Inhalants have some sympathomimetic characteristics, but not as many as do the Stimulants and Hallucinogens. Depressants have some parasympathomimetic characteristics, but not as many as do the Narcotic Analgesics.

Drug Evaluation &amp; Classification Training

RS-39

## Review of Physiology

- What is an artery?
  - Strong, elastic blood vessel that carries blood from the heart to the body's tissues and organs
- What is a vein?
  - Blood vessel that carries blood back to the heart from tissues and organs

Drug Evaluation &amp; Classification Training

RS-40

## Review of Physiology

- What is the Pulmonary Artery, and what is unique about it?
  - It is the artery that carries blood from the heart to the lungs. It is the only artery that carries blood depleted of oxygen
- What are the Pulmonary Veins and what is so special about them?
  - They are the veins that carry blood back to the heart from the lungs. They are the only veins that carry blood rich in oxygen.

Drug Evaluation &amp; Classification Training

RS-41

**QUESTIONS?**

Drug Evaluation & Classification Training

**A SELF-TEST FOR REVIEW AND STUDY**

Circle the letters corresponding to the correct answers. Note that some questions have more than one correct answer.

1. Suppose you examine a suspect that you know is under the combined influence of Demerol and Thorazine. Which of the following would you not expect to find in that suspect? (Circle all that you wouldn't expect)
  - A. Tachycardia is present
  - B. Horizontal Gaze Nystagmus is present
  - C. Hypotension is present
  - D. Mydriasis is present
  - E. Lack of Convergence is present
  
2. The Autonomic Nervous System has sympathetic nerves and \_\_\_\_\_ nerves.
  - A. parasympathetic
  - B. metasympathetic
  - C. postsympathetic
  - D. mesosympathetic
  - E. pilosympathetic
  
3. Suppose you examine a suspect that you know is under the combined influence of Ketamine and Methamphetamine, and you observe that he or she exhibits Horizontal Gaze Nystagmus. This is an example of ....
  - A. A Synergistic Effect
  - B. An Antagonistic Effect
  - C. The Null Effect
  - D. An Overlapping Effect
  - E. An Additive Effect
  
4. The technical term meaning "constricted pupils" is ....
  - A. Mydriasis
  - B. Occulosis
  - C. Miosis
  - D. Bruxism
  - E. Ptosis

5. Chloral Hydrate is an example of ....
- A. a Non-Barbiturate
  - B. an Anti-Psychotic Tranquilizer
  - C. an Anti-Depressant
  - D. a Barbiturate
  - E. an Anti-Anxiety Tranquilizer
6. Hydrocodone is derived from which of the following opium alkaloids?
- A. Codeine
  - B. Morphine
  - C. Thebaine
  - D. Heroin
  - E. Non of the above
7. Which of the following ordinarily will cause Horizontal Gaze Nystagmus? (Circle all that usually cause nystagmus.)
- A. Methamphetamine
  - B. Valium
  - C. The combination of Cocaine and Xanax
  - D. The combination of Cannabis and LSD
  - E. The combination of Heroin and Dilaudid
8. Ritalin is an example of ....
- A. a CNS Stimulant
  - B. a Narcotic Analgesic
  - C. an Hallucinogen
  - D. a CNS Depressant
  - E. an Analog of Phencyclidine
9. Suppose you examine a suspect that you know is under the combined influence of Heroin and PCP, and you observe that he or she exhibits miosis. This is most likely due to ....
- A. The "Downside" of Heroin
  - B. An Overlapping Effect between the two drugs
  - C. An Antagonistic Effect between the two drugs
  - D. An Additive Effect between the two drugs
  - E. The "Downside" of PCP

10. Which of the following usually will be true in a subject who is under the influence of an Hallucinogen? (Circle all that usually will be true.)
- A. Pupils will be constricted
  - B. Body temperature will be elevated
  - C. Eyes will be unable to converge
  - D. Blood pressure will be elevated
  - E. Horizontal Gaze Nystagmus will be present
11. Which of the following is not classified as an Hallucinogen? (Circle all that are not Hallucinogens.)
- A. ETOH
  - B. DOM
  - C. MDMA
  - D. MPPP
  - E. THC
12. Which of the following ordinarily will leave body temperature within the normal range? (Circle all that usually don't affect body temperature.)
- A. CNS Stimulants
  - B. Dissociative Anesthetics
  - C. Cannabis
  - D. CNS Depressants
  - E. All of the above usually do affect body temperature
13. Suppose you examine a suspect that you know is under the combined influence of Percodan and Cannabis, and you find that the suspect's pulse rate is 74 bpm. This is most likely due to ....
- A. An Additive Effect between the two drugs
  - B. The "Downside" of Cannabis
  - C. An Overlapping Effect between the two drugs
  - D. An Antagonistic Effect between the two drugs
  - E. The "Downside" of Percodan
14. How many distinct, validated clues have been established for the Romberg Balance test?
- A. Eight
  - B. Six
  - C. Four
  - D. Three
  - E. There are no validated clues for that test.

15. A person under the combined influence of Ritalin and LSD usually will have above normal blood pressure. This is an example of ....
- A. An Overlapping Effect
  - B. A Synergistic Effect
  - C. The Null Effect
  - D. An Additive Effect
  - E. An Antagonistic Effect
16. The gap between two nerve cells is called the ....
- A. Vesicle
  - B. Neuron
  - C. Synapse
  - D. Dendrite
  - E. Axon
17. "Ptosis" most nearly means ....
- A. Dilated pupils
  - B. Grinding the teeth
  - C. Constricted pupils
  - D. Droopy eyelids
  - E. Goose bumps
18. How many distinct, validated clues have been established for the Walk-and-Turn test?
- A. Eight
  - B. Six
  - C. Four
  - D. Three
  - E. There are no validated clues for that test.
19. Which of the following are not subcategories of Inhalants? (Circle all that are not proper names for Inhalant Subcategories.)
- A. Fluorocarbons
  - B. Anesthetic Gases
  - C. Aerosols
  - D. Volatile Solvents
  - E. Propellants

20. Phencyclidine is best described as ....
- A. parasympathomimetic
  - B. an anti-depressant
  - C. a cellular stimulant
  - D. psychotophobic
  - E. a dissociative anesthetic
21. Which of the following usually will not cause the pupils to dilate? (Circle all that usually do not cause dilation.)
- A. MDMA
  - B. Methaqualone
  - C. Dexedrine
  - D. Peyote
  - E. Ketamine
22. Which subcategory or subcategories of Inhalants usually cause blood pressure to be below normal? (Circle all that usually cause below normal blood pressure.)
- A. Anesthetic Gases
  - B. Propellants
  - C. Volatile Solvents
  - D. Aerosols
  - E. Fluorocarbons
23. Which of the following are Natural Alkaloids of opium? (Circle all that are Natural Alkaloids.)
- A. Lortab
  - B. Dilaudid
  - C. Codeine
  - D. Thebaine
  - E. Hycodan
24. "Crank" is a street name for ....
- A. Heroin
  - B. Cocaine
  - C. PCP
  - D. Methamphetamine
  - E. LSD

25. Which of the following are not validated clues for the One Leg Stand test? (Circle all that aren't validated clues.)
- A. Hopping
  - B. Raising the arms
  - C. Putting the foot down
  - D. Failing to count out loud
  - E. Swaying
26. Which of the following would be considered sympathomimetic drugs? (Circle all that are sympathomimetic.)
- A. MDMA
  - B. Dexedrine
  - C. Xanax
  - D. Oxycontin
  - E. Desoxyn
27. Suppose you examine a suspect, and you observe all of the following: Horizontal Gaze Nystagmus is present, with an onset of approximately 30 degrees; BAC is 0.00; eyes are unable to converge; pupil size is 5.5 mm in near-total darkness and 3.5 mm in direct light; pupil reaction to light is within normal; pulse rate is 100 bpm; blood pressure is 148/96; body temperature is 99.8 degrees. In your opinion, this suspect is under the influence of ....
- A. a combination of a CNS Depressant and a CNS Stimulant
  - B. a CNS Depressant alone
  - C. a Dissociative Anesthetic, alone
  - D. a combination of Dissociative Anesthetic and a CNS Stimulant
  - E. a combination of a CNS Depressant and Cannabis
28. The only artery that carries de-oxygenated blood is the \_\_\_\_\_ artery.
- A. Carotid
  - B. Brachial
  - C. Pulmonary
  - D. Radial
  - E. Coronal

29. Suppose a subject is under the influence of Hycodan and nothing else. Indicate whether each of the following will be true or false:
- A. T F Horizontal Gaze Nystagmus will not be present
  - B. T F Pupils will be constricted
  - C. T F Bradycardia will be present
  - D. T F Eyes will be able to converge
  - E. T F Hypotension will be present
30. "Bruxism" most nearly means ....
- A. Dilated pupils
  - B. Grinding the teeth
  - C. Constricted pupils
  - D. Droopy eyelids
  - E. Goose bumps
31. Suppose a suspect is under the influence of a combination of Marijuana and Cocaine, but nothing else. Indicate whether each of the following will be true or false:
- A. T F Pulse rate will be elevated
  - B. T F Pupils will be dilated
  - C. T F Horizontal Gaze Nystagmus will be present
  - D. T F Eyes will be able to converge
  - E. T F Blood pressure will be elevated
32. How many distinct, validated clues have been established for the Finger-to-Nose test?
- A. Eight
  - B. Six
  - C. Four
  - D. Three
  - E. There are no validated clues for this test.
33. The drug \_\_\_\_\_ is an example of an Anti-Anxiety Tranquilizer. (Circle all that are Anti-Anxiety Tranquilizers.)
- A. Librium
  - B. Valium
  - C. Amobarbital
  - D. Chloral Hydrate
  - E. Xanax

**ANSWER KEY FOR THE SELF-TEST**

1. Correct answers are A and D.  
Demerol is a Narcotic Analgesic, Thorazine is a CNS Depressant. The combination should not produce elevated heart rate (Tachycardia) nor dilated pupils (Mydriasis). But Horizontal Gaze Nystagmus and Lack of Convergence should be present, due to the Depressant, Thorazine. And, lowered blood pressure (Hypotension) should be present as an Additive Effect of both drugs.
2. Correct answer is A, parasympathetic.
3. Correct answer is D, Overlapping.  
Ketamine is an Analog of PCP, a drug that usually does cause Horizontal Gaze Nystagmus. Methamphetamine is a CNS Stimulant, a type of drug that doesn't affect nystagmus. This is a case of action plus no action equals action, i.e., an Overlapping Effect.
4. Correct answer is C, Miosis.
5. Correct answer is A, Non-Barbiturate.
6. Correct answer is A, Codeine.
7. Correct answers are B and C.  
Valium is a CNS Depressant, which of course causes nystagmus. The combination of Cocaine and Xanax gives us a Stimulant and a Depressant (Xanax), which causes Nystagmus via an Overlapping Effect. None of the other drugs mentioned cause Nystagmus: Methamphetamine is a Stimulant; LSD is an Hallucinogen; Heroin and Dilaudid are Narcotics; Cannabis, of course, is its own category.
8. Correct answer is A, CNS Stimulant.
9. Correct answer is B, Overlapping.  
Heroin, a Narcotic, causes constriction of the pupils (Miosis); PCP does not affect pupil size. This is another case of action plus no action equals action.
10. Correct answers are B and D.  
Hallucinogens are sympathomimetic drugs, and therefore usually elevate the vital signs. But they have no affect on either Nystagmus or Lack of Convergence. And, instead of constricting the pupils, Hallucinogens usually cause pupils to dilate.

11. Correct answers are A, D and E.  
ETOH is the chemical name for Ethyl Alcohol, the common beverage form of alcohol that remains the most commonly-abused drug. MPPP is a synthetic opiate. THC is the primary active ingredient in Cannabis. But "MDMA" (also known as "Ecstasy") and "DOM" (also known as "STP") are Hallucinogens.
12. Correct answers are C and D, Cannabis and Depressants.
13. Correct answer is D, Antagonistic.  
A pulse rate of 74 bpm is within the normal range. Percodan, a Narcotic Analgesic, usually lowers the pulse, while Cannabis usually elevates the pulse. The Antagonistic Effect of the two drugs has put this suspect's pulse into a precarious, and probably temporary, state of balance.
14. Correct answer is E, no validated clues.  
It is important to understand that, when we say there are no validated clues for Romberg, that does not mean that the test is invalid. It simply means that we do not have the research data to attest that specific clues on that test are statistically reliable indicators of impairment. Those kinds of research data, at the present time, are available only for Horizontal Gaze Nystagmus, Walk and Turn and One Leg Stand.
15. Correct answer is D, Additive.  
Ritalin (a Stimulant) and LSD (an Hallucinogen) both usually elevate blood pressure.
16. Correct answer is C, Synapse.
17. Correct answer is D, Droopy Eyelids.
18. Correct answer is A, Eight.  
Of the eight validated clues for Walk and Turn, two may be observed during the Instructions Stage of the test. They are can't keep balance (which means the suspect breaks away from the heel-to-toe stance) and starts too soon. The other six clues pertain to the Walking Stage of the test. They include:
  - o misses heel-to-toe
  - o raises arms
  - o steps off line
  - o stops walking
  - o turns improperly
  - o takes the wrong number of steps

Although these eight are the only validated clues for Walk and Turn, they aren't the only things that might be observed that could serve as evidence of impairment. All of your observations of the suspect are important.

19. Correct answers are A and E, Fluorocarbons and Propellants.  
The only proper names for subcategories of Inhalants are Volatile Solvents, Aerosols and Anesthetic Gases.
20. Correct answer is E, dissociative anesthetic.
21. Correct answer is E, Ketamine.  
Ketamine is an analog of PCP, a drug that doesn't affect pupil size. MDMA and Peyote are Hallucinogens, and Dexedrine is a CNS Stimulant; all of those dilate pupils. Methaqualone is a very special CNS Depressant; unlike almost all other Depressants, Methaqualone does affect pupil size (by dilating the pupils).
22. Correct answer is A, Anesthetic Gases.  
Volatile Solvents and Aerosols usually produce above-normal blood pressure. "Fluorocarbons" and "Propellants" are, of course, not proper names for subcategories of Inhalants.
23. Correct answers are C and D, Codeine and Thebaine.  
Metopon, Dilaudid and Lortab are all opium derivatives. Dilaudid derives from Morphine, Hycodan from Codeine and Metopon from Thebaine.
24. Correct answer is D, Methamphetamine.
25. Correct answer is D, Failing to Count Out Loud.  
Hopping, Raising the Arms, Putting the Foot Down and Swaying are the four (and only four) validated clues of impairment for One Leg Stand.
26. Correct answers are A, B and E: MDMA, Dexedrine and Desoxyn.  
Dexedrine and Desoxyn are members of the Amphetamine family of CNS Stimulants. MDMA is a "Psychedelic Amphetamine" belonging to the Hallucinogens. CNS Stimulants and Hallucinogens are the two categories that make up the sympathomimetic drugs. That means they simulate the responses that the body makes to messages conveyed along the sympathetic nerves, i.e., elevated vital signs, dilated pupils, etc. Three other categories, namely the Inhalants, Dissociative Anesthetics and Cannabis have some sympathomimetic characteristics, but they are not considered to be fully sympathomimetic, and not to the degree of the CNS Stimulants and Hallucinogens. Xanax and Oxycontin aren't even close to being sympathomimetic. Xanax (a Depressant) and Oxycontin (a Narcotic) are better described as wholly or partially parasympathomimetic.

27. Correct answer is C, Dissociative Anesthetic alone.  
A Dissociative Anesthetic such as PCP, by itself, can account for all of the observations listed. Dissociative Anesthetics causes Nystagmus, and Lack of Convergence; it does not affect pupil size, so the pupils remain within the normal range; it does not affect the reaction of the pupils to light; it does usually elevate all three vital signs.

A Depressant, by itself, could not account for the elevated vitals, and usually would slow the pupils' reaction to light.

If we had a combination of a Depressant and a Stimulant, we'd expect to see the pupils dilated beyond the normal range (due to an Overlapping Effect), and we'd expect to see the reaction of the pupils slowed (due to an Additive Effect). Also, although it is possible that the vital signs could all be elevated with a combination of Depressant and Stimulant, we'd probably expect to see some "moderation" of the vitals due to an Antagonistic Effect.

If we had a combination of Dissociative and a Stimulant, we could expect to see pupil dilation and some slowing of the reaction to light, due to Overlapping Effects.

If we had a combination of Depressant and Cannabis, we'd expect to find the temperature within the normal range, since neither of those drugs ordinarily affects temperature.

28. Correct answer is C, Pulmonary.
29. Correct answers are:  
 (A) True: no nystagmus will be present  
 (B) True: we will see miosis, or constricted pupils  
 (C) True: we will find a slow pulse, or Bradycardia  
 (D) True: we won't see a Lack of Convergence, so the eyes will be able to converge  
 (E) True: we will find a lowered blood pressure, or Hypotension  
 Hycodan is a Narcotic Analgesic, and these observations will be consistent with impairment by Narcotics.
30. Correct answer is B, Grinding the Teeth
31. Correct answers are:  
 (A) True: An Additive Effect will elevate the pulse for this combo  
 (B) True: pupils will dilate due to an Overlapping or Additive Effect  
 (C) False: neither drug causes Nystagmus, so the Null Effect will also cause no nystagmus  
 (D) False: Marijuana causes Lack of Convergence, so the Overlapping

Effect means the eyes won't converge

(E) True: An Additive Effect will elevate the blood pressure

32. Correct answer is E, no validated clues

33. Correct answer are A, B and E: Librium, Valium and Xanax

One Hour and Fifty Minutes

**SESSION I**  
**INTRODUCTION AND OVERVIEW**

## **SESSION I            INTRODUCTION AND OVERVIEW**

Upon successfully completing this session the student will be able to:

- o State the goals and objectives of the course.
- o Outline the major course content.
- o Outline the schedule of major course activities.
- o Outline the contents and arrangement of the student manual.

During this session the student will demonstrate his or her current knowledge of basic concepts and terminology relevant to the Drug Evaluation and Classification Process.

### Content Segments

### Learning Activities

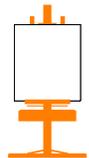
- |                                     |                                 |
|-------------------------------------|---------------------------------|
| A. Welcoming Remarks and Goal       | o Instructor Led Presentations  |
| B. Participant Introductions        | o Participant Led Presentations |
| C. Objectives                       | o Knowledge Examination         |
| D. Overview of Content and Schedule | o Reading Assignments           |
| E. Overview of Student Manual       |                                 |
| F. Administrative Matters           |                                 |
| G. Glossary of Terms                |                                 |

Aids	Lesson Plan	Instructor Notes
 <b>I-1 (Title)</b>	<p><b>INTRODUCTION AND OVERVIEW</b></p> <p><b>A. Welcoming Remarks and Goal</b></p> <p>1. Welcome to the seven day DRE School.</p> <p>2. The goal of this school is simple:</p> <p>To help you prevent crashes, deaths and injuries caused by drug-impaired drivers.</p> <p>a. Maryland Shock Trauma Center study (1985-1986)</p> <p>32 percent of drivers treated at the Shock Trauma Center had used marijuana prior to their crashes.</p> <p>b. University of Tennessee study (1988)</p> <p>40 percent of drivers treated at Trauma Center for crash injuries had drugs other than alcohol in them.</p>	<p>Total Lesson Time: Approximately 110 Minutes</p> <p>Display Session Title</p>
 <b>I-2 (Objectives)</b>  <b>10 Minutes</b>		<p>Briefly review the content, objectives and activities of this session.</p>
 <b>I-3 (Goal)</b>		<p><b>Brief</b> welcoming remarks by the lead-off instructor (not longer than one minute).</p>
 <b>I-3A (MD Study)</b>		<p>The Tennessee study was conducted by Kirby, Jackie M. (RN, MSN) and Maull, Kimball I. (MD), Division of Trauma/ Critical Care, Department of Surgery, University of Tennessee Medical Center, Knoxville, Tennessee.</p>
 <b>I-3B (TN Study)</b>		<p>Emphasize that these studies clearly show that drug impaired driving is a major problem in this country.</p>

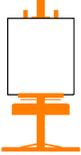
Aids	Lesson Plan	Instructor Notes
 <p><b>I-3C</b> (NHTSA Study)</p>	<p>c. NHTSA (1992) 17.8 percent of 1,882 operators involved in fatal crashes from thirteen sites tested positive for drugs other than alcohol.</p>	<p>Instructor note: Remind students that all studies published are subject to interpretation.</p> <p>For more information contact NHTSA, The National Traffic Law Center, or the IACP DEC Technical Advisory Panel.</p> <p>Study by Terhune, Ippolito, Hendricks, etc.</p> <p>The 13 sampling sites were from the states of California, Massachusetts, Nevada, North Carolina, Texas, Virginia and Wisconsin.</p>
 <p><b>I-3D</b> (WA State Study)</p>	<p>d. The results of blood or urine tests from 370 fatally injured drivers in Washington revealed that marijuana was the most encountered drug (12 percent), followed by benzodiazepines (5 percent), cocaine (4.8 percent) and Amphetamines (4.8 percent).</p>	<p>Source: Combined Drug &amp; Alcohol Use In Fatally Injured Drivers in Washington State, Journal of Forensic Sciences, Schwilke, et al 2006</p>
 <p><b>I-3E</b> (Incidence of Drugged Driving)</p>	<p>e. In 2003, one out of six high school seniors admitted driving under the influence of drugs.</p>	<p>Source: SADD, 2003</p>

Aids	Lesson Plan	Instructor Notes
	<p>f. In 2004, 10.6 million people reported driving under the influence of an illicit drug during the past year .</p> <p>3. We can do something to remove drugged drivers from our roads.</p> <p>a. The Drug Evaluation and Classification (DEC) Program is based on solid medical and scientific facts.</p> <p>b. The validity of the Drug Evaluation and Classification (DEC) Program has been tested in carefully controlled research in both the laboratory and the field.</p> <p>4. By enrolling in Drug Recognition Expert (DRE) training, you have become part of an elite international program.</p> <p>a. DREs form one of the tightest knit fraternities in law enforcement.</p> <p>b. DREs from many agencies and from many parts of the country work closely together to share information and other resources, and to maintain the highest standards of quality.</p>	<p>National Survey on Drug Use and Health (NSDUH) report: Drugged Driving Update, 2005</p> <p><u>Point out</u> that the students will hear more about this research later today.</p> <p>Mention the various agencies represented among the instructors and the students in this school.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>25 Minutes</b></p>	<p>c. Each of you was selected to receive this training because you were recognized by your department as a skilled and dedicated law enforcement professional.</p> <p>d. Your instructors welcome you to this school and are proud to have you here, and we're sure that you are proud to be here.</p> <p><b>B. Introductions</b></p> <ol style="list-style-type: none"> <li>1. Introduction of representatives of host agencies and other dignitaries.</li> <li>2. Introduction of faculty.</li> <li>3. Students' introductions.</li> </ol>	<p>The introductions of dignitaries, and their welcoming remarks, must be kept brief: no more than 10 minutes can be devoted to this.</p> <p>The lead-off instructor should mention the names and agency affiliations of all other instructors, asking each to stand as their name is called.</p> <p>Whenever possible, instructor should consider using creative and innovative icebreaking techniques. At a minimum, instruct each student to stand and give their name, agency affiliation and experience.</p>
 <p><b>10 Minutes</b></p>  <p><b>I-4A (First Three</b></p>	<p><b>C. Objectives</b></p> <ol style="list-style-type: none"> <li>1. If you successfully complete this School, you will be able to: <ol style="list-style-type: none"> <li>a. Describe the involvement of drugs in impaired driving incidents.</li> </ol> </li> </ol>	

Aids	Lesson Plan	Instructor Notes
<p>Objectives)</p>  <p>I-4B (Next Two Objectives)</p>  <p>I-3C (Last Three Objectives)</p>  <p>25 Minutes</p> 	<p>b. Name the seven categories of drugs and recognize their effects.</p> <p>c. Describe and properly conduct the drug influence evaluation.</p> <p>d. Document the results of the drug influence evaluation.</p> <p>e. Properly interpret the results of the evaluation.</p> <p>f. Prepare a narrative Drug Influence Report.</p> <p>g. Testify clearly and convincingly in drug evaluation cases.</p> <p>h. Maintain an up to date DRE Curriculum Vitae (C.V.).</p> <p>2. Every DRE needs to be able to do these eight things.</p> <p>3. Before you can be certified as a DRE, you will have to demonstrate that you can do each of these things.</p> <p><b>D. Overview of Content and Schedule</b></p> <p>1. Major content topics</p> <p>a. Drugs in society and in vehicle operation.</p>	<p>Solicit students' questions about the objectives.</p> <p>Refer to wall charts in previewing the content topics.</p> <p><u>Briefly</u> overview the contents covered under each major topic.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>b. Development and effectiveness of the Drug Evaluation and Classification (DEC) Program.</li> <li>c. Overview of the DEC Procedures.</li> <li>d. Eye Examinations (a major component of the DEC procedures).</li> <li>e. Physiology and Drugs.</li> <li>f. Vital signs examinations (a major component of the DEC procedures).</li> <li>g. The seven categories of drugs.</li> <li>h. The Physicians's Desk Reference (PDR) and other reference sources.</li> <li>i. Interviewing suspects (a major component of the DEC procedures).</li> <li>j. Curriculum Vitae (C.V.) preparation and maintenance.</li> <li>k. Case preparation and testimony.</li> <li>l. Classifying a suspect (interpreting and documenting the results of an examination)</li> </ul> <p>2. Hands-on practice sessions.</p>	<p>Solicit students' questions concerning the content topics.</p> <p><u>Emphasize</u> that hands on practice is the principal learning activity of this course.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>a. Eye Examinations practice (Nystagmus, Lack of Convergence, pupil size and reaction to light)</li> <li>b. Alcohol workshop (psychophysical testing practice)</li> <li>c. Practicing interpretation of the examination results.</li> <li>d. Vital signs examinations practice (pulse, blood pressure)</li> <li>e. Practicing administration of the drug influence evaluation.</li> <li>f. Simulated drug impaired subjects examinations.</li> </ul>	<p>Refer to wallchart outlining practice sessions.</p> <p><u>Point out</u> that volunteer drinkers from outside the class will be recruited for this session.</p> <p><u>Point out</u> that several sessions will be devoted to this allowing the students to review drug evaluation reports and identify the probable drug category or combinations of categories.</p> <p><u>Point out</u> that several sessions will be devoted to this. In each, students will practice administering the drug influence examinations to each other. No hands on practice with <u>actual</u> drugged subjects is included in the classroom portion of DRE training.</p> <p><u>Point out</u> that students will work in teams to conduct and document examinations of instructors who will be simulating the indicators of drug-impaired subjects.</p> <p>Solicit students' questions concerning the hands-on practice sessions.</p>
	<ul style="list-style-type: none"> <li>3. Course schedule.</li> </ul>	<p>Refer students to the schedule shown in their manuals.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>25 Minutes</b></p>	<p><b>E. Overview of Student Manual</b></p> <ol style="list-style-type: none"> <li>1. The student manual is the basic reference document for this course. <ol style="list-style-type: none"> <li>a. The manual contains a summary of presentations made by instructors throughout the classroom training.</li> <li>b. The manual includes a set of "class notes" for every session in the course.</li> </ol> </li> <li>2. Students are expected to use the manual to review the material covered in class.</li> <li>3. The manual should also be used to <u>preview</u> the class sessions.</li> <li>4. By taking good notes, and by studying the manual carefully, students should have no trouble in passing the course.</li> </ol>	<p><u>Briefly</u> overview the schedule of sessions.</p> <p>Solicit students' questions concerning the schedule.</p> <p><u>Make sure</u> each student has a copy of the student manual.</p> <p><u>Point out</u> that the student manual has a separate chapter, or section, for each session of the course.</p> <p><u>Instruct</u> students to open their manuals to Session I, and <u>briefly</u> review the content of that section of the manual, to illustrate how the document is organized.</p> <p>Encourage students to read the appropriate student manual sessions prior to each day's classes.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>15 Minutes</b></p>	<p>5. At the conclusion of the classroom training, the student must pass the written test with a score of 80 percent or better in order to progress to the certification phase.</p> <p><b>F. Administrative Matters</b></p> <p>1. Logistics. (Completion of registration forms, travel vouchers, etc.)</p> <p>2. Mandatory attendance at all sessions of this school.</p> <p>3. Facilities. (Locations of restrooms, lunchrooms, etc.)</p> <p>4. Pre-test</p>	<p>Remind students that there will be numerous quizzes during the class.</p> <p>Emphasize that, if a student misses any portion of this school, he or she must make up the deficiency via after hours tutoring before beginning certification training.</p> <p>Hand out pre-tests. <u>Emphasize</u> that the pre-test scores do not affect passage of this course, nor will the pre-test be a part of the student's permanent record. Allow 10 minutes for students to complete, then collect the pre-tests.</p> <p>Point out to the students that they will find a "clean" copy of the pre-test at the end of Section I of their student's manual. Inform students to use the pre-test as a study guide while they progress through the course.</p>



# Drug Recognition Expert 7-Day School

## Session I

### Introduction and Overview



I-1

### Introduction and Overview

Upon successfully completing this session the student will be able to:

- State the goals and objectives of the course
- Outline the major course content
- Outline the schedule of major course activities
- Outline the contents and arrangement of the student manual

Drug Evaluation & Classification Training I-2

### Ultimate Goal of the Program

To help you prevent crashes, deaths and injuries caused by drug-impaired drivers



Drug Evaluation & Classification Training I-3

### Incidence of Drugged Driving:

**Maryland Shock Trauma Center Study (1985-1986):**

**32% of drivers treated at the Shock Trauma Center had used marijuana prior to their crashes**

Drug Evaluation & Classification Training I-3A

### University of Tennessee Study (1988)

**40% of drivers receiving emergency treatment had used drugs prior to the crash**



Drug Evaluation & Classification Training I-3B

## National Highway Traffic Safety Administration (NHTSA)

1992 study revealed that 17.8% of 1,882 drivers involved in fatal crashes tested positive for drugs other than alcohol



Drug Evaluation & Classification Training

I-3C

## State of Washington (2003)

The results of blood and/or urine tests from 370 fatally injured drivers revealed the following drugs:

- Marijuana (12%)
- Benzodiazepines (5.1%)
- Cocaine (4.8%)
- Amphetamines (4.8%)



Drug Evaluation & Classification Training

I-3D

## Incidence of Drugged Driving

- In 2003, one out of six high school seniors admitted driving under the influence of drugs (*SADD, 2003*)
- In 2004, 10.6 million persons reported driving under the influence of an illicit drug during the past year (*NSDUH*)

Drug Evaluation & Classification Training

I-3E

## Classroom Training Objectives

You will become better able to:

1. Describe the involvement of drugs in impaired driving incidents
2. Name the seven drug categories and recognize their effects
3. Describe and properly conduct the drug influence evaluation

Drug Evaluation & Classification Training

I-4A

## Classroom Training Objectives (Continued)

4. Document the results of the drug influence evaluation
5. Properly interpret the results of the evaluation
6. Prepare a narrative for the drug influence evaluation

Drug Evaluation & Classification Training

I-4B

## Classroom Training Objectives (Continued)

7. Discuss appropriate procedures for testifying in typical drug evaluation and classification cases
8. Prepare and maintain a relevant and up-to-date Curriculum Vitae (C.V.)

Drug Evaluation & Classification Training

I-4C

**QUESTIONS?**

Drug Evaluation & Classification Training

## **DRUG EVALUATION AND CLASSIFICATION PROGRAM**

### **GLOSSARY OF TERMS**

#### **ACCOMMODATION REFLEX**

The adjustment of the eyes for viewing at various distances. Meaning the pupils will automatically constrict as objects move closer and dilate as objects move further away.

#### **ADDICTION**

Habitual, psychological, and physiological dependence on a substance beyond one's voluntary control.

#### **ADDITIVE EFFECT**

One mechanism of polydrug interaction. For a particular indicator of impairment, two drugs produce an additive effect if they both affect the indicator in the same way. For example, cocaine elevates pulse rate and PCP also elevates pulse rate. The combination of cocaine and PCP produces an additive effect on pulse rate.

#### **AFFERENT NERVES**

See: "Sensory Nerves."

#### **ALKALOID**

A chemical that is found in, and can be physically extracted from, some substance. For example, morphine is a natural alkaloid of opium. It does not require a chemical reaction to produce morphine from opium.

#### **ANALGESIC**

A drug that relieves or allays pain.

#### **ANALOG (of a drug)**

An analog of a drug is a chemical that is very similar to the drug, both in terms of molecular structure and in terms of psychoactive effects. For example, the drug Ketamine is an analog of PCP.

#### **ANESTHETIC**

A drug that produces a general or local insensibility to pain and other sensation.

#### **ANTAGONISTIC EFFECT**

One mechanism of polydrug interaction. For a particular indicator of impairment, two drugs produce an antagonistic effect if they affect the indicator in opposite ways. For example, heroin constricts pupils while

cocaine dilates pupils. The combination of heroin and cocaine produces an antagonistic effect on pupil size. Depending on how much of each drug was taken, and on when they were taken, the suspect's pupils could be constricted, or dilated, or within the normal range of size.**ARRHYTHMIA**  
An abnormal heart rhythm.

**ARRHYTHMIA**

An abnormal heart rhythm.

**ARTERY**

The strong, elastic blood vessels that carry blood away the heart.

**ATAXIA**

A blocked ability to coordinate movements. A staggering walk and poor balance may be caused by damage to the brain or spinal cord. This can be the result of trauma, birth defect, infection, tumor, or drug use.

**AUTONOMIC NERVE**

A motor nerve that carries messages to the muscles and organs that we do not consciously control. There are two kinds of autonomic nerves, the sympathetic nerves and parasympathetic nerves.

**AXON**

The part of a neuron (nerve cell) that sends out a neurotransmitter.

**BAC**

(Blood Alcohol Concentration) - The percentage of alcohol in a person's blood.

**BrAC**

(Breath Alcohol Concentration) - The percentage of alcohol in a person's blood as measured by a breath testing device.

**BLOOD PRESSURE**

The force exerted by blood on the walls of the arteries. Blood pressure changes continuously, as the heart cycles between contraction and expansion.

**BRADYCARDIA**

Abnormally slow heart rate; pulse rate below the normal range.

**BRADYPNEA**

Abnormally slow rate of breathing.

**BRUXISM**

Grinding the teeth. This behavior is often seen in persons who are under the influence of cocaine or other CNS stimulants.

## **CANNABIS**

1. One of the seven drug categories. Cannabis includes marijuana, hashish, hash oil, and marinol.
2. Several species of plants from which marijuana and related products are made (e.g., Cannabis Sativa and Cannabis Indicia).

## **CARBOXY THC**

A metabolite of THC (tetrahydrocannabinol).

## **CHEYNE- STOKES RESPIRATION**

Abnormal pattern of breathing. Marked by breathlessness and deep, fast breathing.

## **CNS (Central Nervous System)**

A system within the body consisting of the brain, the brain stem, and the spinal cord.

## **CNS DEPRESSANTS**

One of the seven drug categories. CNS Depressants include alcohol, barbiturates, anti-anxiety tranquilizers, and numerous other drugs.

## **CNS STIMULANTS**

One of the seven drug categories. CNS Stimulants include Cocaine, the Amphetamines, Ritalin, Preludin, and numerous other drugs.

## **CONJUNCTIVITIS**

An inflammation of the mucous membrane that lines the inner surface of the eyelids caused by infection, allergy, or outside factors. May be bacterial or viral. Persons suffering from conjunctivitis may show symptoms in one eye only. This condition is commonly referred to as "pink eye", a condition that could be mistaken for the bloodshot eyes produced by alcohol or Cannabis.

## **CONVERGENCE**

The "crossing" of the eyes that occurs when a person is able to focus on a stimulus as it is pushed slowly toward the bridge of their nose. (See, also, "Lack of Convergence".)

## **CRACK/ROCK**

Cocaine base, appears as a hard chunk form resembling pebbles or small rocks. It produces a very intense, but relatively short duration "high".

**CURRICULUM VITAE**

A written summary of a person's education, training, experience, noteworthy achievements and other relevant information about a particular topic.

**CYCLIC BEHAVIOR**

A manifestation of impairment due to certain drugs, in which the suspect alternates between periods (or cycles) of intense agitation and relative calm. Cyclic behavior, for example, sometimes will be observed in persons under the influence of PCP.

**DELIRIUM**

A brief state characterized by incoherent excitement, confused speech, restlessness, and possible hallucinations.

**DENDRITE**

The part of a neuron (nerve cell) that receives a neurotransmitter.

**DIACETYL MORPHINE**

The chemical name for Heroin.

**DIASTOLIC**

The lowest value of blood pressure. The blood pressure reaches its diastolic value when the heart is fully expanded, or relaxed (Diastole).

**DIPLOPIA**

Double vision.

**DISSOCIATIVE ANESTHETICS**

One of the seven drug categories. Includes drugs that inhibits pain by cutting off or disassociating the brain's perception of pain. PCP and it's analogs are considered Dissociative Anesthetics.

**DIVIDED ATTENTION**

Concentrating on more than one thing at a time. The four psychophysical tests used by DREs require the suspect to divide attention.

**DOWNSIDE EFFECT**

An effect that may occur when the body reacts to the presence of a drug by producing hormones or neurotransmitters to counteract the effects of the drug consumed.

**DRUG**

Any substance, which when taken into the human body, can impair the ability of the person to operate a vehicle safely.

**DYSARTHIA**

Slurred speech. Difficult, poorly articulated speech.

**DYSPNEA et. al.**

Shortness of breath.

**DYSMETRIA**

An abnormal condition that prevents the affected person from properly estimating distances linked to muscular movements.

**DYSPHORIA**

A disorder of mood. Feelings of depression and anguish.

**EFFERENT NERVES**

See: "Motor Nerves".

**ENDOCRINE SYSTEM**

The network of glands that do not have ducts and other structures. They secrete hormones into the blood stream to affect a number of functions in the body.

**EXPERT WITNESS**

A person skilled in some art, trade, science or profession, having knowledge of matters not within knowledge of persons of average education, learning and experience, may assist a jury in arriving at a verdict by expressing an opinion on a state of facts shown by the evidence and based upon his or her special knowledge. (NOTE: Only the court can determine whether a witness is qualified to testify as an expert.)

**FLASHBACK**

A vivid recollection of a portion of an hallucinogenic experience. Essentially, it is a very intense daydream. There are three types: (1) emotional -- feelings of panic, fear, etc.; (2) somatic -- altered body sensations, tremors, dizziness, etc.; and (3) perceptual -- distortions of vision, hearing, smell, etc.

**GARRULITY**

Chatter, rambling or pointless speech. Talkative.

**HALLUCINATION**

A sensory experience of something that does not exist outside the mind, e.g., seeing, hearing, smelling, or feeling something that isn't really there. Also, having a distorted sensory perception, so that things appear differently than they are.

## **HALLUCINOGENS**

One of the seven drug categories. Hallucinogens include LSD, MDMA, peyote, psilocybin, and numerous other drugs.

## **HASHISH**

A form of cannabis made from the dried and pressed resin of a marijuana plant.

## **HASH OIL**

Sometimes referred to as "marijuana oil" it is a highly concentrated syrup-like oil extracted from marijuana. It is normally produced by soaking marijuana in a container of solvent, such as acetone or alcohol for several hours and after the solvent has evaporated, a thick syrup-like oil is produced with a THC content generally ranging from 8 to 20 percent.

## **HEROIN**

A powerful and widely-abused narcotic analgesic that is chemically derived from morphine. The chemical, or generic name of heroin is "diacetyl morphine".

## **HIPPUS**

A rhythmic pulsating of the pupils of the eyes, as they dilate and constrict within fixed limits.

## **HOMEOSTASIS**

The dynamic balance, or steady state, involving levels of salts, water, sugars, and other materials in the body's fluids.

## **HORIZONTAL GAZE NYSTAGMUS (HGN)**

Involuntary jerking of the eyes occurring as the eyes gaze to the side.

## **HORMONES**

Chemicals produced by the body's endocrine system that are carried through the blood stream to the target organ. They exert great influence on the growth and development of the individual, and that aid in the regulation of numerous body processes.

## **HYDROXY THC**

A metabolite of THC (tetrahydrocannabinol).

## **HYPERFLEXIA**

Exaggerated or over extended motions.

## **HYPERGLYCEMIA**

Excess sugar in the blood.

**HYPERPNEA**

A deep, rapid or labored breathing.

**HYPERPYREXIA**

Extremely high body temperature.

**HYPERRFLEXIA**

A neurological condition marked by increased reflex reactions.

**HYPERTENSION**

Abnormally high blood pressure. Do not confuse this with hypotension.

**HYPOGLYCEMIA**

An abnormal decrease of blood sugar levels.

**HYPOPNEA**

Shallow or slow breathing.

**HYPOTENSION**

Abnormally low blood pressure. Do not confuse this with hypertension.

**HYPOTHERMIA**

Decreased body temperature.

**ICE**

A crystalline form of methamphetamine that produces a very intense and fairly long-lasting "high".

**INHALANTS**

One of the seven drug categories. The inhalants include volatile solvents (such as glue and gasoline), aerosols (such as hair spray and insecticides) and anesthetic gases (such as nitrous oxide).

**INSUFFLATION**

See "snorting".

**INTEGUMENTARY SYSTEM**

The skin and accessory structures, hair and nails. Functions include protection, maintenance of body temperature, excretion of waste, and sensory perceptions.

**INTRAOCULAR**

"Within the eyeball".

### **KOROTKOFF SOUNDS**

A series of distinct sounds produced by blood passing through an artery, as the external pressure on the artery drops from the systolic value to the diastolic value.

### **LACK OF CONVERGENCE**

The inability of a person's eyes to converge, or "cross" as the person attempts to focus on a stimulus as it is pushed slowly toward the bridge of his or her nose.

### **MARIJUANA**

Common term for the Cannabis Sativa plant. Usually refers to the dried leaves of the plant. This is the most common form of the cannabis category.

### **MARINOL**

A drug containing a synthetic form of THC (tetrahydrocannabinol). Marinol belongs to the cannabis category of drugs, but marinol is not produced from any species of cannabis plant.

### **METABOLISM**

The sum of all chemical processes that take place in the body as they relate to the movements of nutrients in the blood after digestion, resulting in growth, energy, release of wastes, and other body functions. The process by which the body, using oxygen, enzymes and other internal chemicals, breaks down ingested substances such as food and drugs so they may be consumed and eliminated. Metabolism takes place in two phases. The first step is the constructive phase (anabolism) where smaller molecules are converted to larger molecules. The second steps is the destructive phase (catabolism) where large molecules are broken down into smaller molecules.

### **METABOLITE**

A chemical product, formed by the reaction of a drug with oxygen and/or other substances in the body.

### **MIOSIS**

Abnormally constricted pupils.

### **MOTOR NERVES**

Nerves that carry messages away from the brain, to be body's muscles, tissues, and organs. Motor nerves are also known as efferent nerves.

### **MUSCULAR HYPERTONICITY**

Rigid muscle tone.

### **MYDRIASIS**

Abnormally dilated pupils.

**NARCOTIC ANALGESICS**

One of the seven drug categories. Narcotic analgesics include opium, the natural alkaloids of opium (such as morphine, codeine, and thebaine), the derivatives of opium (such as heroin, dilaudid, oxycodone, percodan and hycodan), and the synthetic narcotics (such as demerol and numorphan).

**NERVE**

A cord-like fiber that carries messages either to or from the brain. For drug evaluation and classification purposes, a nerve can be pictured as a series of "wire-like" segments, with small spaces or gaps between the segments.

**NEURON**

A nerve cell. The basic functional unit of a nerve. It contains a nucleus within a cell body with one or more axons and dendrites.

**NEUROTRANSMITTER**

Chemicals that pass from the axon of one nerve cell to the dendrite of the next cell, and that carry messages across the gap between the two nerve cells.

**NULL EFFECT**

One mechanism of polydrug interaction. For a particular indicator of impairment, two drugs produce a null effect if neither of them affects that indicator. For example, PCP does not affect pupil size, and alcohol does not affect pupil size. The combination of PCP and alcohol produces a null effect on pupil size.

**NYSTAGMUS**

An involuntary jerking of the eyes.

**"ON THE NOD"**

A semiconscious state of deep relaxation. Typically induced by impairment due to Heroin or other narcotic analgesic. The suspect's eyelids droop, and chin rests on the chest. Suspect may appear to be asleep, but can be easily aroused and will respond to questions.

**OVERLAPPING EFFECT**

One mechanism of polydrug interaction. For a particular indicator of impairment, two drugs produce an overlapping effect if one of them affects the indicator but the other doesn't. For example, cocaine dilates pupils while alcohol doesn't affect pupil size. The combination of cocaine and alcohol produces an overlapping effect on pupil size: the combination will cause the pupils to dilate.

**PALLOR**

An abnormal paleness or lack of color in the skin.

**PARANOIA**

Mental disorder characterized delusions and the projection of personal conflicts, that are ascribed to the supposed hostility of others.

**PARAPHERNALIA**

Drug paraphernalia are the various kinds of tools and other equipment used to store, transport or ingest a drug. Hypodermic needles, small pipes, bent spoons, etc., are examples of drug paraphernalia. The singular form of the word is "paraphernalium". For example, one hypodermic needle would be called a "drug paraphernalium".

**PARASYMPATHETIC NERVE**

An autonomic nerve that commands the body to relax and to carry out tranquil activities. The brain uses parasympathetic nerves to send "at ease" commands to the muscles, tissues, and organs.

**PARASYMPATHOMIMETIC DRUGS**

Drugs that mimic neurotransmitter associated with the parasympathetic nerves. These drugs artificially cause the transmission of messages that produce lower blood pressure, drowsiness, etc.

**PDR (Physician's Desk Reference)**

A basic reference source for drug recognition experts. The PDR provides detailed information on the physical appearance and psychoactive effects of licitly-manufactured drugs.

**PHENCYCLIDINE**

A contraction of PHENYL CYCLOHEXYL PIPERIDINE, or PCP. Formerly used as a surgical anesthetic, however, it has no current legitimate medical use in humans.

**PHENYL CYCLOHEXYL PIPERIDINE (PCP)**

Often called "phencyclidine" or "PCP", it is a specific drug belonging to the Dissociative Anesthetics category.

**PHYSIOLOGY**

The study of living organisms and the changes that occur during activity.

**PILOERECTION**

Literally, "hair standing up", or goose bumps. This condition of the skin is often observed in persons who are under the influence of LSD.

**POLY DRUG USE**

Ingesting drugs from two or more drug categories.

**PSYCHEDELIC**

A mental state characterized by a profound sense of intensified or altered sensory perception sometimes accompanied by hallucinations.

**PSYCHOPHYSICAL TESTS**

Methods of investigating the mental (psycho-) and physical characteristics of a person suspected of alcohol or drug impairment. Most psychophysical tests employ the concept of divided attention to assess a suspect's impairment.

**PSYCHOTOGENETIC**

Literally, "creating psychosis" or "giving birth to insanity". A drug is considered to be psychotogenic if persons who are under the influence of the drug become insane, and remain so after the drug wears off.

**PSYCHOTOMIMETIC**

Literally, "mimicking psychosis" or "impersonating insanity". A drug is considered to be psychotomimetic if persons who are under the influence of the drug look and act insane while they are under the influence.

**PTOSIS**

Droopy eyelids.

**PULSE**

The expansion and relaxation of the walls of an artery, caused by the surging flow of blood.

**PULSE RATE**

The number of expansions of an artery per minute.

**PUPILLARY LIGHT REFLEX**

The pupils of the eyes will constrict and dilate depending on changes in lighting.

**REBOUND DILATION**

A period of constriction followed by dilation with a change equal to or greater than 2 mm.

**RESTING NYSTAGMUS**

Jerking of the eyes as they look straight ahead.

**SCLERA**

A dense white fibrous membrane that, with the cornea, forms the external covering of the eyeball (i.e., the white part of the eye).

**SENSORY NERVES**

Nerves that carry messages to the brain, from the various parts of the body, including notably the sense organs(eyes, ears, etc.). Sensory nerves are also known as afferent nerves.

**SINSEMILLA**

The unpollinated female cannabis plant, having a relatively high concentration of THC.

**SFST**

Standardized Field Sobriety Testing. There are three SFSTs, namely Horizontal Gaze Nystagmus (HGN), Walk and Turn, and One Leg Stand. Based on a series of controlled laboratory studies, scientifically validated clues of alcohol impairment have been identified for each of these three tests. They are the only Standardized Field Sobriety Tests for which validated clues have been identified.

**SNORTING**

One method of ingesting certain drugs. Snorting requires that the drug be in powdered form. The user rapidly draws the drug up into the nostril, usually via a paper or glass tube. Snorting is also known as insufflation.

**SPHYGMOMANOMETER**

A medical device used to measure blood pressure. It consists of an arm or leg cuff with an air bag attached to a tube and a bulb for pumping air into the bag, and a gauge for showing the amount of air pressure being pressed against the artery.

**STETHOSCOPE**

A medical instrument used, for drug evaluation and classification purposes, to listen to the sounds produced by blood passing through an artery.

**SYMPATHETIC NERVE**

An autonomic nerve that commands the body to react in response to excitement, stress, fear, etc. The brain uses sympathetic nerves to send "wake up calls" and "fire alarms" to the muscles, tissues and organs.

**SYMPATHOMIMETIC DRUGS**

Drugs that mimic the neurotransmitter associated with the sympathetic nerves. These drugs artificially cause the transmission of messages that produce elevated blood pressure, dilated pupils, etc.

**SYNAPSE (or Synaptic Gap)**

The gap or space between two neurons (nerve cells).

**SYNESTHESIA**

A sensory perception disorder, in which an input via one sense is perceived by the brain as an input via another sense. An example of this would be a person "hearing" a phone ring and "seeing" the sound as a flash of light. Synesthesia sometimes occurs with persons under the influence of hallucinogens.

**SYSTOLIC**

The highest value of blood pressure. The blood pressure reaches its systolic value when the heart is fully contracted (systole), and blood is sent surging into the arteries.

**TACHYCARDIA**

Abnormally rapid heart rate; pulse rate above the normal range.

**TACHYPNEA**

Abnormally rapid rate of breathing.

**THC (Tetrahydrocannabinol)**

The principal psychoactive ingredient in drugs belonging to the cannabis category.

**TOLERANCE**

An adjustment of the drug user's body and brain to the repeated presence of the drug. As tolerance develops, the user will experience diminishing psychoactive effects from the same dose of the drug. As a result, the user typically will steadily increase the dose he or she takes, in an effort to achieve the same psychoactive effect.

**TRACKS**

Scar tissue usually produced by repeated injection of drugs, via hypodermic needle, along a segment of a vein.

**VERTICAL GAZE NYSTAGMUS**

An involuntary jerking of the eyes (up-and-down) which occurs as the eyes are held at maximum elevation.

**VOIR DIRE**

A french expression literally meaning "to see, to say". Loosely, this would be rendered in English as "To seek the truth", or "to call it as you see it". In a law or court context, one application of voir dire is to question a witness to assess his or her qualifications to be considered an expert in some matter pending before the court.

### **VOLUNTARY NERVE**

A motor nerve that carries messages to a muscle that we consciously control.

### **WITHDRAWAL**

This occurs in someone who is physically addicted to a drug when he or she is deprived of the drug. If the craving is sufficiently intense, the person may become extremely agitated, and even physically ill.

**SESSION II**  
**DRUGS IN SOCIETY AND IN**  
**VEHICLE OPERATION**

**SESSION II      DRUGS IN SOCIETY AND IN VEHICLE OPERATION**

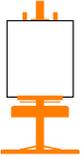
Upon successfully completing this session the student will be able to:

- o Define the term "drug" in the context of this course.
- o Name the seven major categories of drugs that are relevant to the Drug Evaluation and Classification program.
- o State in approximate, quantitative terms the incidence of drug use among various segments of the American public.
- o State in approximate, quantitative terms the incidence of drug involvement in motor vehicle crashes and other driving incidents.
- o Correctly answer the “topics for study” questions at the end of this session.

**Content Segments****Learning Activities**

- |                                       |                                |
|---------------------------------------|--------------------------------|
| A. Definition and Categories of Drugs | o Instructor Led Presentations |
| B. Drugs and Driving                  | o Reading Assignments          |

Aids	Lesson Plan	Instructor Notes
 II-1 (Title)	<b>DRUGS IN SOCIETY AND IN VEHICLE OPERATION</b>	Total Lesson Time: Approximately 50 Minutes  Display Session Title
 II-2A&B (Objectives)		Briefly review the objectives, content and activities of this session.
 <b>35 Minutes</b>	<b>A. Definition and Categories of Drugs</b>  1. What do we mean by the word "drug"?  a. Medicines? Are all drugs medicines? Are all medicines drugs?  b. Narcotics? Are all drugs narcotics?  c. Habit forming substances? Are all drugs habit forming? Are all habit forming substances drugs?	Instructor: If this has been covered in the Pre-School, pose this question "What is our working definition of the word 'drug'?" and proceed to number 2.  <u>Pose</u> this question to the students.  Solicit several responses.
 <b>II-3</b> (Definition of "Drug")	2. A simple, law enforcement oriented definition.  "Any substance, which when taken into the human body, can impair the ability of the person to operate a vehicle safely."	This definition is derived from the California Vehicle Code.  <u>Point out</u> that this definition excludes many substances that physicians, chemists, etc. might consider to be "drugs", e.g.,

Aids	Lesson Plan	Instructor Notes
	<p>3. Within this simple, law enforcement oriented definition, there are seven categories of drugs.</p> <ol style="list-style-type: none"> <li>a. Each category consists of substances that impair a person's ability to drive.</li> <li>b. The categories differ from one another in terms of <u>how</u> they impair driving ability and in terms of the <u>kinds</u> of impairment they cause.</li> <li>c. Because the categories produce different types of impairment, they generate different signs and symptoms.</li> <li>d. With training and practice, you will be able to recognize the different signs of drug influence and determine which category is causing the impairment you observe in a subject.</li> </ol>	<p>antibiotics, Novocain, vitamins, etc. It also includes some substances that aren't normally thought of as "drugs", such as model airplane glue, insecticides, etc.</p> <p><u>Ask</u> students: "What are the seven categories of drugs?"</p> <p><u>Write</u> the names of the categories on the dry erase board or flip-chart as they are mentioned by the students.</p>

## Aids

## Lesson Plan

## Instructor Notes


**II-4**  
 (Depressants)

 4. Central Nervous System  
 Depressants.

- a. The category of CNS Depressants includes some of the most commonly abused drugs.
  - o Alcohol remains the most familiar drug. In 2002, 51 percent of persons aged 12 or older were current drinkers.
- b. Depressants slow down the operation of the Central Nervous System (i.e. the brain, brain stem and spinal cord).
  - o cause the user to react more slowly.
  - o cause the user to process information more slowly.
  - o relieve anxiety and tension.
  - o induce sedation, drowsiness and sleep.
  - o in high enough doses, CNS Depressants will produce general anesthesia.
  - o in very high doses, induce coma and death.

Point out that tens of millions of prescriptions for such drugs are written in this country each year.

Source: The USDUH Report. (December 12, 2003).

i.e. depress the brain's ability to sense pain.

Aids	Lesson Plan	Instructor Notes
 <p><b>II-5</b> (Stimulants)</p> 	<p>5. Central Nervous System Stimulants</p> <ul style="list-style-type: none"> <li>a. CNS Stimulants constitute another widely abused category of drugs. <ul style="list-style-type: none"> <li>o There appear to be more than two (2) million Cocaine users in the U.S.</li> <li>o Cocaine is one of the most frequently reported drugs in overdose cases treated at hospital emergency rooms.</li> <li>o In 2003, 20.8 million Americans aged 12 or older admitted using prescription-type Stimulants non-medically at least once in their lifetime.</li> <li>o More than 12 million people age 12 or older (5.3 %) reported they had used methamphetamine at least once in their lifetime.</li> </ul> </li> <li>b. CNS Stimulants speed up the operation of the central nervous system, and of the various bodily functions controlled by the Central Nervous System.</li> </ul>	<p>Source: NSDUH Survey, Dec. 2003</p> <p><b>NOTE:</b> Estimates of drug use vary widely, especially for illicit drugs such as Cocaine, Methamphetamine, etc.</p> <p>Source: February 2005 National Survey on Drug Use and Health.</p> <p>Source: 2002 National Survey on Drug Use and Health</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>II-6</b> (Hallucinogens)</p>	<ul style="list-style-type: none"> <li>o cause the user to become hyperactive, extremely talkative.</li> <li>o speech may become rapid and repetitive.</li> <li>o heart rate increases.</li> <li>o blood pressure increases.</li> <li>o body temperature rises, user may become excessively sweaty.</li> <li>o induce emotional excitement, restlessness, irritability.</li> <li>o can induce cardiac arrhythmia (abnormal beating of the heart), cardiac seizures and death.</li> </ul> <p>6. Hallucinogens</p> <ul style="list-style-type: none"> <li>a. Hallucinogens are also widely abused.</li> <li>b. In recent years, significant increases in the abuse of both LSD and "Ecstasy" (MDMA) have been reported.</li> </ul>	<p><u>Remind</u> students of well-known athletes and others who have died because of Cocaine abuse.</p> <p><u>Point out</u> that LSD and Peyote are only two examples of Hallucinogens. There are many other Hallucinogens.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>II-7 (Dissoc. Anesthetics)</b></p>	<p>c. Hallucinogens create perceptions that differ from reality.</p> <p>d. These perceptions are often very distorted, so that the user sees, hears and smells things in a way quite different from how they really look, sound and smell.</p> <p>e. Hallucinogens cause the nervous system to send strange or false signals to the brain.</p> <ul style="list-style-type: none"> <li>o Produce sights, sounds, odors, feelings and tastes that aren't real.</li> <li>o Induce a temporary condition very much like psychosis or insanity.</li> <li>o Can create a "mixing" of sensory modalities, so that the user "hears colors", "sees music".</li> </ul> <p><b>7. Dissociative Anesthetics</b></p> <p>a. PCP and it's analogs and Dextromethorphan are examples of Dissociative Anesthetics. PCP is considered by the medical community to be a Hallucinogen. However, because of the</p>	<p><u>Clarification:</u> Hallucinogens <u>confuse</u> the Central Nervous System (as well as speeding it up, like CNS Stimulants).</p> <p><u>Point out</u> that this mixing of the senses is called <u>Synesthesia</u>.</p> <p>Point out that, with all of these false, and distorted perceptions, a person under the influence of hallucinogens would be a very unsafe driver.</p> <p><u>Point out</u> that this category was changed from PCP to Dissociative Anesthetics in 2005.</p> <p><u>Point out</u> that people under the influence of Dissociative Anesthetics may exhibit a combination of the signs associated with Hallucinogens, CNS Stimulants and Depressants.</p>

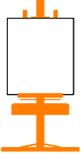
Aids	Lesson Plan	Instructor Notes
	<p>symptomology it presents, it is in a separate category.</p> <p>b. PCP is a synthetic drug, i.e. it does not occur naturally but must be produced in a laboratory-like setting.</p> <p>c. PCP has some effects that resemble the effects of other categories.</p> <p>d. PCP is similar to CNS Depressants in that it <u>depresses</u> brain wave activity.</p> <ul style="list-style-type: none"> <li>o slows down thought</li> <li>o slows reaction time</li> <li>o slows verbal responses</li> </ul> <p>e. But PCP is similar to CNS Stimulants in that it <u>activates</u> the parts of the brain that control emotions, the heart and the other autonomic systems.</p> <ul style="list-style-type: none"> <li>o heart rate increases</li> <li>o blood pressure increases</li> <li>o adrenalin production increases</li> <li>o body temperature rises</li> <li>o muscles become rigid</li> </ul>	<p><u>Phencyclidine</u> is a short form of the chemical name <u>Phenyl Cyclohexyl Piperidine</u>, from which we get the abbreviation "PCP".</p> <p><u>Point out</u> that PCP has many analogs, or "chemical cousins" that are very similar to PCP in chemical structure, and that produce essentially the same effects.</p> <p>The Dissociative Anesthetic category consists of PCP and its various analogs.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>II-8</b> (Narcotics)</p>	<p>f. And PCP is similar to Hallucinogens in that it distorts or "<u>scrambles</u>" signals received by the brain.</p> <ul style="list-style-type: none"> <li>o sight, hearing, taste, smell and touch may all be distorted</li> <li>o user's perception of time and space may be distorted</li> <li>o user may become paranoid, feel isolated and depressed</li> <li>o user may develop a strong fear of and preoccupation with death</li> <li>o user may become unpredictably violent</li> </ul> <p>g. PCP is also a very powerful pain killer, or anesthetic.</p> <p>h. Analogs of PCP include: Ketamine, Ketalar and Ketajet.</p> <p>8. Narcotic Analgesics</p> <p>a. There are two subcategories of Narcotic Analgesics.</p>	<p><u>Point out</u> that the reason PCP is a Dissociative Anesthetic is because it "separates" the user from any sensation of pain without making him or her unconscious.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>o Opiates are derivatives of Opium.</li> <li>o Synthetics are produced chemically in the laboratory. The synthetics are not derived in any way from Opium, but produce similar effects.</li> <li>b. The word "Analgesic" means pain killer. All of the drugs in this category reduce the person's reaction to pain.</li> <li>c. Heroin is one of the most commonly abused of the Narcotic Analgesics.</li> <li>d. Heroin is highly addictive. <ul style="list-style-type: none"> <li>o many addicts support their habit by stealing property and converting it to cash.</li> </ul> </li> <li>e. In addition to reducing pain, Narcotic Analgesics produce euphoria, drowsiness, apathy, lessened physical activity and sometimes impaired vision.</li> <li>f. Persons under the influence of Narcotic Analgesics often pass into a semi-conscious type of sleep or near-sleep. <ul style="list-style-type: none"> <li>o they often are sufficiently alert to respond to questions effectively.</li> </ul> </li> </ul>	<p>Point out that Morphine and Codeine are examples of Opiates.</p> <p>Point out that Methadone and Numorphan are examples of Synthetic Narcotics.</p> <p><u>Point out</u> that this condition is often called being "on the nod".</p>

**Aids****Lesson Plan****Instructor Notes**
**II-9**  
 (Inhalants)

- g. Higher doses of Narcotic Analgesics can induce coma, respiratory failure and death.
9. Inhalants
- a. Inhalants are the fumes of certain substances. Inhalant abuse is on the rise.
- b. These substances are found in many common products.
- o gasoline
  - o oil-based paints
  - o glue
  - o aerosol cans
  
  - o varnish remover
  - o cleaning fluids
  - o etc.
- c. Different Inhalants produce different effects.
- o many produce effects similar to those of CNS Depressants.
  - o a few produce Stimulant-like effects.
  - o some produce Hallucinogenic effects.
- d. The Inhalant abuser's attitude and demeanor can vary from inattentive, stuporous and passive to irritable, violent and dangerous.
- e. The abuser's speech will often be slow, thick and slurred.

Aids	Lesson Plan	Instructor Notes
 <p><b>II-10</b> (Cannabis)</p>  	<p>10. Cannabis</p> <ol style="list-style-type: none"> <li>a. The category "Cannabis" includes the various forms and products of the <u>Cannabis Sativa</u> plant and other species of Cannabis plants.</li> <li>b. The primary active ingredient in Cannabis products is the substance known as "Delta-9 Tetrahydrocannabinol", or "THC".</li> <li>c. Apart from alcohol, Marijuana is the most commonly abused drug in this country.</li> <li>d. In a household survey in 2002, marijuana was listed as the most common illicit used drug in the U.S. There were 14.6 million users of marijuana in 2002.</li> <li>e. Cannabis appears to interfere with the attention process. Drivers under the influence of Marijuana often do not pay attention to their driving.</li> <li>f. Cannabis also produces a distortion of the user's perception of time, an increased heart rate (often over 100 beats per minute) and a reddening of the eyes.</li> </ol>	<p>Write "Cannabis Sativa" on the dry erase board or flip chart.</p> <p>Write "Δ-9 THC" on the dry erase board or flip-chart.</p> <p>Source: National Household Drug Use and Health Survey, 2002</p> <p>Point out that divided attention Standardized Field Sobriety Tests usually disclose some of the best evidence of Cannabis impairment.</p>

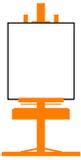
## Aids

## Lesson Plan

## Instructor Notes



II-11 (Drug  
Combina-  
tions)



## 11. Drug Combinations

- a. Many drug users appear to be "chemical gluttons". They often ingest drugs from two or more drug categories.
- b. The term for this is "polydrug use"
- c. Some very common examples of polydrug use include:
  - o Alcohol with virtually any other drug.
  - o Marijuana and PCP
  - o Cocaine and Heroin
  - o Heroin and Amphetamine
  - o Heroin and PCP
  - o "Crack" Cocaine and PCP
  - o "Crack" Cocaine and Marijuana
  - o "Crack" and Methamphetamine

Note: "poly" is the Greek prefix for "many".

Write "polydrug use" on the dry erase board or flip-chart.

Point out that a common way to ingest PCP is to sprinkle it on a Marijuana "joint" and smoke it.

Sometimes called a "speedball".

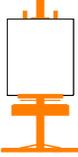
Sometimes called a," poor man's speedball".

Sometimes called a "fireball".

This is sometimes called a "space base".

Sometimes called a "primo".

Sometimes called "croak".

Aids	Lesson Plan	Instructor Notes
   <b>15 Minutes</b>   <b>II-12</b> <b>(Drug Use)</b>	<p>d. Sometimes, people take two different drugs (such as Heroin and Cocaine) that produce some opposite effects.</p> <p>e. Different drug combinations may produce unique, interactive effects.</p> <p>f. When a person has ingested multiple drugs, that person will experience multiple drug effects.</p> <p>g. However, it is important to bear in mind that, in a polydrug situation, some of the signs of a particular drug may not be evident even though the person is under the influence of that drug.</p> <p><b>B. Incidence and Characteristics of Drug Use in America</b></p> <p>1. In 2004, 19.1 million Americans (7.9% of the population) aged 12 years or older were current illicit drug users.</p> <p>2. Marijuana was the most commonly used illicit drug in 2004, with 14.6 million</p> <p>3. In 2004, 6.0 million people were users of psychotherapeutic drugs taken non-medically.</p> <p>4. In 2004, an estimated 2 million persons were current Cocaine users.</p>	<p><u>Example:</u></p> <ul style="list-style-type: none"> <li>o Heroin tends to lower blood pressure.</li> <li>o Cocaine tends to elevate blood pressure</li> </ul> <p><u>Write</u> on dry erase board or flipchart: "Polydrug use unique, interactive effects."</p> <p><u>Note</u>, however, that under proper medical supervision, specific drugs often are used to reverse overdose conditions.</p> <p>Source: Results From the 2004 National Survey on Drug Use and Health: National Findings</p> <p>Source: Results From the 2004 National Survey on Drug Use and Health: National Findings</p> <p>Source: Results From the 2004 National Survey on Drug Use and Health: National Findings</p> <p>Source: Results From the 2004 National Survey on Drug Use and Health: National Findings</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>II-13</b> (Drugged Driving Facts)</p>	<p>5. In 2004, there were an estimated 166,000 users of Heroin.</p> <p>6. In 2004, 1.9 million people aged 12 or older used OxyContin non-medically.</p> <p><b>C. Incidence of Drug Impaired Driving</b></p> <p>The exact incidence of drugged driving is not actually known. However, the following facts are known about this highway safety problem:</p>	<p>Source: Results From the 2004 National Survey on Drug Use and Health: National Findings</p>
	<p>a. <u>Fact:</u> In 2002, about 11 million illicit drug users admitted driving after using an illicit drug.</p>	<p>National Survey on Drug Use and Health (NSDUH), September 2003.</p>
 <p><b>II-14 (CA Male Drivers)</b></p>	<p>b. <u>Fact:</u> A study in California of young male (15-34 years old) drivers killed in crashes in the early 1980's revealed that more than half (51 percent) tested positive for drugs other than alcohol. The most prevalent drug (other than alcohol) was cannabis at 37%. 30% of all cases had both alcohol and cannabis.</p>	<p>Source: Compton, R. and Anderson, T.. The Incidence of Driving Under the Influence of Drugs: 1985. National Highway Traffic Safety Administration, 1985.</p>
 <p><b>II-15</b> (Univ. TN Study)</p>	<p>c. <u>Fact:</u> University of Tennessee (1988) found 40% of crash injured drivers had drugs other than alcohol in them.</p>	

Aids	Lesson Plan	Instructor Notes
	<p>d. <u>Fact</u>: A study completed in 2000, of 880 crash-injured drivers in Rochester, New York, found that 33% had used drugs.</p> <p>e. <u>Fact</u>: A NHTSA study of various locations in seven states revealed that alcohol was present in more than 50% of the drivers. Drugs other than alcohol were present in 18% of the drivers.</p> <p>3. The facts are unmistakable:</p> <p>a. Drug use is common among many Americans.</p> <p>b. So is drug impaired driving.</p>	<p>Research Accident Investigation Team, Department of Community and Preventative Medicine, University of Rochester</p> <p>Source: NHTSA; 1993 Traffic Tech</p> <p>NOTE: Consult national and local resources for updated data on drugs and driving.</p> <p>Solicit students' comments and questions about drugs in society and vehicle operation</p>

## **Topics for Study**

1. What does the term "drug" mean, as it is used in this course?

**A drug is any substance, which when taken into the human body, can impair the ability of the person to operate a vehicle safely.**

2. What are the seven categories of drugs? To which category does alcohol belong? To which category does cocaine belong?

**CNS Depressants, CNS Stimulants, Hallucinogens, Dissociative Anesthetics, Narcotic Analgesics, Inhalants, Cannabis**

3. What does "polydrug use" mean?

**Ingesting drugs from two or more drug categories.**

4. What is a "Speedball"? What is "Space Base"?

**Cocaine and Heroin; Crack and PCP**

5. In the Monitoring the Future National Survey from 2003, what ratio of high school seniors admitted driving under the influence of drugs?

**1 out of 6**

## Session II

### Drugs in Society and in Vehicle Operation



II-1

### Drugs in Society and in Vehicle Operation

Upon successfully completing this session  
the student will be able to:

- Define the term “drug” in the context of this course
- Name the seven major categories of drugs that are relevant to the Drug Evaluation and Classification program

Drug Evaluation &amp; Classification Training

II-2A

### Drugs in Society and in Vehicle Operation (Continued)

- State in approximate, quantitative terms the incidence of drug use among various segments of the American public
- State in approximate, quantitative terms the incidence of drug involvement in motor vehicle crashes and other driving incidents
- Correctly answer the “topics for study” questions at the end of this session.

Drug Evaluation &amp; Classification Training

II-2B

### Working Definition of “Drug”

Any substance which when taken into  
the human body, can impair the ability of  
the person to operate a vehicle safely.

Drug Evaluation &amp; Classification Training

II-3

### Central Nervous System Depressants



#### Examples:

- Alcohol
- Barbiturates
- Anti-Depressants
- Anti-Anxiety  
Tranquilizers



Drug Evaluation &amp; Classification Training

II-4

### Central Nervous System Stimulants

#### Examples:

- Amphetamine
- Cocaine
- Methamphetamine
- Ritalin



Drug Evaluation &amp; Classification Training

II-5

## Hallucinogens

**Examples:**

- LSD
- MDMA (Ecstasy)
- Peyote
- Psilocybin

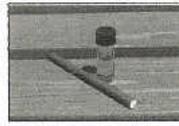



Drug Evaluation & Classification Training II-6

## Dissociative Anesthetics

**Examples:**

- Dextromethorphan
- Ketamine
- PCP (Phenyl Cyclohexyl Piperidine)




Drug Evaluation & Classification Training II-7

## Narcotic Analgesics

**Examples:**

- Codeine
- Demerol
- Heroin
- Methadone
- Morphine
- OxyContin




Drug Evaluation & Classification Training II-8

## Inhalants

**Examples:**

- Volatile Solvents  
(Glue, Gasoline, Paint, etc.)
- Aerosols  
(Hairspray, Insecticides, etc.)
- Anesthetic Gases  
(Nitrous Oxide, Amyl Nitrite, etc.)




Drug Evaluation & Classification Training II-9

## Cannabis

**Active ingredient:**

- Tetrahydrocannabinol (THC)

**Examples:**

- Marijuana
- Hashish
- Marinol




Drug Evaluation & Classification Training II-10

## Drug Combinations


+


Drug Evaluation & Classification Training II-11

## Incidence and Characteristics of Drug Use in America

- In 2004, 19.1 million Americans aged 12 years or older, were current illicit drug users
- Marijuana was the most commonly used illicit drug in 2004, with 14.6 million users
- In 2004, 6.0 million people were users of psychotherapeutic drugs taken non-medically

Source: National Survey on Drug Use and Health (NSDUH)

Drug Evaluation & Classification Training

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## Drug Impaired Driving Facts

- Fact: About 11 million illicit drug users admitted driving after using an illicit drug in 2002
- Fact: In 2002, between 10 and 18% of young drivers age 17 to 21 years reported driving under the influence of an illicit drug during the past year

Source: National Survey on Drug Use and Health (NSDUH)

Drug Evaluation & Classification Training

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## Incidence of Drug Impaired Driving

California - A study of young male drivers fatally injured in crashes found that 51% had used drugs other than alcohol.



Source: Compton, NHTSA 1985

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II-14

## University of Tennessee Study

In 1988, 40 percent of crash injured drivers had drugs other than alcohol in their system.



Drug Evaluation & Classification Training

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# QUESTIONS?

Drug Evaluation & Classification Training

Fifty Minutes

**SESSION III**  
**DEVELOPMENT AND EFFECTIVENESS**  
**OF THE DRUG EVALUATION AND**  
**CLASSIFICATION PROGRAM**

**SESSION III      DEVELOPMENT AND EFFECTIVENESS OF THE DRUG  
EVALUATION AND CLASSIFICATION PROGRAM**

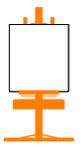
Upon successfully completing this session the student will be able to:

- o State the origin and evolution of the Drug Evaluation and Classification program.
- o Describe research and demonstration project results that validate the effectiveness of the program.
- o State the impact of legal precedents established by case law.
- o Correctly answer the "topics for study" questions at the end of this session.

Content Segments

Learning Activities

- |   |                                |
|---|--------------------------------|
| A. Origin and Evolution of Drug Evaluation & Classification Program | o Instructor Led Presentations |
| B. Evidence of Effectiveness  | o Reading Assignments          |
| C. Case Law Review  |                                |

Aids	Lesson Plan	Instructor Notes
 III-1 (Title)	<p><b>DEVELOPMENT AND EFFECTIVENESS OF THE DRUG EVALUATION AND CLASSIFICATION PROGRAM</b></p>	<p>Total lesson time: Approximately 50 Minutes</p> <p>Briefly review the content, objectives and activities of this session.</p>
		<p>Display Session Title</p>
 III-2A&B (Objectives)		<p>Session title on wall chart.</p>
 15 Minutes	<p><b>A. Origin and Evolution of the Drug Evaluation and Classification (DEC) Program</b></p>	
	<ol style="list-style-type: none"> <li>1. The DEC program was developed by personnel of the Los Angeles Police Department.</li> <li>2. Development of the DEC program began in the early 1970's, in response to a growing awareness that many people apprehended for impaired driving were under the influence of drugs other than alcohol.</li> <li>3. Individuals principally responsible for initiation and development of the program.             <ol style="list-style-type: none"> <li>a. Dick Studdard (A Traffic Officer)                 <ol style="list-style-type: none"> <li>o encountered many impaired drivers whose BACs were zero or very low.</li> </ol> </li> </ol> </li> </ol>	<p><u>Write:</u> "LAPD" on dry erase board or flip-chart.</p> <p>Sergeant Studdard retired from the LAPD in June, 1990.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>o occasionally succeeded in having physicians examine some of these low BAC subjects, resulting in diagnosis of drug influence.</li> <li>o for various reasons, physicians were often reluctant or unwilling to conduct these examinations and offer opinions.</li> <li>o as a result, some drivers whom Studdard and other officers were certain were impaired were not prosecuted or convicted for DWI.</li> <li>o Studdard concluded that it was essential to develop diagnostic procedures that <u>officers</u> could use when confronted with persons suspected of drug impairment.</li> <li>b. Len Leeds (A Narcotics Officer) <ul style="list-style-type: none"> <li>o was approached by Studdard and asked to</li> </ul> </li> </ul>	<p><u>Note:</u> examining physicians subsequently would be subpoenaed to testify in contested cases.</p> <p>Some reasons why doctors may be reluctant:</p> <ol style="list-style-type: none"> <li>(1) They typically receive little training in the recognition of specific signs of drug impairment, particularly at street level doses.</li> <li>(2) They may not see the subject until hours after the drugs were used, by which time the signs and symptoms often have changed.</li> </ol> <p>Deceased in 1995.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>III-3</b> (Three-Step Process)</p>	<p>collaborate in the development of a program.</p> <ul style="list-style-type: none"> <li>o initiated some independent research by consulting with physicians, enrolling in relevant classes, studying text books, technical articles, etc.</li> <li>o secured management level support within the department to continue research and program development.</li> </ul> <p>c. As time went on, many other key persons both within and outside LAPD contributed to the development and refinement of the program.</p> <p>4. Around 1979, the program was officially recognized by LAPD.</p> <p>5. The DEC program evolved into what is essentially a three-step process.</p> <ul style="list-style-type: none"> <li>a. First, establish that the subject is impaired and verify that his or her alcohol level is not consistent with the degree of impairment that is evident.</li> </ul>	<p>Note: The LAPD program was referred to as the Drug Recognition Expert (DRE) program</p> <p><u>Clarification:</u> the first portion of the drug evaluation examination is devoted principally to Standardized Field Sobriety Testing of the subject, and to the administration of a breath test.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>b. Second, use some simple diagnostic procedures to determine whether the impairment may stem from illness or injury, requiring prompt medical attention.</li> <li>c. Third, use diagnostic procedures to determine what category (or categories) of drugs is the likely cause of the impairment.</li> </ul> <p>6. <u>Key point</u>: the entire examination is <u>standardized</u>.</p> <ul style="list-style-type: none"> <li>a. Administered the same way to all subjects.</li> <li>b. Administered the same way by all officers.</li> </ul> <p>7. The need for diagnostic procedures.</p> <ul style="list-style-type: none"> <li>a. One reason for needing the diagnostic procedures is that we may be called upon to submit evidence of an articulable suspicion of drug influence to support our</li> </ul>	<p>Inconsistency between the observed impairment and the BAC suggests the presence of some other drug(s), or some other complicating factor such as an illness or injury.</p> <p><u>Pose this question</u>: "Why is it necessary for an officer to use diagnostic procedures to determine the category of drugs causing the impairment?"</p> <p><u>Follow-up question</u>: "If we see that a subject is impaired, and the BAC is too low to account for that impairment, why don't we simply obtain a blood sample and ask the laboratory to analyze the sample for all drugs?"</p> <p>Solicit responses from students.</p> <p>Some courts or motor vehicle hearings officers may find that a low BAC result, by itself, does not provide adequate basis for requesting the subject to submit to a 2<sup>nd</sup> chemical test.</p>

Aids	Lesson Plan	Instructor Notes
	<p>request for a chemical test of the subject.</p> <p>b. Another reason is that the subject may refuse to submit to the chemical test, denying us of scientific evidence of drug influence. In that case, conviction or acquittal may hinge on the officer's observations and expertise as a drug examiner.</p> <p>c. A third reason is that chemical tests usually disclose only that the subject has used a particular drug <u>recently</u>. The chemical test usually does not indicate whether the drug is psychoactive at the present time.</p> <p>Thus, the DRE procedures are needed to establish that the subject not only has used the drug, but also that he or she is <u>under the influence</u> at this time.</p> <p>d. A fourth reason is that it can be expensive, and require a large sample of blood or urine, to perform a broad analysis for any or all drugs. Practical constraints require that we be able to point the laboratory technician toward those types of drugs most likely to be found in the sample.</p>	<p><u>Pose this question:</u> "Are there other toxicological samples that can be obtained for drug analysis by the lab?"</p> <p>Solicit responses on hair and saliva sampling.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>20 Minutes</b></p>	<p>e. It is always possible that a person suspected of drug impairment is actually suffering from some medical problem. If a sample is collected, and the subject is not examined by someone who is qualified, evidence of medical problems may not come to light until it is too late.</p> <p><b>B. Evidence of Program Effectiveness</b></p> <ol style="list-style-type: none"> <li>1. LAPD began to work with the National Highway Traffic Safety Administration (NHTSA) on issues relating to this program in the early 1970's. <ol style="list-style-type: none"> <li>a. The first step was to develop and validate a battery of Standardized Field Sobriety Tests for investigating <u>alcohol</u> impaired driving.</li> <li>b. LAPD personnel played a major role in the research that led to the wide spread use of Horizontal Gaze Nystagmus, the Walk and Turn test, and the One Leg Stand test.</li> <li>c. By the early 1980's, NHTSA completed its validation of the standardized tests for alcohol enforcement.</li> <li>d. At that time, NHTSA began to assist LAPD in validating the drug enforcement program.</li> </ol> </li> </ol>	<p>Solicit students' questions and comments concerning the origin, evolution and need for the Drug Evaluation and Classification program.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>III-4</b> (Two Stages of Validation)</p>	<ol style="list-style-type: none"> <li>2. NHTSA assisted LAPD in a two-phased validation study.               <ol style="list-style-type: none"> <li>a. Laboratory validation, using volunteers who ingested selected drugs.</li> <li>b. Field validation, using persons actually arrested in Los Angeles on suspicion of drug influence.</li> </ol> </li> <li>3. The Laboratory Validation took place at Johns Hopkins University in Maryland.               <ol style="list-style-type: none"> <li>a. The drug examiners were senior DREs from LAPD.</li> <li>b. The laboratory experiments were planned and conducted by researchers from Johns Hopkins.</li> <li>c. Volunteers each took a "pill" and smoked a "cigarette".</li> <li>d. The "pill" contained either no drug (placebo) or one of the following drugs:                   <ol style="list-style-type: none"> <li>o Secobarbital (CNS Depressant)</li> <li>o Valium (i.e. Diazepam - CNS Depressant)</li> <li>o Desoxyn (Methamphetamine Sulfate - CNS Stimulant)</li> </ol> </li> </ol> </li> </ol>	<p>Note: The Johns Hopkins validation was conducted in 1984.</p> <p>Note: The LAPD Field validation was conducted in 1985.</p> <p>The LAPD participants:            Dick Studdard            Jerry Powell            Pat Russell            Doug Laird</p>

Aids	Lesson Plan	Instructor Notes
	<p>e. The "cigarette" contained either Marijuana or no drug (placebo).</p> <p>f. <u>Neither the volunteers nor the LAPD officers knew what the volunteers had taken.</u></p> <p>g. Two different dose levels of Marijuana, Diazepam and Methamphetamine Sulfate were used.</p>	<p><u>Note:</u> this condition is known as a "double blind" experiment. The people being tested and the people doing the testing are kept uninformed of the test condition.</p> <p><u>Clarification:</u> some of the Diazepam and Methamphetamine Sulfate pills were "weak", some were "strong". Similarly, some of the Marijuana cigarettes were "weak", some "strong". All of the Secobarbital pills were "strong".</p> <p>Instructor: The following is given for your information.</p> <p>Normal daily doses for therapeutic purposes:</p> <ul style="list-style-type: none"> <li>• Secobarbital: approx 100mgs</li> <li>• Diazepam: 4-40mgs</li> <li>• Desoxyn (methamphetamine sulfate): 15mgs</li> </ul> <p>Doses administered for this study:</p> <ul style="list-style-type: none"> <li>• Secobarbital: 300 mgs</li> <li>• Diazepam: weak - 15mgs; strong - 30mgs</li> <li>• Desoxyn: weak - 15mgs strong - 30mgs</li> </ul>

## Aids

## Lesson Plan

## Instructor Notes


**III-5 (Lab Results)**

4. Results of the Johns Hopkins study.
  - a. The DREs were excellent in identifying subjects who received only placebo doses: they classified 95% of the drug free subjects as "not impaired".
  - b. Similarly, they were excellent in identifying the high dose subjects.
    - o they classified as "impaired" 98.7% of the subjects who received Secobarbital or strong doses of Marijuana, Diazepam or Methamphetamine Sulfate.
    - o they correctly identified the category of drug for 91.7% of those strong dose subjects.
  - c. The DREs were less successful in identifying the weak dose subjects.
    - o only 17.5% of the subjects who received the weak dose of Methamphetamine Sulfate were classified as "impaired".

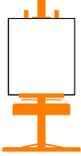
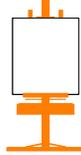
- Marijuana:
  - weak - 12 puffs of 1.3% THC cigarettes
  - strong - 12 puffs of 2.8% THC cigarettes

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>o only 32.5% of the subjects who smoked the "weak" Marijuana cigarettes were classified as "impaired".</li> <li>d. The results of the laboratory validation study were considered to be extremely positive. <ul style="list-style-type: none"> <li>o the DRE procedures correctly identified the category of drugs in more than 90% of the subjects who were impaired.</li> <li>o the procedures only rarely indicated that unimpaired subjects were under the influence of drugs.</li> </ul> </li> <li>5. The field validation study was based on 173 people actually arrested on suspicion of driving under the influence of drugs. <ul style="list-style-type: none"> <li>a. None of the cases involved a crash.</li> <li>b. In all of the cases, the arrested subjects agreed to submit to a blood test.</li> </ul> </li> </ul>	<p><u>Emphasize</u> that these low dose subjects probably would never have been stopped by police officers, if they had been driving.</p> <p><u>Point out</u> that, during the study period, many other drugged driving arrests were made by LAPD officers.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>III-6A</b> (LA Field Study)</p>	<p>c. Twenty-eight different DREs from LAPD participated in the examinations of these 173 subjects.</p> <p>6. Results of the Field Study.</p> <p>a. Based on the independent blood tests, only one of the 173 subjects was found to have no alcohol or other drugs.</p> <p>b. Another 10 subjects were found to have only alcohol in them.</p> <p>c. 37 (21%) of the subjects were found to have only one drug other than alcohol.</p> <p>d. 82 had two drugs other than alcohol (47%), and 43 (25%) had three or more drugs other than alcohol.</p>	<p>But the researchers excluded all cases where the subjects refused to give blood, since it would have been impossible to check the DREs accuracy in those cases. Similarly, they excluded all cases that involved crashes, since the subjects' injuries could have confounded the drug examination.</p> <p>POINT OUT that it is possible that these 11 so-called "drug free" subjects may have used drugs that the independent laboratory could not identify, for various reasons.</p> <p>Even if we assume that these 11 people really had not used any drug other than alcohol, 11 out of 173 is a very small "false positive" rate.</p>



Aids	Lesson Plan	Instructor Notes
<div> </div> <p><b>15 Minutes</b></p> <div> </div> <p><b>III-7A (Case Law Review)</b></p>	<p>d. CNS Depressants: blood tests confirmed 50% of DREs' opinions.</p> <p>e. CNS Stimulants: blood tests confirmed 33% of DREs' opinions.</p> <p>9. Numerous states have conducted comparisons of laboratory analysis and DRE opinions. The correlation rates exceeded 80% in those studies.</p> <p>10. The overall conclusion of the laboratory and field studies is that the DEC Program is an effective tool for law enforcement.</p> <p><b>C. Case Law Review</b></p> <p>1. Favorable Court Rulings on DEC Procedures</p> <p>a. Courts in various states have ruled favorably on the DEC Program. American courts employ either the Frye or Daubert Standard for determining the admissibility of scientific evidence.</p>	<p>POINT OUT that there are literally hundreds of different CNS Depressants, many of which may not have been identifiable by the independent laboratory.</p> <p>EMPHASIZE that, in this study, the blood samples were not frozen after collection. Unfortunately, cocaine continues to degenerate in a blood sample if the sample isn't frozen. It is quite possible that the cocaine had metabolized from some samples before the lab analyzed them.</p> <p>EMPHASIZE: Simply because a lab cannot find “drugs” in a sample does not guarantee that no drug is present. All labs have some blind spots</p> <p>Solicit students' questions about the laboratory and field studies.</p>

Aids	Lesson Plan	Instructor Notes
	<p>b. The Frye standard is the traditional test for admissibility of "new" scientific evidence.</p> <p>c. The <u>Frye</u> standard: "is the procedure or principle espoused accepted by the relevant scientific community?"</p> <p>d. In Daubert, courts serve as a gatekeeper for all scientific evidence.</p>	<p>NOTE: <u>Frye</u> standard was set by the US Supreme Court in 1923.</p> <p>Print "Frye Standard" on the dry erase board or flip-chart.</p> <p>NOTE: Daubert standard requires a showing of reliability before scientific evidence can be admitted.</p>
	<p>o Courts assess evidence by considering four factors:</p> <ol style="list-style-type: none"> <li>1. Opinions are testable</li> <li>2. Methods/principles have been subject to peer review</li> <li>3. Known error rate can be identified</li> <li>4. Opinions rest on methodology that is generally accepted within the relevant scientific/technical community</li> </ol> <p>e. An Arizona court (Tucson Municipal Court) ruled that the <u>Frye</u> Standard was met. However, upon appeal, The Arizona State Supreme Court ruled that the <u>Frye</u> Standard did not apply to the DEC Program.</p>	<p>Print "Daubert" on the dry erase board or flip-chart</p> <p><u>State of Arizona v. Dayton Johnson and Samuel Rodriguez, et al, NOS 90056865 and 90035883, (1990).</u></p>

Aids	Lesson Plan	Instructor Notes
 <p><b>III-7A</b> (Klawitter)</p>	<p>f. A Minnesota Court (City of Minneapolis) ruled that outside of nystagmus, the DEC Program is not subject to the Frye Standard.</p>	<p><u>State of Minnesota, City of Minneapolis v. Larry Michael Klawitter</u>, 518 N.W.2d 577, (1993).</p>
 <p><b>III-7A</b> (Hernandez)</p>	<p>g. A Colorado Court (Boulder County Court) ruled that the procedures used by DREs are not new or novel and the <u>Frye</u> Standard did not apply.</p>	<p><u>State of Colorado v. Daniel Hernandez</u>, 92M 181, (1992).</p>
 <p><b>III-7B</b> (Baity)</p>	<p>h. The Washington Supreme Court determined that the Frye Standard applies to the protocol because the process has “scientific elements”.</p>	<p>Washington v. Baity 991 P. 2d, 1151, 140 Wn. 2d 1 (2000)</p>
 <p><b>III-7B</b> (Aleman)</p>	<p>i. A New Mexico Court ruled that the DRE protocols are the application of traditional techniques</p>	<p>New Mexico v. Mariam Aleman Dona Ana County, 3<sup>rd</sup> District (2003)</p>
 <p><b>III-7B</b> (Cubrich)</p>	<p>j. A Nebraska Court ruled that the DRE’s opinion was correct and that the DRE protocol is admissible.</p>	<p>State v. Cubrich Case No. CR03-8203 Sarpy County Court (2004)</p>
	<p>k. In many jurisdictions, it will not be necessary to have expert scientific testimony to secure admissibility of a DRE's examination of a subject.</p>	<p>NOTE: In this case. the court used the Daubert standard.</p>

## Aids

## Lesson Plan

## Instructor Notes



III-8  
(Blake)

2. The DEC program is gaining acceptance in many courts.
3. One key element of DEC -- namely, Horizontal Gaze Nystagmus -- has been recognized as meeting the Frye standard by several State Supreme Courts.
  - a. First to do so was Arizona, in the case known as State vs. Blake.
  - b. Many more State Supreme Courts are expected to rule favorably on HGN in the near future.
4. Summary of HGN Case Law.
  - a. The prevailing trend is for courts is to admit HGN as evidence of impairment, with the proper scientific foundation.

Expert testimony regarding drug influence has long been accepted by numerous courts. The components of DRE evaluation are generally accepted in the scientific community. The DEC program simply combined those components into a systematic and standardized procedure. Thus many prosecutors believe that FRYE standards do not apply to DRE evaluations and testimony.

In fact, testimony based on DRE investigation have been accepted by courts for years.

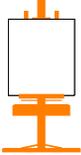
Print "State vs. Blake" on the dry erase board or flip-chart.

Point out that additional court rulings on HGN are summarized in the Student's Manual.

Emphasize that students should familiarize themselves with the case law on HGN to ensure they avoid the errors that kept that evidence from being admitted in the past.

If there are significant cases concerning DEC or HGN from the students' State, review them at this time.

Solicit students' questions and comments about case law.

Aids	Lesson Plan	Instructor Notes
	<p>b. But courts consistently reject all attempts to introduce HGN as evidence of a quantitative BAC.</p> <p>1) The court ruled that in cases where there is no chemical test to determine a BAC level, HGN test results can be admitted the same as of Standardized Field Sobriety Tests to show a "neurological dysfunction", one cause of which could be the ingestion of alcohol.</p>	<p>Write "No Chemical Test - HGN Admissible".</p> <p>Write on dry erase board or flip chart - "Cannot be used as evidence of specific BAC level".</p>

## **Topics for Study**

1. State four reasons why it is important not to rely simply on a chemical test to establish a subject's drug impairment.

**Develop articulable evidence of drug impairment; Suspect may refuse chemical test; Chemical tests do not indicate recency of use; Suspect may be suffering from injury or illness**

2. What categories of drugs were included in the Johns Hopkins Laboratory Study?

**CNS Depressants, CNS Stimulants, Cannabis**

3. In what percentage of cases in the Los Angeles Field Validation Study did blood tests confirm the DREs' opinion that PCP was present?

**92%**

4. What percentage of subjects were found to be polydrug users in the LAPD Field Validation Study?

**72%**

5. What was the landmark State Supreme Court case that upheld the use of HGN as evidence of impairment?

**State (AZ) vs Blake**

6. What do we call the standards for admissibility of scientific evidence, set by the U.S. Supreme Court?

**Frye Standard**

7. Which State first found the Drug Evaluation and Classification procedures met the standards of scientific evidence?

**Arizona**

## Session III

### Development and Effectiveness of the Drug Evaluation and Classification Program



III-1

### Development and Effectiveness of the Drug Evaluation and Classification Program

Upon successfully completing this session the student will be able to:

- State the origin and evolution of the Drug Evaluation and Classification program
- Describe research and demonstration project results that validate the effectiveness of the program

Drug Evaluation & Classification Training III-2A

### Development and Effectiveness of the DEC Program (Continued)

- State the impact of legal precedents established by case law
- Correctly answer the "topics for study" questions at the end of this session

Drug Evaluation & Classification Training III-2B

### The Three-Step Drug Evaluation Process

Step One  
Establish that the **1** subject is impaired

Step Two  
Rule out medical **2** impairment

Step Three  
Determine the **3** category of drugs involved

Drug Evaluation & Classification Training III-3

### Two Stages of Validation

**1**

Stage One: Laboratory Validation Study  
Johns Hopkins University

**2**

Stage Two: Field Validation Study  
Los Angeles

Drug Evaluation & Classification Training III-4

### Laboratory Study Results

1. DRE officers correctly identified 95% of drug-free subjects as "unimpaired"
2. DRE officers classified 98.7% of high-dose subjects as "impaired"
3. Correctly identified the category of drugs for 91.7% of high-dose subjects
4. DRE officers were less successful in classifying low-dose subjects

Drug Evaluation & Classification Training III-5

## The Los Angeles Field Validation Study

- 173 drivers accused of drug impairment
- Blood tests confirmed:
  - One suspect had no drugs or alcohol
  - 10 had alcohol only
  - 37 (21%) had one drug
  - 82 (47%) had two drugs
  - 43 (25%) had three or more drugs

Drug Evaluation &amp; Classification Training

III-6A

## The Los Angeles Field Validation Study (Continued)

- Blood tests confirmed the presence of at least one “predicted” category of drugs for more than 90% of the suspects

Drug Evaluation &amp; Classification Training

III-6B

## Confirmation Rates for Specific Categories

- 92%: Phencyclidine (PCP)
- 85%: Narcotic Analgesics
- 78%: Cannabis
- 50%: CNS Depressants
- 33%: CNS Stimulants



Drug Evaluation &amp; Classification Training

III-6C

## Case Law Review

- “Frye” Standard
- Minnesota v Klawitter
- Colorado v Hernandez



Drug Evaluation &amp; Classification Training

III-7A

## Case Law Review (Cont.)

- Washington v Baity
- New Mexico v Aleman
- Nebraska v Cubrich

Drug Evaluation &amp; Classification Training

III-7B

## HGN Case Law

- State (AZ) v Blake



Drug Evaluation &amp; Classification Training

III-8

**QUESTIONS?**

Drug Evaluation & Classification Training

## ATTACHMENT A

**“Frye” Decisions Regarding Admissibility  
of Drug Recognition Expert Testimony**

“Frye” refers to a United States Federal Court opinion dealing with the admissibility of scientific evidence. The court established that new or novel scientific evidence, or the novel application of scientific principles, must be shown to have met with general acceptance in the relevant scientific community before it can be admitted.

**1990**

**State of Arizona v. Dayton Johnson and Samuel Rodriguez, et al.**

**Defendants**

**Nos 90056865 & 90035883 (Unpublished Opinion).**

**The Municipal Court of the City of Tucson, County of Pima, State of Arizona**

“Virtually all the witnesses agreed that the scientific procedures utilized by trained drug recognition experts are reliable and are generally accepted in the scientific community. The methodology in place, used by trained law enforcement personnel in the field, has been shown to produce reasonably reliable and uniform results that will contribute materially to the ascertainment of the truth.”

On May 7, 1992, the Arizona Supreme Court heard oral arguments in a special proceeding regarding this case. The Justices uniformly rejected the application of “Frye” to the DRE procedures. The Chief Justice observed that the component examination procedures had been established for fifty years.

The prosecutors in this case were Tom Rankin (Tucson) and Cliff Vanell (Phoenix). Expert witnesses for the prosecution included: Sgt. Richard Studdard, LAPD, Marcelline Burns, Ph.D., Sgt. Thomas Page, LAPD, Zenon Zuk, M.D., and Eugene Adler, toxicologist.

**1992**

**County Court, Boulder, Colorado**

**Case No. 92M181 (Unpublished Opinion)**

**People of the State of Colorado v. Daniel Hernandez**

“The DRE methods are accepted within the scientific community because they have found to be reliable.”

“The Court finds that the expert does have sufficient specialized knowledge to assist

the jurors in better deciding whether the defendant drove his car when under the influence of a specific drug. The DRE testimony can be used at trial provided a sufficient foundation is laid.” Overall, this court ruled that the procedures used by DRE’s are not new or novel scientific techniques that must meet the “Frye” standard.

The prosecutor in this case was David Archeluta (Boulder County). Expert witnesses for the prosecution include: Sergeant Thomas Page, LAPD, Zenon Zuk, M.D., Marcelline Burns, Ph.D., Rick Abbott, M.D., and Laurel Farrell (chemist).

### **1993**

**State of Minnesota in Supreme Court, C6-93-2092, filed June 30, 1994.  
(Unpublished Opinion)**

**State of Minnesota, City of Minneapolis vs. Larry Michael Klawitter, 518 N.W.2d 577 (1994)**

“Given proper foundation and subject to other qualifications, opinion testimony by experienced police officers trained in use of so-called drug recognition protocol is generally admissible in evidence in a trial of a defendant for driving while under the influence of a controlled substance.”

The Court determined that the gaze nystagmus test satisfies the requirements of “Frye”.

“We agree with the trial court that the officer should be allowed to give an opinion based on the officer’s training and experience and his or her observations following the 12-step drug recognition protocol, as long as (a) there is sufficient foundation for the specific opinion expressed, (b) the state does not attempt to exaggerate the officer’s credentials by referring to the officer as a “Drug Recognition Expert” or to unfairly suggest that the officer’s opinion is entitled to greater weight than it deserves, and...” “We add only that it should be obvious that the mere fact that such opinion testimony by itself will be sufficient to support a guilty verdict.” The court also determined that, outside of nystagmus, the components of a DRE examination are not scientifically new and are not subject to the “Frye” test.

The trial court stated, “...there is nothing scientifically new, novel, or controversial about any component of the DRE protocol itself. The symptomatology matrix used by DRE’s to reach their conclusions is not new and is generally accepted in the medical community as an accurate compilation of signs and symptoms or impairment by the various drug categories.”

The prosecutor in this case was Karen Herland (City of Minneapolis). Expert witnesses for the prosecution included: Sgt. Thomas Page, LAPD, Dr. Marcelline Burns (psychologist), Dr. David Peed (optometrist), Dr. Zenon Zuk (medical doctor), Eugene Adler (criminalist), Dr. S.J. Jejurikar (MN Bureau of Criminal Apprehension), and Robert Meyer (toxicologist).

**1994**

**11<sup>th</sup> Judicial Circuit in and for Dade County, Florida**

**Case No. 256998,9-I (Unpublished Opinion)**

**State of Florida v. Frederick Williams**

**Judge Maxine Cohen Lando**

**Original filed January 19, 1995**

“Given proper foundation and subject to other qualifications, opinion testimony by an experienced police officer trained in the use of the drug recognition protocol is generally admissible in evidence in a trial of a defendant charged with driving under the influence of a controlled or chemical substance. Furthermore, Horizontal Gaze Nystagmus (HGN) test results are generally admissible to establish (1) that the defendant was impaired; and/or (2) that the defendant was over the legal limit; and/or (3) the defendant’s specific breath or blood alcohol level at the time he performed the test.”

This court found that the “Frye” standard is inapplicable to the DRE Protocol because neither the protocol nor any of its subsets (including HGN, VGN, and Lack of Convergence) are “scientific”.

Further, these tests are neither new nor novel. The Court also state that “Frye” is inapplicable to HGN, VGN, and LOC because none of them are new or novel. “None of these tests or the theories and procedures they encompass, are new, novel, or emerging scientific techniques. The medical and psychological professions have acknowledged the tests’ underlying theories and procedures for decades.”

The Court concluded:

“Drug recognition training is not designed to qualify police officers as scientists, but to train them as observers. The training is intended to refine and enhance the skill of acute observation...and to focus that power...in a particular situation.”

This court followed the Klawitter (Minnesota) decision, that it requires the state to “lay a proper predicate before referring to a DRE as anything other than a DRE or Drug Recognition Evaluator or Examiner.”

“The real issue is not the admissibility of the evidence, but the weight it should receive. That is a matter for the jury to decide.”

The prosecutor in this case was Steve Talpins (Dade County). Expert witnesses for the prosecution in this case included: Marcelline Burns, Ph.D., Zenon Zuk, M.D., Robert Dobie, M.D., Sergeant Thomas Page, LAPD, and others.

**2000****Case No. 66876-1****State of Washington vs. Michael Baity****Judge J. Talmadge, WA Supreme Court****Original filed 2000**

In this case, the court was asked to determine if a drug recognition protocol, used by trained drug recognition officers to determine if a suspect's driving is impaired by a drug other than alcohol, meets the requirements of *Frye v. United States*, 293 F. 1013, 34 A.L.R. 145 (1923), for novel scientific evidence.

The issue brought before the court was; Is a drug recognition program novel scientific evidence generally accepted in the scientific community, thus satisfying the *Frye* test for admissibility?

The facts in this case were:

The state charged Baity with one count of DUI, in violation of RCW 46.61.502 (l) (b) (c), and one count of driving while license suspended in the third degree, in violation of RCW 46.20.342(l)(c), after he failed roadside SFST's and showed signs of drug impairments.

In a pretrial motion in Baity's case, the State sought to qualify the DREs as experts and to obtain a ruling on the admissibility of DRE evidence with respect to the defendant's drug impairment and the evaluation process used to determine that impairment. Specifically, the State sought to admit testimony that Baity's impairment was consistent with the symptoms associated with one of seven categories of drugs. Additionally, the state moved to admit testimony regarding the use of the horizontal gaze nystagmus (HGN) test, both for the detection of alcohol and for the detection of drugs. Baity moved to suppress all DRE evidence, including the HGN test, on the basis that the DRE program and protocol constitute novel scientific evidence subject to the *Frye* test for admissibility.

On May 19, 1998, the Pierce County District Court judges issued their opinion titled, "*Opinion Regarding Admissibility of HGN and DRE.*" In that opinion, they denied the defendants' motions to suppress the field sobriety tests (SFSTs) as to their alcohol impairment, holding those tests are "reasonably understandable to the ordinary person" and therefore not subject to *Frye*. Clerk's Papers at 56. The court also noted some features of the DRE protocol were either not of a scientific nature or were scientific, but not novel.

The court ruled that after analyzing the DRE protocol and the approach of other courts to its admissibility, that the DRE protocol and the chart used to classify the behavioral patterns associated with seven categories of drugs have scientific elements meriting evaluation under *Frye*. They also found that the protocol to be accepted in the relevant scientific communities. However, the court ruled that there is confined situations where all 12-steps of the protocol have been undertaken.

Moreover, an officer may not testify in a fashion that casts an aura of scientific certainty to the testimony. The officer also may not predict the specific level of drugs present in a suspect. The DRE officer, properly qualified, may express an opinion that a suspect's behavior and physical attributes are or are not consistent with the behavioral and physical signs associated with certain categories of drugs.

The court also held that the protocol meets the mandate of Frye. An officer may testify concerning such drug impairment, subject to the limitations set forth in this opinion, upon meeting the requirements of ER 702 and 703 for the admission of expert opinion testimony. The court reversed the suppression orders of the Pierce County District Court and remanded the cases for further proceedings consistent with this opinion.

### **2003**

**Case No. CR-2003-00025**

**State of New Mexico vs. Miriam Aleman**

**State of New Mexico, County of Dona Ana**

**Third Judicial District**

**Judge Silvia E. Cano-Garica**

Defendant made a motion *In Limine* to exclude the testimony of the DRE officer. They heard the testimony of various witnesses and reviewed the State's Brief in support of the DRE testing. Testimony and other applicable documents found that:

The DRE officer was recognized as an expert of DRE testing based upon his specialized knowledge and experience, the DRE evaluation method is generally accepted in the particular scientific field of forensic toxicology, the DRE evaluation provides critical information which assists the toxicologist in forming an opinion as to whether the driver was impaired by the use of drugs at or near the time the driver was driving the motor vehicle.

The DRE protocols are the application or incorporation of traditional techniques in the biology, physiology, anatomy, chemistry, pharmacology and toxicology fields, and the ultimate decision as to the driver's alleged impairment, based on all of the testimony received, rests with the jury.

### **2004**

**Case No. CR 03-8203**

**State of Nebraska vs. Timothy J. Cubrich**

**Judge Todd J. Hutton, Sarpy Co. Court**

The court was asked to determine the admissibility of the law enforcement officer's opinion that the defendant was under the influence of a drug, other than alcohol, to the extent that his abilities to safely operate the vehicle were appreciably impaired.

To this end the court applied the standards set forth in *Schafersman v. Agland Coop*, 262 Neb. 215, 631 N.W. 2d 862 (2001), having adopted *Daubert v. Merrel Dow Pharmaceuticals, Inc.*, 509 U.S.579 (1993), as the controlling authority in determining the admissibility of expert opinion testimony.

The court concluded: Since *Daubert*, the court now serves in the “gatekeeping” role in which it is called upon to determine the reliability and relevance of expert testimony. There is no Case Law in Nebraska which has specifically addressed the issue of expert testimony relating to impaired drivers suspected of using drugs. Nor is there a statutory procedure by which Drug Recognition Examinations or the opinions derived there from have been codified.

Application of the *Daubert* standard provided a number of considerations the court used in determining the admissibility of evidence through the testimony of an expert, which included:

The 12-step protocol which relies on determining if a person is drug impaired has been recognized in the scientific community, including physicians, ophthalmologists, and forensic toxicologists, as a dependable methodology by which an officer, properly trained, can identify impairment and the category of drug(s) which are impairing the suspect’s cognitive and physical capabilities.

The methodology is reliable because it is dependent on a fixed set of assessments which are verified by a toxicology test. The evaluation process includes HGN testing which has been found to meet the *Frye* standard of admissibility. Additionally, the HGN and VGN tests have been subject to peer review and publication. The remaining tests serve to screen the suspect’s mental and physical condition documenting clues explaining why the person may or may not be impaired and if so the source(s) involved.

The drug recognition assessment is a tool by which a specially trained officer can conclude “based on the totality of results” whether or not a person is impaired by a drug other than alcohol.

The court found that the DREs opinion was correct in that the Defendant showed signs of impairment from a drug, other than alcohol, which caused him to seek a toxicological examination. The category of drug is admissible for the limited purpose of establishing foundation for drug screen conducted by the toxicologists.

**American Prosecutors Research Institute  
National Traffic Law Center**

**HORIZONTAL GAZE NYSTAGMUS  
STATE CASE LAW SUMMARY**

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**INTRODUCTION**

The following state case law summary contains the seminal cases for each state, the District of Columbia and the Federal courts on the admissibility of HGN. Three main issues regarding the admissibility of the HGN test are set out under each state: evidentiary admissibility, police officer testimony, and purpose and limits of the HGN test results. The case or cases that address each issue are then briefly summarized and cited.

**Alabama**

**I. Evidentiary Admissibility**

HGN is a scientific test that must satisfy the *Frye* standard of admissibility. The Supreme Court of Alabama found that the State had not presented “sufficient evidence regarding the HGN test’s reliability or its acceptance by the scientific community to determine if the Court of Criminal Appeals correctly determined that the test meets the Frye standards.”  
*Malone v. City of Silverhill*, 575 So.2d 106 (Ala. 1990).

**II. Police Officer Testimony Needed to Admit HGN Test Result**

The Court did not address this issue.

**III. Purpose and Limits of HGN**

The Court did not address this issue.

**Alaska**

**I. Evidentiary Admissibility**

HGN is a scientific test. It is generally accepted within the relevant scientific community.  
*Ballard v. Alaska*, 955 P.2d 931, 939 (Alaska Ct. App. 1998).

**II. Police Officer Testimony Needed to Admit HGN Test Result**

A police officer may testify to the results of HGN testing as long as the government establishes a foundation that the officer has been adequately trained in the test.  
*Ballard*, 955 P.2d at 941.

### **III. Purpose and Limits of HGN**

HGN testing is “a reliable indicator of a person’s alcohol consumption and, to that extent, HGN results are relevant.” The court cautioned that the HGN test could not be used to correlate the results with any particular blood-alcohol level, range of blood-alcohol levels, or level of impairment.

*Ballard*, 955 P.2d at 940.

## **Arizona**

### **I. Evidentiary Admissibility**

HGN is a scientific test that needs to satisfy the *Frye* standard of admissibility. State has shown that HGN satisfies the *Frye* standard. *State v. Superior Court (Blake)*, 718 P.2d 171, 181 (Ariz. 1986) (seminal case on the admissibility of HGN).

### **II. Police Officer Testimony Needed to Admit HGN Test Result**

“The proper foundation for [admitting HGN test results] . . . includes a description of the officer's training, education, and experience in administering the test and showing that proper procedures were followed.”

*Arizona ex. rel. Hamilton v. City Court of Mesa*, 799 P.2d 855, 860 (Ariz. 1990).

*See also Arizona ex. Rel. McDougall v. Ricke*, 778 P.2d 1358, 1361 (Ariz. Ct. App. 1989).

### **III. Purpose and Limits of HGN**

HGN test results are admissible to establish probable cause to arrest in a criminal hearing. *State v. Superior Court (Blake)*, 718 P.2d at 182.

“Where a chemical analysis has been conducted, the parties may introduce HGN test results in the form of estimates of BAC over .10% to challenge or corroborate that chemical analysis.” *Ricke*, 778 P.2d at 1361.

When no chemical analysis is conducted, the use of HGN test results “is to be limited to showing a symptom or clue of impairment.”

*Hamilton*, 799 P.2d at 858.

## **Arkansas**

### **I. Evidentiary Admissibility**

Novel scientific evidence must meet the *Prater* (relevancy) standard for admissibility. Because law enforcement has used HGN for over thirty-five years, a *Prater* inquiry is not necessary as the test is not “novel” scientific evidence. *Whitson v. Arkansas*, 863 S.W.2d 794, 798 (Ark. 1993).

## **II. Police Officer Testimony Needed to Admit HGN Test Result**

The Court did not address this issue.

## **III. Purpose and Limits of HGN**

HGN may be admitted as evidence of impairment, but is not admissible to prove a specific BAC. *Whitson*, 863 S.W.2d at 798.

### **California**

#### **I. Evidentiary Admissibility**

HGN is a scientific test and the *Kelly/Frye* “general acceptance” standard must be applied. *California v. Leahy*, 882 P.2d 321 (Cal. 1994). *California v. Joehnk*, 35 Cal. App. 4<sup>th</sup> 1488, 1493, 42 Cal. Rptr. 2d 6, 8 (Cal. Ct. App. 1995).

“...[A] consensus drawn from a typical cross-section of the relevant, qualified scientific community accepts the HGN testing procedures....”  
*Joehnk*, 35 Cal. App. 4<sup>th</sup> at 1507, 42 Cal. Rptr. 2d at 17.

#### **II. Police Officer Testimony Needed to Admit HGN Test Result**

Police officer testimony is insufficient to establish “general acceptance in the relevant scientific community.” *Leahy*, 882 P.2d. at 609. Also see *People v. Williams*, 3 Cal. App. 4<sup>th</sup> 1326 (Cal. Ct. App. 1992).

Police officer can give opinion, based on HGN and other test results, that defendant was intoxicated. Furthermore, police officer must testify as to the administration and result of the test.

*Joehnk*, 35 Cal. App. 4<sup>th</sup> at 1508, 42 Cal. Rptr. 2d at 18.

#### **III. Purpose and Limits of HGN**

HGN may be used, along with other scientific tests, as some evidence that defendant was impaired.

*Joehnk*, 35 Cal. App. 4<sup>th</sup> at 1508, 42 Cal. Rptr. 2d at 17.

HGN test results may not be used to quantify the BAC level of the defendant.  
*California v. Loomis*, 156 Cal. App. 3d Supp. 1, 5-6, 203 Cal. Rptr. 767, 769-70 (1984).

## **Connecticut**

### **I. Evidentiary Admissibility**

Proper foundation must be established in accordance with *Daubert* prior to the introduction of HGN test results. *State v. Russo*, 773 A. 2d 965 (Conn. App. Ct. 2001).

Also see, *Connecticut v. Merritt*, 647 A.2d 1021, 1028 (Conn. App. Ct. 1994). HGN must meet the *Frye* test of admissibility. In this case, the state presented no evidence to meet its burden under the *Frye* test.

HGN satisfies the *Porter* standards and is admissible. (In *State v. Porter*, 698 A.2d 739 (1997), the Connecticut Supreme Court held the *Daubert* approach should govern the admissibility of scientific evidence and expressed factors to be considered in assessing evidence.) *Connecticut v. Carlson*, 720 A.2d 886 (Conn. Super. Ct. 1998).

### **II. Police Officer Testimony Needed to Admit HGN Test Result**

Must lay a proper foundation with a showing that the officer administering the test had the necessary qualifications and followed proper procedures. *Connecticut v. Merritt*, 647 A.2d 1021, 1028 (Conn. App. Ct. 1994).

### **III. Purpose and Limits of HGN**

HGN test results can be used to establish probable cause to arrest in a criminal hearing. *Connecticut v. Royce*, 616 A.2d 284, 287 (Conn. App. Ct. 1992).

## **Delaware**

### **I. Evidentiary Admissibility**

HGN evidence is scientific and must satisfy the Delaware Rules of Evidence standard. *Delaware v. Ruthardt*, 680 A.2d 349, 356 (Del. Super. Ct. 1996).

HGN evidence is acceptable scientific testimony under the Delaware Rules of Evidence. *Ruthardt*, 680 A.2d at 362.

### **II. Police Officer Testimony Needed to Admit HGN Test Result**

Police officer may be qualified as an expert to testify about the underlying scientific principles that correlate HGN and alcohol. Delaware police receiving three-day (twenty-four hour) instruction on HGN test administration are not qualified to do this. *Ruthardt*, 680 A.2d at 361-62.

Police officer testimony about training and experience alone, without expert testimony, is not enough foundation to admit HGN test results. *Zimmerman v. Delaware*, 693 A.2d 311, 314 (Del. 1997).

### **III. Purpose and Limits of HGN**

HGN test results admissible to show probable cause in a criminal hearing.  
*Ruthardt*, 680 A.2d at 355.

HGN test results admissible to show probable cause in a civil hearing.  
*Cantrell v. Division of Motor Vehicles*, 1996 Del. Super. LEXIS 265 (Del. Super. Ct. Apr. 9, 1996).

HGN test results cannot be used to quantify the defendant's BAC. However, they can be used as substantive evidence that the defendant was "under the influence of intoxicating liquor."  
*Ruthardt*, 680 A.2d at 361-62.

### **District of Columbia**

#### **I. Evidentiary Admissibility**

The Court does not address this issue.

#### **II. Police Officer Testimony Needed to Admit HGN Test Result**

The Court used the case law of other jurisdictions to come to the conclusion that the Officer in the case could testify as an expert on the administration and the results of the HGN test. Therefore, in this case, the evidence was properly admitted using the Officer as the expert. See *Karamychev v. District of Columbia*, 772 A. 2d 806 (D.C. App. 2001).

### **III. Purpose and Limits of HGN**

The Court has not yet addressed this issue.

### **Florida**

#### **I. Evidentiary Admissibility**

The 3<sup>rd</sup> District Court found HGN to be a "quasi-scientific" test. Its application is dependent on a scientific proposition and requires a particular expertise outside the realm of common knowledge of the average person. It does not have to meet the *Frye* standard because HGN has been established and generally accepted in the relevant scientific community, and has been *Frye* tested in the legal community. The court took judicial notice that HGN is reliable based on supportive case law from other jurisdictions, numerous testifying witnesses and studies submitted. It is "no longer 'new or novel' and there is simply no need to reapply a *Frye* analysis."  
*Williams v. Florida*, 710 So. 2d 24 (Fla. Dist. Ct. App. 1998).

The 4<sup>th</sup> District Court found HGN to be a scientific test. However, because it is not novel, the *Frye* standard is not applicable. However, “[e]ven if not involving a new scientific technique, evidence of scientific tests is admissible only after demonstration of the traditional predicates for scientific evidence including the test's general reliability, the qualifications of test administrators and technicians, and the meaning of the results.” Without this predicate, “the danger of unfair prejudice, confusion of issues or misleading the jury from admitting HGN test results outweighs any probative value.” The state did not establish the appropriate foundation for the admissibility of HGN test results.

*Florida v. Meador*, 674 So. 2d 826, 835 (Fla. Dist. Ct. App. 1996), *review denied*, 686 So. 2d 580 (Fla. 1996).

## **II. Police Officer Testimony Needed to Admit HGN Test Result**

“We take judicial notice that HGN test results are generally accepted as reliable and thus are admissible into evidence once a proper foundation has been laid that the test was correctly administered by a qualified DRE [Drug Recognition Expert].”

*Williams*, 710 So. 2d at 32.

Also see *Bown v. Florida*, 745 So. 2d 1108 (Fl. Dist. Ct. App. 1999) which expands *Williams*. Allows trooper to explain HGN, but district requires confirmatory blood, breath or urine test before admitting HGN into evidence.

No evidence presented as to the police officer’s qualifications nor administration of the HGN test in this case.

*Meador*, 674 So. 2d at 835.

## **III. Purpose and Limits of HGN**

The HGN test results alone, in the absence of a chemical analysis of blood, breath, or urine, are inadmissible to trigger the presumption provided by the DUI statute, and may not be used to establish a BAC of .08 percent or more.

*Williams*, 710 So. 2d at 36.

## **Georgia**

### **I. Evidentiary Admissibility**

The HGN test is admissible as a “scientifically reliable field sobriety evaluation” under the *Harper* “verifiable certainty” standard. *Manley v. Georgia*, 424 S.E.2d 818, 819-20 (Ga. Ct. App. 1992).

HGN testing is judicially noticed as a scientifically reliable test and therefore expert testimony is no longer required before the test results can be admitted.

*Hawkins v. Georgia*, 476 S.E.2d 803, 808-09 (Ga. Ct. App. 1996).

## **II. Police Officer Testimony Needed to Admit HGN Test Result**

Police officer, who received specialized training in DUI detection and worked with a DUI task force for two years, was permitted to testify that, in his opinion, defendant was under the influence.

*Sieveking v. Georgia*, 469 S.E.2d 235, 219-20 (Ga. Ct. App. 1996).

A Police officer who testifies to the results, administration, and procedure of HGN may be cross-examined about those areas even if the state only offers him as a POST-certified officer. This is because the analysis and expertise needed for HGN go far beyond those needed by a lay person who observes the walk and turn or one leg stance tests. *James v. State*, 2003 WL 1540235 (Ga. App.).

## **III. Purpose and Limits of HGN**

HGN test can be admitted to show that the defendant “was under the influence of alcohol to the extent that it was less safe for him to drive.”

*Sieveking*, 469 S.E.2d at 219.

## **Hawaii**

### **I. Evidentiary Admissibility**

HGN is a scientific test. The HGN test is reliable under the Hawaii Rules of Evidence and admissible as “evidence that police had probable cause to believe that a defendant was DUI.” Judicial notice of the “validity of the principles underlying HGN testing and the reliability of HGN test results” is appropriate. HGN test results can be admitted into evidence if the officer administering the test was duly qualified to conduct the test and the test was performed properly. *Hawaii v. Ito*, 978 P.2d 191 (Haw. Ct. App. 1999).

### **II. Police Officer Testimony Needed to Admit HGN Test Result**

Before HGN test results can be admitted into evidence in a particular case, however, it must be shown that (1) the officer administering the test was duly qualified to conduct and grade the test; and (2) the test was performed properly in the instant case. *Hawaii v. Ito*, 978 P.2d 191 (Haw. Ct. App. 1999), *See also Hawaii v. Toyomura*, 904 P.2d 893, 911 (Haw. 1992) and *Hawaii v. Montalbo*, 828 P.2d. 1274, 1281 (Haw. 1992).

### **III. Purpose and Limits of HGN**

HGN test can be admitted as “evidence that police had probable cause to believe that a defendant was DUI.” *Hawaii v. Ito*, 978 P.2d 191 (Haw. Ct. App. 1999).

## Idaho

### I. Evidentiary Admissibility

HGN test results admitted under the Idaho Rules of Evidence. Rule 702 is the correct test in determining the admissibility of HGN. *State v. Gleason*, 844 P.2d 691, 694 (Idaho 1992).

### II. Police Officer Testimony Needed to Admit HGN Test Result

Officer may testify as to administration of HGN test, but not correlation of HGN and BAC. *State v. Garrett*, 811 P.2d 488, 493 (Idaho 1991).

### III. Purpose and Limits of HGN

“HGN test results may not be used at trial to establish the defendant's blood alcohol level . . . Although we note that in conjunction with other field sobriety tests, a positive HGN test result does supply probable cause for arrest, standing alone that result does not provide proof positive of DUI....”

*Garrett*, 811 P.2d at 493.

HGN may be “admitted for the same purpose as other field sobriety test evidence -- a physical act on the part of [defendant] observed by the officer contributing to the cumulative portrait of [defendant] intimating intoxication in the officer's opinion.”

*Gleason*, 844 P.2d at 695.

## Illinois

### I. Evidentiary Admissibility

HGN meets *Frye* standard of admissibility.

*People v. Buening*, 592 N.E.2d 1222, 1227 (Ill. App. Ct. 1992).

Despite the ruling of the *Buening* appellate court, the Fourth District Court of Appeals declined to recognize HGN's general acceptance without a *Frye* hearing. The court criticized the *Buening* court for taking judicial notice of HGN's reliability based on the decisions of other jurisdictions. *People v. Kirk*, 681 N.E.2d 1073, 1077 (Ill. App. Ct. 1997).

The state supreme court held that the state was no longer required to show than an HGN test satisfied the Frye standard before introducing the results of the test into evidence. Absent proof by the defense that the HGN test was unsound, the State only had to show that the officer who gave the test was trained in the procedure and that the test was properly administered. *The People of the State of Illinois v. Linda Basler*, 740 N.E.2d 1 (Ill. 2000), 2000 Ill. LEXIS 1698 (Ill. 2000). (Plurality Opinion) According to Fourth Circuit, a *Frye* hearing must be held for HGN to be admitted. *People v. Herring*, 762 N.E.2d 1186.

## **II. Police Officer Testimony Needed to Admit HGN Test Result**

“A proper foundation should consist of describing the officer's education and experience in administering the test and showing that the procedure was properly administered.”

*Buening*, 592 N.E.2d at 1227.

## **III. Purpose and Limits of HGN**

HGN test results may be used to establish probable cause in a criminal hearing.

*People v. Furness*, 526 N.E.2d 947, 949 (Ill. App. Ct. 1988).

HGN test results admissible to show probable cause in a civil hearing.

*People v. Hood*, 638 N.E.2d 264, 274 (Ill. App. Ct. 1994).

HGN test results may be used “to prove that the defendant is under the influence of alcohol.”

*Buening*, 592 N.E.2d at 1228.

## **Indiana**

### **I. Evidentiary Admissibility**

Results of properly administered HGN test are admissible to show impairment which may be caused by alcohol and, when accompanied by other evidence, will be sufficient to establish probable cause to believe a person may be intoxicated. *Cooper v. Indiana*, 751 N.E.2d 900, 903 (Ind. Ct. App. Feb. 2002)

### **II. Police Officer Testimony Needed to Admit HGN Test Result**

The proper foundation for admitting HGN evidence should consist of describing the officer's education and experience in administering the test and showing that the procedure was properly administered. *Cooper*, 751 N.E.2d at 903.

The question of whether a trained officer might express an opinion that defendant was intoxicated based upon the results of field sobriety tests was not before the court, and thus, the court expressed no opinion concerning the admissibility of such testimony. *Cooper*, 751 N.E. 2d at 902, n. 1.

### **III. Purpose and Limits of HGN**

HGN test results, when accompanied by other evidence, will be sufficient to establish probable cause that the person may be intoxicated. *Cooper*, 751 N.E.2d at 903.

## **Iowa**

### **I. Evidentiary Admissibility**

HGN admissible as a field test under the Iowa Rules of Evidence. “[T]estimony by a properly trained police officer with respect to the administration and results of the horizontal gaze nystagmus test are admissible without need for further scientific evidence.”  
*State v. Murphy*, 451 N.W.2d 154, 158 (Iowa 1990).

### **II. Police Officer Testimony Needed to Admit HGN Test Result**

Police officer may testify about HGN test results under Rule 702 if the officer is properly trained to administer the test and objectively records the results.  
*Murphy*, 451 N.W.2d at 158.

### **III. Purpose and Limits of HGN**

HGN test results may be used as an indicator of intoxication. *Murphy*, 451 N.W.2d at 158.

## **Kansas**

### **I. Evidentiary Admissibility**

HGN must meet *Frye* standard of admissibility and a *Frye* hearing is required at the trial level. There was no *Frye* hearing conducted and the appellate court refused to make a determination based on the record it had. *State v. Witte*, 836 P.2d 1110, 1121 (Kan. 1992).

HGN test has not achieved general acceptance within the relevant scientific community and its exclusion was appropriate. *State v. Chastain*, 960 P.2d 756 (Kan. 1998).

### **II. Police Officer Testimony Needed to Admit HGN Test Result**

The Court did not address this issue.

### **III. Purpose and Limits of HGN**

The Court did not address this issue.

## **Kentucky**

### **I. Evidentiary Admissibility**

HGN test results admitted due to defendant’s failure to object.  
*Commonwealth v. Rhodes*, 949 S.W.2d 621, 623 (Ky. Ct. App. 1996).

## **II. Police Officer Testimony Needed to Admit HGN Test Result**

The Court did not address this issue.

## **III. Purpose and Limits of HGN**

The Court did not address this issue.

### **Louisiana**

#### **I. Evidentiary Admissibility**

HGN meets *Frye* standard of admissibility and with proper foundation may be admitted as evidence of intoxication.

*State v. Breitung*, 623 So. 2d 23, 25-6 (La. Ct. App. 1993).

*State v. Regan*, 601 So. 2d 5, 8 (La. Ct. App. 1992).

*State v. Armstrong*, 561 So. 2d 883, 887 (La. Ct. App. 1990).

The standard of admissibility for scientific evidence is currently the Louisiana Rules of Evidence.

*State v. Foret*, 628 So. 2d 1116 (La. 1993).

## **II. Police Officer Testimony Needed to Admit HGN Test Result**

Police officer may testify as to training in HGN procedure, certification in the administration of HGN test and that the HGN test was properly administered. *Armstrong*, 561 So. 2d at 887.

## **III. Purpose and Limits of HGN**

The HGN test may be used by the officer “to determine whether or not he [needs] to ‘go any further’ and proceed with other field tests.”

*Breitung*, 623 So. 2d at 25.

HGN test results may be admitted as evidence of intoxication.

*Armstrong*, 561 So. 2d at 887.

### **Maine**

#### **I. Evidentiary Admissibility**

Because the HGN test relies on greater scientific principles than other field sobriety tests, the reliability of the test must first be established. Either *Daubert* or *Frye* standard must be met.

*State v. Taylor*, 694 A.2d 907, 912 (Me. 1997).

The Maine Supreme Court took judicial notice of the reliability of the HGN test to detect impaired drivers.

*Taylor*, 694 A.2d at 910.

## **II. Police Officer Testimony Needed to Admit HGN Test Result**

“A proper foundation shall consist of evidence that the officer or administrator of the HGN test is trained in the procedure and the [HGN] test was properly administered.”

*Taylor*, 694 A.2d at 912.

## **III. Purpose and Limits of HGN**

HGN test results may only be used as “evidence of probable cause to arrest without a warrant or as circumstantial evidence of intoxication. The HGN test may not be used by an officer to quantify a particular blood alcohol level in an individual case.”

*Taylor*, 694 A.2d at 912.

## **Maryland**

### **I. Evidentiary Admissibility**

HGN is scientific and must satisfy the *Frye/Reed* standard of admissibility. The Court of Appeals took judicial notice of HGN's reliability and its acceptance in the relevant scientific communities.

*Schultz v. State*, 664 A.2d 60, 74 (Md. Ct. Spec. App. 1995).

### **II. Police Officer Testimony Needed to Admit HGN Test Result**

Police officer must be properly trained or certified to administer the HGN test. [NOTE: In *Schultz*, the police officer failed to articulate the training he received in HGN testing and the evidence was excluded.]

*Schultz*, 664 A.2d at 77.

### **III. Purpose and Limits of HGN**

HGN testing may not be used to establish a specific blood alcohol level.

*Wilson v. State*, 723 A.2d 494 (Md. Ct. Spec. App. 1999).

## **Massachusetts**

### **I. Evidentiary Admissibility**

HGN is scientific and is admissible on a showing of either general acceptance in the scientific community or reliability of the scientific theory. See *Commonwealth v. Lanigan*, 641 N.E.2d 1342 (Mass. 1994). HGN test results are inadmissible until the Commonwealth introduces expert testimony to establish that the HGN test satisfies one of these two standards. *Commonwealth v. Sands*, 675 N.E.2d 370, 373 (Mass. 1997).

## **II. Police Officer Testimony Needed to Admit HGN Test Result**

“[T]here must be a determination as to the qualification of the individual administering the HGN test and the appropriate procedure to be followed.” In this case there was no testimony as to these facts, thus denying the defendant the opportunity to challenge the officer’s qualifications and administration of the test. *Sands*, 675 N.E.2d at 373.

## **III. Purpose and Limits of HGN**

The Court did not address this issue.

### **Michigan**

#### **I. Evidentiary Admissibility**

Court found that HGN test is scientific evidence and is admissible under the *Frye* standard of admissibility.

*State v. Berger*, 551 N.W.2d 421, 424 (Mich. Ct. App. 1996).

#### **II. Police Officer Testimony Needed to Admit HGN Test Result**

Only foundation necessary for the introduction of HGN test results is evidence that the police officer properly performed the test and that the officer administering the test was qualified to perform it.

*Berger*, 551 N.W.2d at 424.

#### **III. Purpose and Limits of HGN**

HGN test results are admissible to indicate the presence of alcohol.

*Berger*, 551 N.W.2d at 424 n.1.

### **Minnesota**

#### **I. Evidentiary Admissibility**

Court found that HGN meets the *Frye* standard of admissibility.

*State v. Klawitter*, 518 N.W.2d 577, 585 (Minn. 1994).

#### **II. Police Officer Testimony Needed to Admit HGN Test Result**

Police officers must testify about their training in and experience with the HGN test.

*See generally Klawitter*, 518 N.W.2d at 585-86.

### **III. Purpose and Limits of HGN**

HGN admissible as evidence of impairment as part of a Drug Evaluation Examination in the prosecution of a person charged with driving while under the influence of drugs.  
*See generally Klawitter*, 518 N.W.2d at 585.

## **Mississippi**

### **I. Evidentiary Admissibility**

HGN is a scientific test. However, it is not generally accepted within the relevant scientific community and is inadmissible at trial in the State of Mississippi.  
*Young v. City of Brookhaven*, 693 So.2d 1355, 1360-61 (Miss. 1997).

### **II. Police Officer Testimony Needed to Admit HGN Test Result**

Police officers cannot testify about the correlation between the HGN test and precise blood alcohol content.  
*Young*, 693 So.2d at 1361.

### **III. Purpose and Limits of HGN**

HGN test results are admissible only to prove probable cause to arrest.  
*Young*, 693 So.2d at 1361.

HGN test results cannot be used as scientific evidence to prove intoxication or as a mere showing of impairment. *Young*, 693 So.2d at 1361.

## **Missouri**

### **I. Evidentiary Admissibility**

Court found that HGN test meets the *Frye* standard of admissibility. *State v. Hill*, 865 S.W.2d 702, 704 (Mo. Ct. App. 1993), *rev'd on other grounds*, *State v. Carson*, 941 S.W.2d 518, 520 (Mo. 1997).

### **II. Police Officer Testimony Needed to Admit HGN Test Result**

Police officer must be adequately trained and able to properly administer the test.  
*Hill*, 865 S.W.2d at 704.

See also, *Duffy v. Director of Revenue*, 966 S.W. 2d 372 (Mo. Ct. App. 1998). HGN not admitted at trial because the administering officer was not aware of how to properly score the test and interpret its results.

### **III. Purpose and Limits of HGN**

HGN can be admitted as evidence of intoxication. *Hill*, 865 S.W.2d at 704.

#### **Montana**

##### **I. Evidentiary Admissibility**

Court found that HGN is neither new nor novel; thus, *Daubert* does not apply. Court still finds that HGN must meet the state's rules of evidence that are identical to the Federal Rules of Evidence. *Hulse v. DOJ, Motor Vehicle Div.*, 961 P.2d 75, 88 (Mont. 1998).

##### **II. Police Officer Testimony Needed to Admit HGN Test Result**

The court held that before an arresting officer may testify as to HGN results, a proper foundation must show that the officer was properly trained to administer the HGN test and that he administered the test in accordance with this training. Before the officer can testify as to the correlation between alcohol and nystagmus, a foundation must be established that the officer has special training in the underlying scientific basis of the HGN test. *Hulse*, 961 P.2d 75 (Mont. 1998).

See Also, *State v. Crawford*, 315 Mont. 480, 68 P.3d 848 (2003), in which the court ruled that the officer's credentials were sufficient to establish his expertise, along with evidence that he was previously qualified as an expert. They relied on *Russette* (2002 MT 200), stating that to establish an expert's qualifications, the proponent of the testimony must show that the expert has special training or education and adequate knowledge on which to base an opinion.

### **III. Purpose and Limits of HGN**

HGN test results admissible as evidence of impairment. *State v. Clark*, 762 P.2d 853, 856 (Mont. 1988).

#### **Nebraska**

##### **I. Evidentiary Admissibility**

HGN meets the *Frye* standard for acceptance in the relevant scientific communities, and when the test is given in conjunction with other field sobriety tests, the results are admissible for the limited purpose of establishing impairment that may be caused by alcohol. *State v. Baue*, 607 N.W.2d 191 (Neb. 2000)

## II. Police Officer Testimony Needed to Admit HGN Test Result

A police officer may testify to the results of **HGN** testing if it is shown that the officer has been adequately trained in the administration and assessment of the **HGN** test and has conducted the testing and assessment in accordance with that training. *State v. Baue*, 607 N.W.2d 191 (Neb. 2000)

## III. Purpose and Limits of HGN

“Testimony concerning **HGN** is admissible on the issue of impairment, provided that the prosecution claims no greater reliability or weight for the **HGN** evidence than it does for evidence of the defendant's performance on any of the other standard field sobriety tests, and provided further that the prosecution makes no attempt to correlate the **HGN** test result with any particular blood-alcohol level, range of blood-alcohol levels, or level of impairment.” *State v. Baue*, 607 N.W.2d 191 (Neb. 2000) (quoting *Ballard v. State*, 955 P.2d 931, 940 (Alaska App. 1998))

## New Hampshire

### I. Evidentiary Admissibility

In *State v. Dahoo* (Dec. 20, 2002), the N.H. Supreme Court ruled that the HGN test is admissible under N.H. Rule of Evidence 702 and *Daubert* for the limited purpose of providing circumstantial evidence of intoxication. HGN test is a scientifically reliable and valid test.

N.H. Supreme Court ruled their findings binding in *Dahoo* and that courts “will not be required to establish the scientific reliability of the HGN.”

### II. Police Officer Testimony Needed to Admit HGN Test Result

“Since we have already determined that the scientific principles underlying the HGN test are reliable, a properly trained and qualified police officer may introduce the HGN test results at trial.” *State v. Dahoo*, 2002 N.H. LEXIS 179.

### III. Purpose and Limits of HGN

“HGN results cannot be introduced at trial for the purpose of establishing a defendant’s BAC level....[T]he results are not sufficient alone to establish intoxication.” *State v. Dahoo*, Id.

## New Jersey

### I. Evidentiary Admissibility

In New Jersey, the party offering the results of a scientific procedure into evidence must comply with *Frye* and show that the procedure is generally accepted in the relevant scientific communities. A party may prove this general acceptance via “(1) testimony of knowledgeable

experts[,] (2) authoritative scientific literature[, or] (3) [p]ersuasive judicial decision.” Based on the testimony of Dr. Marcelline Burns and Dr. Jack Richman, the Court found the HGN test to be generally accepted and the results thus admissible. The Court also noted the “significant number” of jurisdictions that have accepted the HGN test as admissible scientific evidence. *State v. Maida*, 2000 N.J. Super. LEXIS 276 (N.J. Super. Ct. Law Div. 2000).

**\*But See**, *State v. Doriguzzi*, 760 A.2d 336 (N.J. Super. 2000), which held that HGN is scientific evidence that must meet Frye Standard. However, in each trial, sufficient foundation evidence must be laid by expert testimony to assure defendants that a conviction for DUI, when based in part on HGN testing, is grounded in reliable scientific data. In this case, the appellate court reversed defendant’s conviction because at trial no such foundation was presented. The court found that because HGN testing has not achieved general acceptance in the community, it is not a matter of which a court can take judicial notice.

## **II. Police Officer Testimony Needed to Admit HGN Test Result**

The Court did not address this issue.

## **III. Purpose and Limits of HGN**

The Court found the HGN test admissible “as a reliable scientific indicator of likely intoxication.”

### **New Mexico**

#### **I. Evidentiary Admissibility**

HGN is a scientific test. New Mexico follows the *Daubert* standard, which requires a showing of reliability before scientific evidence can be admitted. The court held that a scientific expert must testify to the underlying scientific reliability of HGN and that a police officer cannot qualify as a scientific expert. Because the State failed to present sufficient evidence regarding the HGN test’s reliability, the court remanded the case stating it would be appropriate for the trial court, on remand, to make the initial determination of whether HGN testing satisfies *Daubert*. In addition, the court found HGN to be “beyond common and general knowledge” and declined to take judicial notice of HGN reliability.

*State v. Torres*, 976 P.2d 20 (N.M. 1999).

*State v. Lasworth*, 42 P.3d 844 (Ct. App. N.M. 2001), cert. denied (2002). Results of HGN test were inadmissible at trial (*State v. Torres*, 976 P.2d 20 (N.M. 1999)). The State needed to prove that HGN was both valid and reliable.

State called Dr. Marceline Burns as a witness (reliability) but did not call an expert in a discipline such as biology or medicine to explain how the amount of alcohol a person consumes correlates with HGN (validity).

## II. Police Officer Testimony Needed to Admit HGN Test Result

Police officers can qualify as non-scientific experts based on their training and experience. Non-scientific experts may testify about the administration of the test and specific results of the test provided another scientific expert first establishes the reliability of the scientific principles underlying the test. In order to establish the “technical or specialized knowledge” required to qualify as an expert in the administration of the HGN test, “there must be a showing: (1) that the expert has the ability and training to administer the HGN test properly, and (2) that the expert did, in fact, administer the HGN test properly at the time and upon the person in question.” *State v. Torres*, 976 P.2d 20 (N.M. 1999).

*State v. Lasworth*, 42 P.3d 844 (Ct. App. N.M. 2001), cert. denied (2002). Court believed that state had to show that presence of HGN (BAC above .08) correlates with diminishment of driver’s mental or physical driving skills (which it failed to do) & a correlation between presence of HGN and BAC above or below .08 (which it did through testimony of Dr. Burns). Court did not preclude use of results of HGN to establish probable cause for arrest or to establish grounds for administering a chemical BAC test.

## III. Purpose and Limits of HGN

The Court did not address this issue.

### New York

#### I. Evidentiary Admissibility

Prue holds that HGN test results are admissible under *Frye* standard of “general acceptance.” *People v. Prue*, Indictment No. I-5-2001, Franklin County Court (November 2001).

In *Gallup*, the court said that it was only necessary to conduct a foundational inquiry into the techniques and the tester’s qualifications for admissibility. *People v. Gallup*, Memorandum and order #13094, 302 A.D.2d 681 (3<sup>rd</sup> Dept)( 2003).

The Court allowed the introduction of HGN and the results because it was properly administered and the burden of establishing that HGN is a reliable indicator of intoxication is generally accepted in the relevant scientific community was satisfied. *People v. William Miley*, NYLJ 12/6/02 p.30 col. 6 (Nassau Co. Ct 2002).

## II. Police Officer Testimony Needed to Admit HGN Test Result

The People must lay a proper evidentiary foundation in order for HGN results to be admissible at trial.

### **III. Purpose and Limits of HGN**

The Court held that HGN is generally accepted in the relevant scientific community as a reliable indicator of intoxication.

#### **North Carolina**

##### **I. Evidentiary Admissibility**

HGN is a scientific test. It “does not measure behavior a lay person would commonly associate with intoxication but rather represents specialized knowledge that must be presented to the jury by a qualified expert.” As a result, “until there is sufficient scientifically reliable evidence as to the correlation between intoxication and nystagmus, it is improper to permit a lay person to testify as to the meaning of HGN test results.” *State v. Helms*, 504 S.E.2d 293 (N.C. 1998).

##### **II. Police Officer Testimony Needed to Admit HGN Test Result**

Testimony of one police officer, whose training consisted of a “forty hour training class dealing with the HGN test”, was inadequate foundation for admission of HGN test results. *Helms*, 504 S.E.2d 293 (N.C. 1998).

##### **III. Purpose and Limits of HGN**

HGN test results are evidence of impairment. *Helms*, 504 S.E.2d 293 (N.C. 1998).

#### **North Dakota**

##### **I. Evidentiary Admissibility**

Court found that HGN test is admissible as a standard field sobriety test. *City of Fargo v. McLaughlin*, 512 N.W.2d 700, 706 (N.D. 1994).

##### **II. Police Officer Testimony Needed to Admit HGN Test Result**

Police officer must testify as to training and experience and that the test was properly administered.

*City of Fargo*, 512 N.W.2d at 708.

##### **III. Purpose and Limits of HGN**

“ . . . HGN test results admissible only as circumstantial evidence of intoxication, and the officer may not attempt to quantify a specific BAC based upon the HGN test.”

*City of Fargo*, 512 N.W.2d at 708.

## Ohio

### I. Evidentiary Admissibility

HGN test is objective in nature and does not require an expert interpretation. *State v. Nagel*, 506 N.E.2d 285, 286 (Ohio Ct. App. 1986).

Court determined that HGN was a reliable indicator of intoxication without specifically ruling on whether HGN meets *Frye* or some other standard of admissibility. *State v. Bresson*, 554 N.E.2d 1330, 1334 (Ohio 1990).

Court held that SFSTs, including HGN, must be administered in *strict compliance* with NHTSA's directives in order for the test results to be admissible. *State v. Homan*, 732 N.E.2d 952 (Ohio 2000).

### II. Police Officer Testimony Needed to Admit HGN Test Result

Police officer need only testify to training in HGN procedure, knowledge of the test and ability to interpret results. *Bresson*, 554 N.E.2d at 1336.

### III. Purpose and Limits of HGN

HGN can be used to establish probable cause to arrest and as substantive evidence of a defendant's guilt or innocence in a trial for DUI, but not to determine defendant's BAC. *Bresson*, 554 N.E.2d at 1336.

## Oklahoma

### I. Evidentiary Admissibility

HGN test results excluded because state failed to lay adequate foundation regarding HGN's scientific admissibility under the *Frye* standard of admissibility. Police officer's testimony alone was insufficient.

*Yell v. State*, 856 P.2d 996, 996-97 (Okla. Crim. App. 1993).

The *Daubert* rationale replaces the *Frye* standard as the admissibility standard for scientific evidence.

*Taylor v. State*, 889 P.2d 319, 328-29 (Okla. Crim. App. 1995).

### II. Police Officer Testimony Needed to Admit HGN Test Result

Police officer testified to training on how to administer HGN test and how the test was administered in this case. Officer also testified as to his training in analyzing HGN test results. *Yell*, 856 P.2d at 997.

### **III. Purpose and Limits of HGN**

If HGN testing was found to satisfy the *Frye* standard of admissibility, HGN test results would be considered in the same manner as other field sobriety test results. HGN test results are inadmissible as scientific evidence creating a presumption of intoxication. *Yell*, 856 P.2d at 997.

## **Oregon**

### **I. Evidentiary Admissibility**

HGN test results are admissible under the Oregon Rules of Evidence. HGN test results are scientific in nature, are relevant in a DUI trial, and are not unfairly prejudicial to the defendant. *State v. O'Key*, 899 P.2d 663, 687 (Or. 1995).

### **II. Police Officer Testimony Needed to Admit HGN Test Result**

“Admissibility is subject to a foundational showing that the officer who administered the test was properly qualified, that the test was administered properly, and that the test results were recorded accurately.”  
*O'Key*, 899 P.2d at 670.

### **III. Purpose and Limits of HGN**

“... HGN test results are admissible to establish that a person was under the influence of intoxicating liquor, but is not admissible...to establish a person's BAC....” *O'Key*, 899 P.2d at 689-90.

Officer may not testify that, based on HGN test results, the defendant's BAC was over .10. *State v. Fischen*, 909 P.2d 206, 207 (Or. Ct. App. 1996).

## **Pennsylvania**

### **I. Evidentiary Admissibility**

The state laid an inadequate foundation for the admissibility of HGN under the *Frye/Topa* standard.

*Commonwealth v. Moore*, 635 A.2d 625, 629 (Pa. Super. Ct. 1993).  
*Commonwealth v. Apollo*, 603 A.2d 1023, 1028 (Pa. Super. Ct. 1992).  
*Commonwealth v. Miller*, 532 A.2d 1186, 1189-90 (Pa. Super. Ct. 1987).

Testimony of police officer is insufficient to establish scientific reliability of HGN test.  
*Moore*, 635 A.2d at 692.  
*Miller*, 532 A.2d at 1189-90.

Testimony of behavioral optometrist did not establish general acceptance of HGN test.  
*Apollo*, 603 A.2d at 1027-28.

## **II. Police Officer Testimony Needed to Admit HGN Test Result**

County detective certified as HGN instructor. Court did not comment on whether this would be enough foundation to allow the detective to testify about HGN test results. *Moore*, 635 A.2d 629.

Police officer had one-day course on HGN. Court did not comment on whether this would be enough foundation to allow the officer to testify about HGN test results. *Miller*, 603 A.2d at 1189.

## **III. Purpose and Limits of HGN**

Not addressed by court.

### **South Carolina**

#### **I. Evidentiary Admissibility**

HGN admissible in conjunction with other field sobriety tests. By implication, HGN is not regarded as a scientific test. *State v. Sullivan*, 426 S.E.2d 766, 769 (S.C. 1993).

#### **II. Police Officer Testimony Needed to Admit HGN Test Result**

Police officer given twenty hours of HGN training. *Sullivan*, 426 S.E.2d at 769.

#### **III. Purpose and Limits of HGN**

HGN test results admissible “to elicit objective manifestations of soberness or insobriety . . . [E]vidence from HGN tests is not conclusive proof of DUI. A positive HGN test result is to be regarded as merely circumstantial evidence of DUI. Furthermore, HGN test shall not constitute evidence to establish a specific degree of blood alcohol content.” *Sullivan*, 426 S.E.2d at 769.

### **South Dakota**

#### **I. Evidentiary Admissibility**

If it can be shown that a horizontal gaze nystagmus test was properly administered by a trained officer, such evidence should be admitted for a jury to consider at trial along with evidence of the other accepted field sobriety tests administered in South Dakota. *STATE v. HULLINGER*, 2002 SD 83; 649 N.W.2d 253 (S.D.S.Ct. 2002); 2002 S.D. LEXIS 99

## **II. Police Officer Testimony Needed to Admit HGN Test Result**

Officer may testify if properly trained and test properly administered. At the pretrial hearing, the State presented three witnesses: 1) Monte Farnsworth, training director for the Office of Highway Safety at the Division of Criminal Investigation Law Enforcement Training Academy; 2) Deputy Ludwig; and 3) Dr. Larry Menning, optometrist and expert witness. South Dakota follows a *Daubert* standard in use of expert witnesses.

## **III. Purpose and Limits of HGN**

The Court did not address this issue.

## **Tennessee**

### **I. Evidentiary Admissibility**

HGN is a scientific test. To be admissible at trial, such evidence must satisfy the requirements of Tenn. Rules of Evidence 702 and 703. State provided an inadequate amount of evidence to allow the court to conclude that HGN evidence meets this standard. *State v. Murphy*, 953 S.W.2d 200 (Tenn. 1997).

## **II. Police Officer Testimony Needed to Admit HGN Test Result**

HGN must be offered through an expert witness. To qualify as an expert, a police officer must establish that he is qualified by his “knowledge, skill, experience, training or education” to provide expert testimony to “substantially assist the trier of fact to understand the evidence or determine a fact in issue.” Although the court did not rule out the possibility that the officer can be considered an expert, the court set a high level of proof. In this case, the court felt that although the officer had attended law enforcement training in DUI offender apprehension and the HGN test, this training was not enough to establish him as an expert. *State v. Grindstaff*, 1998 Tenn. Crim. App. Lexis 339 (March 23, 1998).

## **III. Purpose and Limits of HGN**

The Court did not address this issue.

## **Texas**

### **I. Evidentiary Admissibility**

HGN admissible under the Texas Rules of Evidence. *Emerson v. State*, 880 S.W.2d 759, 769 (Tex. Crim. App. 1994).

## **II. Police Officer Testimony Needed to Admit HGN Test Result**

A police officer must qualify as an expert on the HGN test, specifically concerning its administration and technique, before testifying about a defendant's performance on the test. Proof that the police officer is certified in the administration of the HGN test by the Texas Commission on Law Enforcement Officer Standards and Education satisfies this requirement. *Emerson*, 880 S.W.2d at 769.

## **III. Purpose and Limits of HGN**

HGN admissible to prove intoxication, but not accurate enough to prove precise BAC. *Emerson*, 880 S.W.2d at 769.

### **Utah**

#### **I. Evidentiary Admissibility**

HGN test admissible as other field sobriety test. Court reserved judgment as to the scientific reliability of HGN. *Salt Lake City v. Garcia*, 912 P.2d 997, 1001 (Utah Ct. App. 1996).

#### **II. Police Officer Testimony Needed to Admit HGN Test Result**

Police officer need only testify as to training, experience and observations when HGN admitted as a field test. *Garcia*, 912 P.2d at 1001.

#### **III. Purpose and Limits of HGN**

Admissible as any other field sobriety test. *Garcia*, 912 P.2d at 1000-01.

### **Washington**

#### **I. Evidentiary Admissibility**

It is "undisputed" in the relevant scientific communities that "an intoxicated person will exhibit nystagmus". HGN testing is not novel and has been used as a field sobriety test for "decades" and is administered the same whether investigating alcohol impairment or drug impairment. Thus, the use of HGN in drug and alcohol impaired driving cases is acceptable. *State v. Baity*, 140 Wn.2d 1, 991 P.2d 1151 (Wash. 2000).

"[T]he *Frye* standard applies to the admission of evidence based on HGN testing, unless . . . the State is able to prove that it rests on scientific principles and uses techniques which are not 'novel' and are readily understandable by ordinary persons." The state failed to present any evidence to this fact and the court declined to take judicial notice of HGN. *State v. Cissne*, 865 P.2d 564, 569 (Wash. Ct. App. 1994).

## **II. Police Officer Testimony Needed to Admit HGN Test Result**

The Court did not address this issue.

## **III. Purpose and Limits of HGN**

The Court did not address this issue.

## **West Virginia**

### **I. Evidentiary Admissibility**

The state did not present evidence for the court to reach “the question of whether the HGN test is sufficiently reliable to be admissible.” However, the court did conclude “that even if the reliability of the HGN test is demonstrated, an expert’s testimony as to a driver’s performance on the test is admissible only as evidence that the driver was under the influence. Estimates of blood alcohol content based on the HGN test are inadmissible.” *State v. Barker*, 366 S.E.2d 642, 646 (W. Va. 1988).

The West Virginia Supreme Court modified *State v. Barker* to the extent that the *Daubert* analysis of FRE 702 is applicable to the question of admissibility of expert testimony under the West Virginia Rules of Evidence Rule 702. *Wilt v. Buracker*, 443 S.E. 2d 196 (W.Va. 1993).

## **II. Police Officer Testimony Needed to Admit HGN Test Result**

Police officer's training consisted of a one-day, eight-hour training session conducted by the state police. Officer testified to giving the HGN test about 100 times. Court did not reach question of whether this would be enough to allow the officer to testify about the HGN test results. *Barker*, 366 S.E.2d at 644.

## **III. Purpose and Limits of HGN**

HGN test results admissible to show probable cause in a civil hearing. *Muscatell v. Cline*, 474 S.E.2d 518, 525 (W. Va. 1996). *Boley v. Cline*, 456 S.E.2d 38, 41 (W. Va. 1995).

“[I]f the reliability of the HGN test is demonstrated, an expert's testimony as to a driver's performance on the test is admissible only as evidence that the driver was under the influence,” the same as other field sobriety tests. *Barker*, 366 S.E.2d at 646.

## Wisconsin

### I. Evidentiary Admissibility

The court held that the HGN test results are admissible in this case because the test results were not the only evidence. The results were accompanied by the expert testimony of the officer. *State v. Zivcic*, 598 N.W.2d 565 (Wisc. Ct. App. 1999). **See also**, *State v. Maxon*, 633 N.W. 2d 278 (Wisc. Ct. App. 2001)

### II. Police Officer Testimony Needed to Admit HGN Test Result

A police officer who is properly trained to administer and evaluate the HGN test can testify to the test results. A second expert witness is not needed. *State v. Zivcic*, 598 N.W.2d 565 (Wisc. Ct. App. 1999).

### III. Purpose and Limits of HGN

The Court did not address this issue.

## Wyoming

### I. Evidentiary Admissibility

SFSTs, including HGN, are admissible to establish probable cause when administered in *substantial compliance* with NHTSA guidelines. Strict compliance is not necessary. The court took judicial notice of the number of states that allow HGN evidence on the basis of the “officer’s training, experience and ability to administer the test”. *Smith v. Wyoming*, 2000 Wyo. LEXIS 202 (Wyo. October 4, 2000).

### II. Police Officer Testimony Needed to Admit HGN Test Result

A police officer that is properly trained to administer and evaluate the HGN test can testify to HGN results. *Smith v. Wyoming*, 2000 Wyo. LEXIS 202 (Wyo. October 4, 2000).

### III. Purpose and Limits of HGN

HGN test results are admissible to show probable cause. *Smith v. Wyoming*, 2000 Wyo. LEXIS 202 (Wyo. October 4, 2000).

## United States

### I. Evidentiary Admissibility

*U.S. V. Eric D. Horn*, 185 F. Supp. 2d 530 (D. Maryland 2002) In this case, U.S. District Court in Maryland made the first application of the newly revised FRE 702 to the HGN and other SFSTs.

Results of properly administered WAT, OLS and HGN, SFSTs may be admitted into evidence in a DWI/DUI case only as circumstantial evidence of intoxication or impairment but not as direct evidence of specific BAC.

Officer must first establish his qualifications to administer the test - training and experience, not opinion about accuracy rate of test or causal connection between alcohol consumption and exaggerated HGN.

Government may prove causal connection by: judicial notice, expert testimony, or learned treatise. Horn may prove other causes by: judicial notice, cross-examination of state's expert, defense expert, or learned treatise.

*U.S. V. Daras*, 1998 WL 726748 (4<sup>th</sup> Cir. 1998)(*Unpublished opinion*). WAT and OLS were not scientific so no expert needed. Court would have applied *Daubert* to HGN test, but there was no need to because breathalyzer, WAT and OLS were sufficient.

HGN test was admitted as part of series of field tests. Its admission was not challenged on appeal.

*U.S. v. Van Griffin*, 874 F.2d 634 (9th Cir. 1989).

### II. Police Officer Testimony Needed to Admit HGN Test Result

Foundation for HGN must address validity & reliability under FRE 702. In *Horn*, prosecution had a medical doctor and a police officer, but defense used behavioral psychologist to attack HGN literature of Dr. Marceline Burns and others.

### III. Purpose and Limits of HGN

SFSTs may be admitted into evidence in a DWI/DUI case only as circumstantial evidence of intoxication or impairment but not as direct evidence of specific BAC. *Horn*.

Properly qualified, Officer may give opinion of intoxication or impairment by alcohol. *Horn*.

Note: The following states were not listed above due to a lack of case law discussion on HGN:

Colorado

Nevada

Rhode Island

Vermont( HGN was mentioned in the context of a refusal being admissible as evidence of probative guilt. State v. Blouin, 168 Vt. 119 (Vt. 1998)

Virginia

Last Update: Jan. 2004

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*Or*

*Visit there website [www.ndaa-apri.org](http://www.ndaa-apri.org).*

## ATTACHMENT C

**SCIENTIFIC PUBLICATIONS AND RESEARCH  
REPORTS ADDRESSING NYSTAGMUS**

1. Anderson, Schweitz & Snyder, Field Evaluation of Behavioral Test Battery for DWI, U.S. Dept. of Transportation Rep. No. DOT-HS-806-475 (1983) (field evaluation of the Standardized Field Sobriety Test battery (HGN, one-leg stand, and walk and turn) conducted by police officers from four jurisdictions indicated that the battery was approximately 80% effective in determining BAC above and below .10 percent).
2. Aschan, Different Types of Alcohol Nystagmus, 140 ACTA OTOLARYNGOL SUPP. 69 (Sweden 1958) ("From a medico-legal viewpoint, simultaneous recording of AGN (Alcohol Gaze Nystagmus) and PAN (positional alcoholic nystagmus) should be of value, since it will show in which phase the patient's blood alcohol curve is...").
3. Aschan & Bergstedt, Positional Alcoholic Nystagmus in Man Following Repeated Alcohol Doses, 80 ACTA OTOLARYNGOL SUPP. 330 (Sweden 1975) (abstract available on DIALOG, file 173: Embase 1975-79) (degree of intoxication influences both PAN I and PAN II).
4. Aschan, Bergstedt, Goldberg & Laurell, Positional Nystagmus in Man During and After Alcohol Intoxication, 17 Q.J. OF STUD. ON ALCOHOL, Sept. 1956, at 381. Study distinguishing two types of alcohol-induced nystagmus, PAN (positional alcoholic nystagmus) I and PAN II, found intensity of PAN I, with onset about one-half hour after alcohol ingestion, was proportional to amount of alcohol taken.
5. Baloh, Sharma, Moskowitz & Griffith, Effect of Alcohol and Marijuana on Eye Movements, 50 AVIAT. SPACE ENVIRON. MED., Jan 1979, at 18 (abstract available on DIALOG, file 153: Medline 1979-79) (smooth pursuit eye movement effects of alcohol overshadowed those of marijuana).
6. Barnes, The Effects of Ethyl Alcohol on Visual Pursuit and Suppression of the Vestibulo-Ocular Reflex, 406 ACTA OTOLARYNGOL SUPP. 161 (Sweden 1984) (ethyl alcohol disrupted visual pursuit eye movement by increasing number of nystagmic "catch-up saccades").
7. Burns & Moskowitz, Psychophysical Tests for DWI Arrest, U.S. Dept. of Transportation Rep. No. DOT-HS-802-424 (1977) (recommended the three-test

battery developed by SCRI (one-leg stand, walk and turn, and HGN) to aid officers in discriminating BAC level).

8. Burns, The Robustness of the Horizontal Gaze Nystagmus (HGN) Test, U.S. Dept. of Transportation 2004. Concludes that HGN as used by law enforcement is a robust procedure and the data obtained in this report does not support changes or revisions to the current testing or procedure
9. Church & Williams, Dose- and Time-Dependent Effects of Ethanol, 54 ELECTROENCEPHALOGRAPHY & CLIN. NEUROPHYSIOL., Aug. 1982, at 161 (abstract available on DIALOG, file 11: Psychinfo 1967-85 or file 72: Embase 1982-85) (positional alcohol nystagmus increased with dose levels of ethanol).
10. Citek, Ball and Rutledge, Nystagmus Testing in Intoxicated Individuals, Vol. 74, No. 11, Nov. 2003, Optometry, established that the HGN test administered in the standing, seated, and supine postures is able to discriminate impairment at criterion BAC's of 0.08% and 0.10%.
11. Compton, Use of the Gaze Nystagmus Test to Screen Drivers at DWI Sobriety Checkpoints, U.S. Dept. of Transportation (1984) (field evaluation of HGN test administered to drivers through car window in approximately 40 seconds: "the nystagmus test scored identified 95% of the impaired drivers" at 2; 15% false positive for sober drivers, id.).
12. Fregly, Bergstedt & Graybiel, Relationships Between Blood Alcohol, Positional Alcohol Nystagmus and Postural Equilibrium, 28 Q.J. OF STUD. ON ALCOHOL, March 1967, at 11, 17 (declines from baseline performance levels correlated with peak PAN I responses and peak blood alcohol levels).
13. Goldberg, Effects and After-Effects of Alcohol, Tranquilizers and Fatigue on Ocular Phenomena, ALCOHOL AND ROAD TRAFFIC 123 (1963) (of different types of nystagmus, alcohol gaze nystagmus is the most easily observed).
14. Helzer, Detection DUIs Through the Use of Nystagmus, LAW AND ORDER, Oct. 1984, at 93 (nystagmus is "a powerful tool for officers to use at roadside to determine BAC of stopped drivers...(O)fficers can learn to estimate BACs to within an average of 0.02 percent of chemical test readings." Id. at 94).
15. L.R. Erwin, DEFENSE OF DRUNK DRIVING CASES (3d ed. 1985) ("A strong correlation exists between the BAC and the angle of onset of (gaze) nystagmus." Id. at 8.15A(3)).

16. Lehti, The Effect of Blood Alcohol Concentration on the Onset of Gaze Nystagmus, 136 BLUTALKOHOL 414 (West Germany 1976) (abstract available on DIALOG, file 173: Embase 1975-79) (noted a statistically highly significant correlation between BAC and the angle of onset of nystagmus with respect to the midpoint of the field of vision).
17. Misoi, Hishida & Maeba, Diagnosis of Alcohol Intoxication by the Optokinetic Test, 30 Q.J. OF STUD. ON ALCOHOL 1 (March-June 1969) (optokinetic nystagmus, ocular adaptation to movement of object before eyes, can also be used to detect central nervous system impairment caused by alcohol. Optokinetic nystagmus is inhibited at BAC of only .051 percent and can be detected by optokinetic nystagmus test. Before dosage subjects could follow a speed of 90 degrees per second; after, less than 70 degrees per second).
18. Murphree, Price & Greenberg, Effect of Congeners in Alcohol Beverages on the Incidence of Nystagmus, 27 Q.J. OF STUD. ON ALCOHOL, June 1966, at 201 (positional nystagmus is a consistent, sensitive indicator of alcohol intoxication).
19. Nathan, Zare, Ferneau & Lowenstein, Effects of Congener Differences in Alcohol Beverages on the Behavior of Alcoholics, 5 Q.J. OF STUD. ON ALCOHOL SUPP., may 1970, at 87 (abstract available on DIALOG, file 11: Psychinfo 1967-85) (incidence of nystagmus and other nystagmoid movements increased with duration of drinking).
20. Norris, The Correlation of Angle of Onset of Nystagmus With Blood Alcohol Level: Report of a Field Trial, CALIF. ASS'N CRIMINALISTICS NEWSLETTER, June 1985, at 21 (The relationship between the ingestion of alcohol and the inset of various kinds of nystagmus "appears to be well documented." Id. "While nystagmus appears to be useful as a roadside sobriety test, at this time, its use to predict a person's blood alcohol level does not appear to be warranted." Id. at 22).
21. Nuotto, Palva & Seppala, Naloxone Ethanol Interaction in Experimental and Clinical Situations, 54 ACTA PHARMACOL. TOXICOL. 278 (1984) (abstract available on DIALOG, file 5: Biosis Previews 1981-86) (ethanol alone dose-dependently induced nystagmus).
22. Oosterveld, Meineri & Paolucci, Quantitative Effect of Linear Acceleration on Positional Alcohol Nystagmus, 45 AEROSPACE MEDICINE, July 1974, at 695 (G-loading brings about PAN even when subject has not ingested alcohol; however when subjects ingested alcohol, no PAN was found when subjects were in supine position, even with G-force at 3).

23. Penttila, Lehti & Lonnqvist, Nystagmus and Disturbances in Psychomotor Functions Induced by Psychotropic Drug Therapy, 1974 PSYCHIAT. FENN. 315 (abstract available on DIALOG, file 173: Embase 1975-79) (psychotropic drugs induce nystagmus).
24. Rashbass, The Relationship Between Saccadic and Smooth Tracking Eye Movements, 159 J. PHYSIOL. 326 (1961) (barbiturate drugs interfere with smooth tracking eye movement).
25. Richman, McAndrew, Decker and Mullaney, An Evaluation of Pupil Size Standards Used By Police Officers for Detecting Drug Impairment, Vol. 75, No. 3, March 2004, Opportunity, determined normative values and potential ranges for pupillary responses using the specific DEC program protocols for pupil testing in non-impaired persons.
26. Savolainen, Riihimaki, Vaheri & Linnoila, Effects of Xylene and Alcohol on Vestibular and Visual Functions in Man, SCAND. J. WORK ENVIRON. HEALTH 94 (Sweden 1980) (abstract available on DIALOG, file 172: Embase 1980-81 on file 5: Biosis Previews 1981-86) (the effects of alcohol on vestibular functions (e.g., positional nystagmus) were dose-dependent).
27. Seelmeyer, Nystagmus, A Valid DUI Test, LAW AND ORDER, July 1985, at 29 (Horizontal Gaze Nystagmus test is used in "at least one law enforcement agency in each of the 50 states" and is "a legitimate method of establishing probable cause." Id.).
28. Smith, Hayes, Yolton, Rutledge and Citek, Drug Recognition Expert Evaluations Made Using Limited Data, Forensic Science International 130 (2002), p. 167-173, demonstrated that DRE officers can make a correct positive identification of drug intoxication with limited information.
29. Tharp, Burns & Moskowitz, Circadian Effects on Alcohol Gaze Nystagmus (paper presented at 20th annual meeting of Society for Psychophysiological Research), abstract in 18 PSYCHOPHYSIOLOGY, March 1981 (highly significant correlation between angle of onset of AGN and BAC).
30. Tharp, Burns & Moskowitz, Development and Field Test of Psychophysical Tests for DWI Arrests, U.S. Dept. of Transportation Rep. No. DOT-HS-805-864 (1981) (standardized procedures for administering and scoring the SCRI three-test battery; participating officers able to classify 81% of volunteers above or below .10).

31. Umeda & Sakata, Alcohol and the Oculomotor System, 87 ANNALS OF OTOLOGY, RHINOLOGY & LARYNGOLOGY, May-June 1978, at 392 (in volunteers whose "caloric eye tracking pattern" (CETP) was normal before alcohol intake, influence of alcohol on oculomotor system appeared consistently in the following order: (1) abnormality of CETP, (2) positional alcohol nystagmus, (3) abnormality of eye tracking pattern, (4) alcohol gaze nystagmus).
32. Wilkinson, Kime & Purnell, Alcohol and Human Eye Movement, 97 BRAIN 785 (1974) (oral dose of ethyl alcohol impaired smooth pursuit eye movement of all human subjects).
33. Zyo, Medico-legal and Psychiatric Studies on the Alcohol Intoxicated Offender, 30 JAPANESE J. OF LEGAL MED., No. 3, 1976, at 169 (abstract available on DIALOG, file 21: National Criminal Justice Reference Service 1972-85) (recommends use of nystagmus test to determine somatic and mental symptoms of alcohol intoxication as well as BAC).

Two Hours and Thirty Minutes

**SESSION IV**  
**OVERVIEW OF DRUG EVALUATION  
AND CLASSIFICATION PROCEDURES**

## SESSION IV      **OVERVIEW OF DRUG EVALUATION AND CLASSIFICATION PROCEDURES**

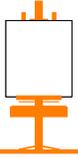
Upon successfully completing this session the student will be able to:

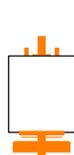
- o Name the components of the Drug Evaluation and Classification program drug influence evaluation.
- o State the purpose of each component.
- o Describe the activities performed during each component.
- o Correctly answer the "topics for study" questions at the end of this session.

### Content Segments

### Learning Activities

- |   |   |
|---|---|
| A. Components of the Drug Evaluation and Classification Procedure | o Instructor Led Presentations<br>o Instructor Led Demonstrations |
| B. Interview of the Arresting Officer                             | o Video Presentations   |
| C. The Preliminary Examination                                    | o Reading Assignments   |
| D. Examinations of the Eyes                                       |   |
| E. Divided Attention Psychophysical Tests                         |   |
| F. Examinations of Vital Signs                                    |   |
| G. Dark Room Checks of Pupil Size                                 |   |
| H. Examination of Muscle Tone                                     |   |
| I. Examination for Injection Sites                                |   |
| J. Toxicological Examination                                      |   |
| K. Video Demonstration  |   |

Aids	Lesson Plan	Instructor Notes
	<p><b>OVERVIEW OF DRUG EVALUATION AND CLASSIFICATION PROCEDURES</b></p>	<p>Total Lesson Time: Approximately 150 Minutes</p> <p>Display Session Title</p>
<p>IV-1 (Title)</p> 		<p>Briefly describe the objectives for this session.</p>
<p>IV-2A&amp;B (Objectives)</p> 		<p><b>A. Components of the Process</b></p> <ol style="list-style-type: none"> <li>1. The DEC procedure is a standardized and systematic method of examining a subject to determine: <ol style="list-style-type: none"> <li>a. Whether subject is impaired.</li> <li>b. Whether the impairment is caused by drugs or a medical condition.</li> <li>c. And if drugs, the category (or categories) of drugs that is (or are) the likely cause of the subject's impairment.</li> </ol> </li> </ol>
<p>35 Minutes</p>		
<p>IV-3 (Systematic &amp; Standardized)</p>		
	<ol style="list-style-type: none"> <li>2. The process is <u>systematic</u> in that it is based on a careful assessment of a variety of observable signs and symptoms that are known to be reliable indicators of drug impairment.</li> </ol>	<p>Write on the dry erase board or flip-chart: "A SYSTEMATIC PROCESS"</p>

Aids	Lesson Plan	Instructor Notes
	<p>a. Some of these observable signs and symptoms relate to the subject's <u>appearance</u>.</p>	<p><u>Write</u> "appearance" on the dry erase board or flip-chart.</p>
	<p>b. Some of the signs and symptoms relate to the subject's <u>behavior</u>.</p>	<p><u>Write</u> "behavior" on the dry erase board or flip-chart.</p>
	<p>c. Some relate to the subject's performance of carefully administered <u>psychophysical tests</u>.</p>	<p><u>Write</u> "psychophysical testing" on the dry erase board or flip-chart.</p> <p><u>Ask</u> students: "What does 'psychophysical' mean?"</p>
	<ul style="list-style-type: none"> <li>● Drugs impair the subject's ability to control his or her mind and body.</li> </ul>	<p><u>Point out</u> that "psycho-physical" relates to the subject's <u>mind</u> (psyche) and <u>body</u> (physique).</p>
	<ul style="list-style-type: none"> <li>● Psychophysical tests can disclose that the subject's ability to control mind and body is impaired.</li> </ul>	
	<ul style="list-style-type: none"> <li>● The specific manner in which the subject performs the psychophysical tests may help indicate the category or categories of drugs causing the impairment.</li> </ul>	
	<p>d. Some of the observable signs and symptoms relate to the subject's <u>automatic responses</u> to the specific</p>	<p>Write "automatic responses of the body" on the dry erase board or flip-chart.</p>

Aids	Lesson Plan	Instructor Notes
	<p>drugs that are present.</p> <p>e. <u>All</u> of these reliable indicators are examined and carefully considered before a judgment is made concerning what categories of drugs are affecting the subject.</p> <p>3. The evaluation is <u>standardized</u> in that it is administered the same way, every time.</p> <p>a. Standardization helps to ensure that no mistakes are made.</p> <ul style="list-style-type: none"> <li>● No examinations are left out.</li> <li>● No extraneous or unreliable "indicators" are included.</li> </ul>	<p>NOTE: Emphasize that DREs should always try to conduct the 12-step process in the same manner each time. However, there may be times when that is not possible, i.e., uncooperative subject, equipment failure, or refusals. Explain that if they are unable to complete all steps of the examination, that they must explain the reasons for this in their narrative report and if they are still able to form an opinion, what evidence and observations supports their opinion.</p> <p><u>Ask</u> students: "Why is it so important to perform the drug evaluation and classification examination in exactly the same way, every time?"</p> <p>Probe to draw out all major reasons for standardization.</p>

Aids	Lesson Plan	Instructor Notes
 <p>IV-4 (Breath Alcohol Test)</p>	<p>b. Standardization helps to promote professionalism among drug recognition experts.</p> <p>c. Standardization helps to secure acceptance in court.</p> <p>4. The Drug Evaluation and Classification drug influence evaluation has <u>twelve</u> components.</p> <p>a. The <u>Breath Alcohol Test</u> is needed to determine Blood Alcohol Concentration (BAC).</p> <ul style="list-style-type: none"> <li>● The purpose of the breath test is to determine whether the specific drug, alcohol, may be contributing to the impairment observable in the subject.</li> <li>● Obtaining an accurate measurement of BAC enables the drug recognition expert to assess</li> </ul>	<p>NOTE: Discuss examples of reasons when the DRE may be unable to complete each step of the examination, i.e., injuries, uncooperative suspect, equipment failure.</p> <p>In such cases, the DRE may still be able to form an opinion based upon on the evidence obtained. State v. Cammack, 1997 WL 104913 (Minnesota Ct. Appeals, 1997) ruled that a DRE need not complete the entire 12-step evaluation for an opinion to be admissible so long as there is sufficient admissible evidence.</p> <p>Refer students to the 12-Step evaluation checklist on page IV-2 of their participants manual.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>IV-5</b> (Interview of ... Officer)</p>  <p><b>IV-6A&amp;B</b> (Preliminary Examination)</p>	<p>whether alcohol may be the sole cause of the observable impairment, or whether it is likely that some other drug or drugs, or other complicating factors are contributing to the impairment.</p> <p>b. The <u>Interview of the Arresting Officer</u>.</p> <ul style="list-style-type: none"> <li>● In most cases, the subjects you will examine will <u>not</u> be people that <u>you</u> arrested.</li> <li>● The arresting officer may have seen or heard things that would be valuable indicators of the kinds of drugs the subject has ingested.</li> <li>● The arresting officer, in searching the subject, may have uncovered drug related paraphernalia, or even drugs themselves.</li> <li>● The arresting officer also may be able to alert you to important information about the suspect's behavior that could be very valuable for your own safety.</li> </ul> <p>c. The <u>Preliminary Examination</u>.</p> <ul style="list-style-type: none"> <li>● The preliminary examination is your first opportunity to observe</li> </ul>	<p><u>Remind</u> students that many suspects who are under the influence of drugs other than alcohol <u>also</u> have alcohol in their bodies.</p> <p>NOTE: Remind students that protective gloves <u>must</u> be worn from this portion of the examination.</p>

Aids	Lesson Plan	Instructor Notes
	<p>the subject closely and directly.</p> <ul style="list-style-type: none"> <li>● A major purpose of the preliminary examination is to determine if the subject may be suffering from an injury or some other medical condition not necessarily related to drugs.</li> <li>● Another major purpose of the preliminary examination is to begin systematically assessing the suspect's appearance, behavior and automatic bodily responses for signs of drug induced impairment.</li> <li>● The preliminary examination consists of a series of questions dealing with possible injuries or medical problems; observations of the subject's face, speech and breath; pupil size and tracking ability; initial checks of the subject's eyes; and, an initial examination of the subject's pulse.</li> </ul>	<p><u>Analogy</u>: The preliminary examination is a "fork in the road." It can help you decide whether to continue with the drug examination, to pursue a possible medical complication, or to proceed with a DWI (alcohol) case.</p> <p><u>Emphasize</u> that the term "preliminary" does <u>not</u> imply "unimportant". Very valuable evidence often comes to light during the preliminary examination.</p> <p>While you are assessing the subject's tracking ability, you can also perform a preliminary assessment of whether Horizontal Gaze Nystagmus is present in the subject's eyes. In particular, if the nystagmus or "jerking" is observed, an <u>initial estimation of the angle of onset</u> can be made. The approximate angle of onset <u>may</u> help to determine whether the subject has consumed some drug other than alcohol.</p> <p><u>Emphasize</u> that courts generally accept these questions as not being in conflict with the suspect's Constitutional rights. However, the students must comply with their own departments' policies as to whether</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>IV-7A&amp;B</b> (Eye Exams)</p>	<p>d. <u>Examinations of the Eyes.</u></p> <ul style="list-style-type: none"> <li>● Certain Drugs produce very easily observable effects on the eyes.</li> <li>● One of the most dramatic of these effects is <u>nystagmus</u>, which means an involuntary jerking of the eyes.</li> <li>● Persons under the influence of alcohol usually will exhibit <u>Horizontal Gaze Nystagmus</u>, which is an involuntary jerking of the eyes occurring as the eyes gaze to the side.</li> <li>● Alcohol is not the only drug that causes Nystagmus.</li> <li>● Horizontal Gaze Nystagmus is not the only observable effect on the eyes that will be caused by various drugs.</li> </ul>	<p>they should advise suspects of their Constitutional rights before asking these questions.</p> <p><u>Ask</u> students: "What do we look for, in a subject's eyes, to determine if he or she may be under the influence of <u>alcohol</u>?"</p> <p>Probe, as necessary, to draw out the response "nystagmus".</p> <p><u>Point out</u> that the examinations of the eyes will be covered in much greater depth subsequently.</p>
 <p><b>IV-8A&amp;B</b> (Divided Attention Tests)</p>	<p>e. Divided Attention Psycho-physical tests.</p>	<p><u>Ask</u> students: "What does 'divided attention' mean?"</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>IV-9A&amp;B</b> (Vital Signs Exams)</p>	<ul style="list-style-type: none"> <li>● All drugs that impair driving ability will also impair the subject's ability to perform certain carefully designed divided attention tests.</li> <li>● These tests are familiar to you in the context of examining <u>alcohol</u> impaired subjects.</li> <li>● The same tests are very valuable for disclosing evidence of impairment due to drugs other than alcohol.</li> <li>● The divided attention tests used in the DEC examination include the Romberg Balance; the Walk and Turn; One Leg Stand and the Finger to Nose.</li> </ul> <p>f. Examinations of <u>Vital Signs</u>.</p> <ul style="list-style-type: none"> <li>● Many categories of drugs affect the operation of the heart, lungs and other major organs of the body.</li> <li>● These effects show up during examination of the subject's <u>vital signs</u>.</li> </ul>	<p><u>Probe</u>, as necessary, to draw out responses indicating the concept of "concentrating on more than one thing at a time".</p> <p><u>Point out</u> that students will have opportunities to practice administering these tests subsequently in the course.</p> <p><u>Point out</u> that examinations of vital signs will be covered in depth subsequently, and that students will have ample opportunity to practice measuring vital signs.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>IV-10A&amp;B</b> (Dark Room Exams)</p>	<ul style="list-style-type: none"> <li>● The vital signs that are reliable indicators of drug influence include blood pressure, pulse, and temperature.</li> <li>g. <u>Dark Room Examinations</u> <ul style="list-style-type: none"> <li>● Many categories of drugs affect how the pupils will appear, and how they respond to light.</li> <li>● Certain kinds of drugs will cause the pupils to widen dramatically, or <u>dilate</u>.</li> <li>● Some other drugs cause the pupils to narrow, or <u>constrict</u>.</li> <li>● By systematically changing the amount of light entering the subject's eyes, we can observe the pupils' appearance and reaction under controlled conditions.</li> <li>● We carry out these examinations in a dark room, using a penlight to control the amount of illumination entering the subject's eyes.</li> <li>● We use a device called a <u>pupillometer</u> to estimate the size of the subject's pupils.</li> </ul> </li> </ul>	<p>Exhibit a penlight.</p> <p>Exhibit a pupillometer.</p> <p>Point out that the pupillometer has a series of circles or semi circles of various sizes.</p>



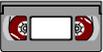
Aids	Lesson Plan	Instructor Notes
 <p><b>IV-13A&amp;B</b> (Statements and Other Observations)</p>	<ul style="list-style-type: none"> <li>● Heroin is probably most commonly associated with injection, but several other types of drugs also are injected by many users.</li> <li>● Uncovering injection sites on a subject provides evidence of possible drug use.</li> <li>j. Suspect's <u>statements and other observations.</u></li> <li>● At this point in the examination, the trained DRE should have reasonable grounds to believe that the suspect is under the influence of a drug or drugs.</li> <li>● The DRE should also have at least an articulable suspicion as to the category or categories of drugs causing the impairment.</li> <li>● The DRE should proceed to interview the suspect to confirm their opinion concerning the drug category or categories involved.</li> <li>● The DRE must carefully record the suspect's statements, and any other observations that may constitute relevant evidence of drug induced impairment.</li> </ul>	<p><u>Emphasize</u> that any such interview can proceed only in conformance with formal admonition and strict observance of the suspect's Constitutional rights.</p> <p><u>Point out</u> that the appropriate procedures for interviewing suspects vary with the probable category or categories of drugs involved.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>IV-14</b> (Opinion of Evaluator)</p>	<p>k. <u>Opinion of Evaluator</u></p> <ul style="list-style-type: none"> <li>● Based on all of the evidence and observations gleaned from the preceding <u>ten</u> steps, the DRE must reach an informed conclusion as to:           <ul style="list-style-type: none"> <li>● whether the subject is under the influence of a drug or drugs</li> <li>● if so, the probable category or categories of drugs causing the impairment</li> </ul> </li> <li>● The DRE must record a narrative summary of the facts forming the basis for their conclusion.</li> </ul>	
 <p><b>IV-15</b> (Toxicological Examination)</p>	<p>l. <u>Toxicological Examination</u></p> <ul style="list-style-type: none"> <li>● The toxicological examination is a chemical test or tests designed to obtain scientific, admissible evidence to substantiate the DRE's conclusion.</li> <li>● Departmental policy and procedures must be followed in requesting, obtaining and handling the toxicological sample.</li> </ul>	<p>Solicit students' comments and questions concerning this preview of the Drug Evaluation and Classification procedures.</p>

Aids	Lesson Plan	Instructor Notes
<div> </div> <p><b>10 Minutes</b></p> <div> </div> <p><b>IV-16A&amp;B</b> (Interview: Behavior)</p>	<p><b>B. Interview of the Arresting Officer</b></p> <ol style="list-style-type: none"> <li>1. The purpose of the interview of the arresting officer is to obtain a summary of the subject's actions, behaviors, etc. that led to the arrest and the suspicion that drugs other than alcohol may be involved.</li> <li>2. Issues concerning the subject's behavior. <ol style="list-style-type: none"> <li>a. Was the subject operating a vehicle?</li> <li>b. What actions, maneuvers, etc. were observed?</li> <li>c. Was there a collision? If yes, was the subject injured?</li> <li>d. Was the subject observed smoking, drinking or eating?</li> <li>e. Was the subject apparently inhaling any substance?</li> <li>f. How did the subject respond to the arresting officer's command to stop?</li> <li>g. Did the subject attempt to conceal or throw away any items or materials?</li> <li>h. What has been the subject's attitude and demeanor during contact with the</li> </ol> </li> </ol>	<p><u>Emphasize</u> that DREs should form the habit of posing explicit questions to arresting officers using a systematic process. A cursory or open ended interview (e.g., "What do we have here?") may fail to elicit some relevant information, because arresting officers won't always know what is relevant to a drug examination.</p> <p><u>Ask</u> students to suggest any other questions that might be relevant concerning the</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>IV-16C</b> (Interview: Statements)</p>	<p>arresting officer and have there been any changes?</p> <p>3. Issues concerning the subject's statements.</p> <p>a. Has the subject complained of an illness or injury?</p> <p>b. Has the subject used any "street terms" or slang associated with drugs or drug paraphernalia?</p> <p>c. How has the subject responded to the arresting officer's questions?</p> <p>d. Does the subject's speech appear to be slurred, slow, rapid, thick, mumbled, etc.?</p> <p>e. What, specifically, has the subject said to the arresting officer?</p>	<p>arresting officer's observations of the subject's behavior.</p> <p>Note: Remind the students that they are acting as investigators and advisors to the arresting officers.</p>
 <p><b>IV-16D</b> (Interview: Physical Evidence)</p>	<p>4. Issues concerning physical evidence.</p> <p>a. What items or materials were uncovered during the search of the subject or vehicle?</p>	<p><u>Ask</u> students to suggest any other questions that might be relevant concerning statements the subject made in the arresting officer's presence.</p>

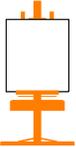
Aids	Lesson Plan	Instructor Notes
<div> </div> <div> <p><b>20 Minutes</b></p> </div> <div> </div> <div> <p><b>IV-17</b> (Overview of Preliminary Examination)</p> </div>	<div> <ul style="list-style-type: none"> <li>b. Were any smoking paraphernalia uncovered?</li> <li>c. Were any injection materials, i.e., needles, syringes, leather straps, rubber tubes, spoons, bottle caps, etc. found?</li> <li>d. Were there any balloons, plastic bags, small metal foil wrappings, etc. found?</li> <li>e. What was the subject's blood alcohol concentration?</li> </ul> </div> <div> <p><b>C. The Preliminary Examination</b></p> </div> <div> <ul style="list-style-type: none"> <li>1. The preliminary examination consists of: <ul style="list-style-type: none"> <li>a. Questions</li> <li>b. Observations of face, breath and speech.</li> <li>c. Initial checks of the eyes.</li> <li>d. The initial check of the subject's pulse.</li> </ul> </li> </ul> </div>	<div> <p><u>NOTE:</u> Emphasize that the subject should be requested to submit to a breath test, if that has not already been done.</p> </div> <div> <p><u>Ask</u> students to suggest any other relevant questions concerning physical evidence.</p> </div> <div> <p>Solicit students' comments and questions concerning the interview of the arresting officer.</p> </div> <div> <p><u>Point out</u> that the pulse check actually is part of the examination of the subject's vital signs. Pulse is checked <u>three times</u></p> </div>

Aids	Lesson Plan	Instructor Notes
 <p><b>IV-18</b> (Preliminary Examination Questions)</p> 	<p>2. The questions deal with injuries or medical problems the subject may have. They include:</p> <ul style="list-style-type: none"> <li>a. Are you sick or injured?</li> <li>b. Do you have any physical defects?</li> <li>c. Are you diabetic or epileptic?</li> <li>d. Do you take insulin?</li> <li>e. Are you under a doctor or dentist's care?</li> <li>f. Are you taking medication?</li> </ul>	<p>during the drug influence evaluation.</p> <p><u>Point out</u> that these questions are incorporated into the Standardized Drug Influence Evaluation Form, which the students will use during all of their practice sessions.</p> <p><u>Briefly</u> discuss the relevance of each question.</p> <p><u>Show</u> video segment, "Preliminary Examination Questions" (optional)</p>
 <p><b>IV-19</b> (Initial Checks of Eyes)</p>	<p>3. The initial checks of the subject's eyes include several particularly important items.</p> <ul style="list-style-type: none"> <li>a. Checks of the size of each pupil. <ul style="list-style-type: none"> <li>o A pupillometer is utilized for this check</li> </ul> </li> </ul>	<p>Point out that, if the two pupils are of unequal size, this may indicate that the subject is suffering from a head injury, brain tumor, or other condition that may require prompt medical attention.</p> <p><u>Also point out</u> that the influence of certain categories of drugs may be indicated if the pupils are dilated or constricted.</p>

Aids	Lesson Plan	Instructor Notes
	<p>b. Assessment of the ability of the eyes to track a moving object.</p> <ul style="list-style-type: none"> <li>● The presence of Nystagmus indicates the possible presence of certain categories of drugs.</li> </ul> <p>c. Initial estimation of the angle of onset of Horizontal Gaze Nystagmus.</p> <ul style="list-style-type: none"> <li>● The approximate angle of onset <u>may</u> indicate the presence of some drug other than alcohol.</li> </ul>	<p>Demonstrate how to use a stimulus to assess the ability of eyes to track a moving object.</p> <p><u>Point out</u> that, if the two eyes do not exhibit the same tracking ability, this too may indicate a head injury or other medical problem.</p> <p>Point out that certain categories of drugs cause Horizontal Gaze Nystagmus. For example, this will be true of CNS Depressants; Dissociative Anesthetics; and certain inhalants.</p> <p><u>Remind</u> students that there is a general correspondence, or <u>correlation</u>, between blood alcohol concentration and the onset angle of nystagmus. Generally speaking, the <u>higher</u> the BAC, the <u>earlier</u> will be the angle of onset.</p> <p><u>But</u>, if the subject has also ingested some <u>other</u> drug that also causes Nystagmus, the onset angle may occur even earlier than the Blood Alcohol Concentration would indicate.</p> <p><u>Example</u>: Suppose you are examining a subject who is known to have a BAC of 0.05.</p> <p>Based on that alcohol level alone, you would expect that the angle of onset of nystagmus would be somewhere in the neighborhood of 45 degrees. But if that subject has also ingested a Dissociative</p>

Aids	Lesson Plan	Instructor Notes
<div> </div> <p><b>10 Minutes</b></p> <div> </div> <p><b>IV-20</b> (Eye Examinations)</p>	<p><b>D. Examinations of the Eyes</b></p> <ol style="list-style-type: none"> <li>1. The Examinations of the Eyes consist of three tests:             <ol style="list-style-type: none"> <li>a. Horizontal Gaze Nystagmus (HGN).</li> </ol> </li> </ol>	<p>Anesthetic, the onset could occur much earlier, perhaps as soon as the eyes start to move to the side.</p> <p><u>Emphasize</u> if the Nystagmus onset occurs much earlier than would be expected from the alcohol level alone, the DRE should be alert to the possible presence of some drug other than alcohol.</p> <p><u>But also emphasize</u> the Nystagmus onset angle could correspond very closely to what would be expected from the alcohol level alone even though the subject has ingested large quantities of other drugs.</p> <p>For example, Cannabis, Narcotic Analgesics, CNS Stimulants and Hallucinogens do <u>not</u> cause nystagmus, and will <u>not</u> affect the onset angle.</p> <p>Selectively reveal the items on the slide.</p> <p><u>Emphasize</u> that this test is a full scale, formal and precise examination, unlike the initial estimation of angle of onset conducted during the preliminary examination.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>• Clue #1 - Lack of smooth pursuit</li> <li>• Clue #2 - Distinct and sustained nystagmus at maximum deviation</li> <li>• Clue #3 - Angle of Onset</li> </ul> <p>b. Vertical Gaze Nystagmus.</p>	<p><u>Point out</u> the importance of checking for each of these clues in every examination of the eyes.</p> <p><u>Point out</u> if the subject's eyes begin to jerk before they have moved to the 30 degree angle, the DRE will not attempt to estimate the angle precisely, but will simply record that the subject exhibits "immediate onset."</p> <p><u>Point out</u> that Vertical Gaze Nystagmus is an involuntary jerking of the eyes (up-and-down) which occurs when the eyes gaze upward at maximum elevation.</p> <p><u>Select</u> a student, and demonstrate how to perform a test of Vertical Gaze Nystagmus on that student. The instructor should hold the stimulus horizontally in front of the subject's face and about 12-15 inches in front of their face. Instruct the person to focus on the center of the stimulus, and to keep the head steady. Raise the stimulus until the subject's eyes are elevated as far as possible. Hold the eyes at that position for a minimum four seconds. If the eyes are observed to jerk noticeably, Vertical Gaze Nystagmus is present.</p> <p><u>Point out</u> that certain types of drugs tend to cause Vertical Gaze Nystagmus, while others</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>IV-20A</b> (LOC)</p> 	<p>c. Lack of Convergence.</p> <ol style="list-style-type: none"> <li>2. Lack of Convergence is checked by first getting the subject to focus on and track the stimulus as it slowly moves in a circle in front of the subject's face.</li> <li>3. Then, the stimulus is slowly pushed in toward the bridge of the subject's nose and held for approximately one (1) second.</li> <li>4. Under the influence of certain types of drugs, the eyes may not be able to converge.</li> </ol>	<p>do not. Also point out that Vertical Gaze Nystagmus tends to develop with relatively high doses of certain drugs for that individual.</p> <p><u>Point out</u> that Lack of Convergence is the inability of both eyes to draw in toward the center (cross) while fixating on a stimulus being moved in toward the bridge of the nose.</p> <p><u>Point out</u> that the circular motion (either left or right) serves to demonstrate that the subject is tracking the stimulus.</p> <p><u>Demonstrate</u> this circular motion, using the student volunteer.</p> <p><u>Demonstrate</u>, using the student volunteer.</p> <p><u>Point out</u> that the stimulus does not actually touch the subjects nose, stopping approximately 2 inches from the nose.</p> <p>Illustrate on the dry erase board or flip-chart different examples of Lack of Convergence.</p> <p>Point out that many people may not be able to converge their eyes.</p>

Aids	Lesson Plan	Instructor Notes
<div> </div> <p><b>10 Minutes</b></p> <div> </div> <p><b>IV-21</b> (Divided Attention Tests)</p>	<p><b>E. Divided Attention Psychophysical Tests</b></p> <ol style="list-style-type: none"> <li>1. Several Divided Attention tests used for drug examinations are the same familiar tests used for examining alcohol impaired subjects. <ol style="list-style-type: none"> <li>a. Romberg Balance</li> <li>b. Walk and Turn</li> <li>c. One Leg Stand</li> <li>d. Finger to Nose</li> </ol> </li> <li>2. Walk and Turn demonstration. <ol style="list-style-type: none"> <li>a. Instructions stage.</li> </ol> </li> </ol>	<p>Excuse the student volunteer and thank him or her for participating.</p> <p>Solicit students' comments and questions concerning the Examinations of the Eyes.</p> <p>Point out that the Romberg test is administered by asking the subject to tilt their head back slightly and close the eyes, and estimate 30 seconds, when they believe 30 seconds have passed they are to tilt their head forward, open their eyes and say "Stop".</p> <p>Point out that the One Leg Stand is administered twice during the DEC drug influence evaluation (once on each leg).</p> <p><u>Point out</u> that complete demonstrations of all four tests will be given later. For the present, we will demonstrate only the Walk and Turn.</p> <p><u>Select</u> a student known to be proficient in administering the</p>



Aids	Lesson Plan	Instructor Notes
<div> </div> <p><b>15 Minutes</b></p> <div> </div> <p><b>IV-23 (Dark Room Checks of Pupil Size)</b></p>	<ul style="list-style-type: none"> <li>b. Blood pressure cuff and gauge (sphygmomanometer)</li> <li>c. Thermometer</li> <li>d. Timepiece capable of measuring in seconds.</li> </ul> <p><b>G. Dark Room Examinations</b></p> <ol style="list-style-type: none"> <li>1. The principal activity that takes place during the dark room examinations is the estimation of pupil size under three lighting conditions. <ul style="list-style-type: none"> <li>a. Room light</li> <li>b. Near total darkness</li> <li>c. Direct light</li> </ul> </li> <li>2. Another officer should always accompany you and the subject into the dark room.</li> </ol>	<p><b>NOTE:</b> An oral thermometer with disposable mouthpieces is recommended.</p> <p><u>Point out</u> that procedures for measuring blood pressure, pulse and temperature will be explained and practiced subsequently.</p> <p>Solicit students' comments and questions concerning examinations of vital signs.</p> <p><u>Point out</u> that the Room Light measurement is conducted prior to darkening the room lights.</p> <p><u>Point out</u> that this is essential for officer safety. Remind students that no one should be</p>

Aids	Lesson Plan	Instructor Notes
	<p>3. Before turning off the lights, you will estimate the size of the subject's pupils under room light.</p> <p>a. You must always first estimate the <u>left</u> pupil, then the right .</p> <p>b. You must position the pupillometer alongside the eye to ensure an accurate estimation.</p> <p>c. After you have completed the room light estimations, turn off the lights and wait 90 seconds to allow your eyes and the subject's eyes to adapt to the dark.</p> <p>4. The next check will be of pupil size under near total darkness.</p> <p>a. You will need the bare minimum amount of light necessary to see the</p>	<p>carrying a weapon when in the presence of a subject during a drug evaluation and classification examination.</p> <p><u>Point out</u> that some departments require that the subject be handcuffed before going into the darkroom.</p> <p><u>Point out</u> that the subject should be instructed <u>not</u> to try to focus on you or on the penlight, but to look "slightly up and at a specific focal point" (straight ahead and several feet away) during the estimation of pupil size.</p>

Aids	Lesson Plan	Instructor Notes
	<p>subject's pupils and the pupillometer.</p> <ol style="list-style-type: none"> <li>b. You can create the necessary light by covering the tip of the penlight with your finger or thumb.</li> <li>c. The light is then brought up along side the subjects left eye just until it is possible to distinguish the colored portion of the eye (Iris).</li> <li>d. Hold the pupillometer alongside the eye and locate the circle or semi-circle closest in size to the pupil.</li> <li>e. Repeat the procedure for the right eye.</li> </ol> <p>5. The third and final check will be of the pupil size under direct light.</p> <ol style="list-style-type: none"> <li>a. You will shine the full strength of the penlight directly into the subject's eye for 15 seconds.</li> <li>b. Do this by bringing the light in from the side of the student's face.</li> <li>c. The penlight should be held close enough to the subject's eye so that its beam fills the eye socket.</li> </ol>	<p><u>Demonstrate</u> this. <u>Point out</u> the reddish glow that emanates. If possible, darken the room and exhibit the reddish glow.</p> <p><u>Point out</u> that it is necessary to maintain reasonably fresh batteries in the penlight.</p> <p><u>Demonstrate</u> this, using the student volunteer.</p> <p><u>Demonstrate</u> this. <u>Point out</u> that this will illuminate the area that usually would be discolored if the subject had a "black eye".</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>10 Minutes</b></p>  <p><b>IV-24</b> (Muscle Tone)</p>	<p>d. When the light is initially shown into the eye, you will check for the pupils reaction to light. Then immediately estimate the pupil size under direct light.</p> <p>6. Two other activities are conducted while in the darkroom.</p> <p>a. Examination of the nasal area.</p> <p>b. Examination of the oral cavity.</p> <p><b>H. Examination of Muscle Tone</b></p> <p>1. Starting with the left arm, examine the arm muscles.</p> <p>2. Firmly grasp the upper arm and slowly move down to determine muscle tone.</p> <p>3. The muscles will appear flaccid, near normal or rigid to the touch.</p> <p>4. Examine the right arm in the same fashion.</p>	<p>If possible, darken the room and exhibit the illumination of the student volunteer's eye socket.</p> <p><u>Emphasize</u> that it is very important not to position the penlight too closely or too far away, since this will affect the constriction or dilation of the pupil.</p> <p>Excuse the student and thank him or her for participating.</p> <p>Solicit students' comments and questions concerning these checks of pupil size.</p> <p>Demonstrate.</p>

## Aids

## Lesson Plan

## Instructor Notes



10 Minutes



IV-25

(Injection Sites)

**I. Examination for Injection Sites**

1. Some injection sites may be relatively easy to notice.
  - a. Persons who frequently inject certain drugs develop lengthy scars, called "tracks", from repeated injections in the same veins.
  - b. Injection of certain drugs may result in severe caustic action against the skin and flesh, producing easily observable sores.
2. Often, a fresh injection site may not be readily observable.
3. Frequently, a DRE will locate the injection site initially by touch, running the fingers along such commonly used locations as the neck, forearms, wrists, back of hand, etc.
4. When the DRE locates a possible injection site, a light magnifying lens, commonly known as ski light is used to provide a magnified visual examination.

Point out that injection sites can be observed with some drug categories. Injection sites will be covered in detail in Session XVII.

Emphasize that gloves should be worn when touching the subject.

Select a student and demonstrate a tactile search for injection sites.

"Ski": short for schematic.

Display this instrument. Demonstrate its use.

Solicit students' comments and questions concerning examination for injection sites.

Aids	Lesson Plan	Instructor Notes
<p></p> <p><b>10 Minutes</b></p> <p></p> <p><b>IV-26</b> (Statements)</p>	<p>5. Hypodermic needles are sized according to <u>gauge</u>. The gauge of a needle is a measurement of the inside diameter.</p> <p>6. During this step, the third pulse is taken.</p> <p><b>J. Suspect Statements</b></p> <p>1. All spontaneous statements and suspect's response to questions should be documented. Ask additional probing questions as appropriate.</p>	<p>Point out that the gauge number represents how many needles of that size would be needed to equal one inch. The higher the gauge, the smaller the diameter of the needle, i.e., a 16 gauge needle is 1/16th of an inch.</p> <p>Note: Give specific examples of probing questions, admissions and denials.</p> <p>Ask students for additional examples and list all on dry erase board or flip-chart.</p>

Aids	Lesson Plan	Instructor Notes
 <b>20 Minutes</b>  <b>IV-27</b> (Opinion of Evaluator)	<p><b>K. Opinion of Evaluator</b></p> <ol style="list-style-type: none"> <li>1. By this point in the evaluation, the DRE should have formed an opinion of the category or categories of drugs responsible for any observed impairment.</li> <li>2. This opinion is based on the totality of the investigation.</li> </ol>	<p>Remind students to make sure the suspect has been advised of their constitutional rights.</p>
 <b>20 Minutes</b>  <b>IV-28</b> (Toxicological Examination)	<p><b>L. Toxicological Examination</b></p> <ol style="list-style-type: none"> <li>1. Toxicology Samples           <p>Your State's implied consent statues will dictate the type of sample you can obtain; urine, blood, breath or saliva.</p> </li> <li>2. Specimen Containers           <ol style="list-style-type: none"> <li>a. The type of container for collecting the sample will be dictated by the type of sample taken and the laboratory requirements where it will be tested.</li> <li>b. Containers should be sterile and have a lid that will seal tightly. Make sure the seal is tight to prevent leakage.</li> </ol> </li> </ol>	<p><u>Review</u> the students' department's policy and procedures for requesting, obtaining and handling toxicological samples.</p> <p><u>Ask</u> the students to relate the laws of their state. The implied consent laws may vary significantly from state to state.</p> <p>Have the students discuss their individual laws and possibly write their requirements on the flip-chart for comparison.</p>

Aids	Lesson Plan	Instructor Notes
	<p>c. Containers will differ depending on the type of specimen collected. Containers are uniquely designed to accommodate specific samples such as blood, urine, saliva, breath, etc.</p> <p>3. Obtaining a Sample</p> <p>a. Urine - Normally the officer must witness the collection of the sample.</p> <p>b. Blood - Should be drawn by a qualified technician and witnessed by the officer.</p> <p>The sample must include a preservative. This is often pre-packaged in the container intended for this use.</p> <p>Samples should be refrigerated or frozen as soon as possible to minimize degeneration during storage.</p> <p>4. Chain of Custody</p> <p>a. Establish a policy dictating the chain of custody, if one does not already exist.</p> <p>b. Establish a policy for your Department on:</p> <p>The sealing of evidence to include officer identification markings; (i.e. initials, labels, tags and packaging)</p>	

Aids	Lesson Plan	Instructor Notes
<p></p> <p><b>25 Minutes</b></p>	<p>Paperwork for the chain of custody and laboratory analysis of your sample.</p> <p>Transportation of the sample to the laboratory.</p> <p>Return reporting of the laboratory analysis.</p> <p></p> <p><b>M. Video Demonstration</b></p>	<p><u>Note:</u> These are issues that must be addressed with the individual agencies to insure proper and standardized procedures. Students should follow-up with the appropriate representatives from their agencies to coordinate this activity.</p> <p>Solicit students' comments and questions concerning toxicological examinations.</p> <p>Instruct students to refer to their checklists as they watch the video.</p> <p>Show the Video "Overview of DRE Procedures". (This is the same video that is shown during Session II of the Pre-School and subsequently in Session VIII of this school.)</p> <p>Solicit students' comments and questions.</p>

## Topics for Study

1. Give three important reasons for conducting drug evaluation and classification evaluations in a standardized fashion.

**Help avoid mistakes, help promote and maintain professionalism and consistency among DREs, and help secure the court's acceptance of your testimony.**

2. What are the twelve major components of the drug evaluation process?

**1. Breath test 2. Interview with arresting officer 3. Preliminary exam 4. Eye exam 5. Divided attention tests 6. Vital sign exam 7. Dark room exam 8. Muscle tone exam 9. Injection site exam 10. Suspect interview 11. Opinion of evaluator 12. Toxicology**

3. How many times is pulse rate measured during the drug evaluation and classification evaluation?

**Three**

4. Are the diameters of a pupillometer's circles/semi-circles indicated in centimeters, millimeters or micrometers?

**Millimeters**

5. What formula expresses the approximate statistical relationship between blood alcohol concentration and nystagmus onset angle?

**50 - Angle of Onset = BAC**

6. Which of the seven categories of drugs ordinarily do not cause nystagmus?  
**CNS Stimulants, Hallucinogens, Narcotic Analgesics, Cannabis**

7. How many heel-to-toe steps is the subject instructed to take, in each direction, on the Walk and Turn test?

**Nine**

8. What period of time is the subject required to estimate during the Romberg Balance test?

**30 seconds**

9. What is systolic pressure?

**The force exerted on the arteries when the heart contracts**

10. What is the name of the instrument used to measure blood pressure?

**Sphygmomanometer**

11. Name the four validated clues of the One Leg Stand test.

**Sways while balancing, Puts foot down, Hops, Uses arms for balance**

12. Name the eight validated clues of the Walk and Turn test.

**Loses balance during instructions, Starts too soon, Steps off line, Wrong number of steps, Does not touch heel to toe, Raises arms for balance, Improper Turn**

13. Suppose you have two hypodermic needles, one is 14 gauge, the other is 20 gauge. Which needle has the smaller inside diameter?

**20 gauge**

## Session IV

### Overview of Drug Recognition Expert Procedures



IV-1

### Overview of Drug Recognition Expert Procedures

Upon successfully completing this session the student will be able to:

- Name the components of the Drug Evaluation and Classification program drug influence evaluation
- State the purpose of each component

Drug Evaluation &amp; Classification Training

IV-2A

### Overview of Drug Recognition Expert Procedures (Continued)

- Describe the activities performed during each component
- Correctly answer the “topics for study” questions at the end of this session

Drug Evaluation &amp; Classification Training

IV-2B

## The Drug Influence Evaluation

A systematic and standardized  
process

Drug Evaluation &amp; Classification Training

IV-3

## Drug Influence Evaluation Steps

### 1. Breath Alcohol Test



Drug Evaluation &amp; Classification Training

IV-4

### 2. Interview of the Arresting Officer



Drug Evaluation &amp; Classification Training

IV-5



### 6. Examination of Vital Signs



Drug Evaluation & Classification Training

IV-9A

### 6. Examination of Vital Signs

**Pulse & Time**

1. \_\_\_\_\_ / \_\_\_\_\_  
 2. \_\_\_\_\_ / \_\_\_\_\_  
 3. \_\_\_\_\_ / \_\_\_\_\_

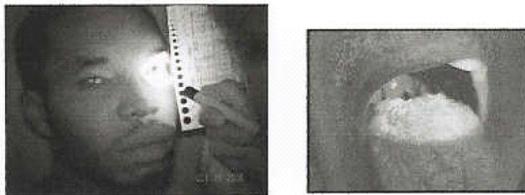
**Blood Pressure**      **Temp**

\_\_\_\_\_ / \_\_\_\_\_      \_\_\_\_\_

Drug Evaluation & Classification Training

IV-9B

### 7. Dark Room Examinations



Drug Evaluation & Classification Training

IV-10A

### 7. Dark Room Examinations

POPIL SIZE	Room Light	Darkness	Direct	NASAL AREA
Left Eye				
Right Eye				ORAL CAVITY
HYPERUS <input type="checkbox"/> Yes <input type="checkbox"/> No	REBOUND DILATION <input type="checkbox"/> Yes <input type="checkbox"/> No		Reaction to Light	

Drug Evaluation & Classification Training

IV-10B

### 8. Examination of Muscle Tone



Drug Evaluation & Classification Training

IV-11A

### 8. Examination of Muscle Tone

**MUSCLE TONE:**  
 Near Normal       Flaccid       Rigid

Comments: \_\_\_\_\_

Drug Evaluation & Classification Training

IV-11B

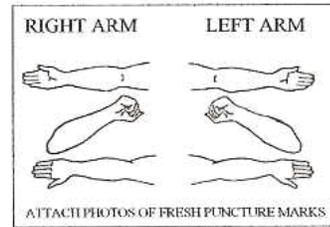
### 9. Examination for Injection Sites



Drug Evaluation & Classification Training

IV-12A

### 9. Examination for Injection Sites



Drug Evaluation & Classification Training

IV-12B

### 10. Suspect's Statements and other Observations



Drug Evaluation & Classification Training

IV-13A

### 10. Subject's statements and other Observations

What medicine or drug have you been using? How much?		Time of use?	Where were the drugs used? (Location)	
Date/Time of Arrest	Time DRE Notified		Eval. Start Time	Time Completed
Member Signature (include Rank)		ID No.	Reviewed By	
Opinion of Evaluator: <input type="checkbox"/> Rule Out <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> Stimulant <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant	<input type="checkbox"/> Depressant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis	

Drug Evaluation & Classification Training

IV-13B

### 11. Opinion of the Evaluator



Drug Evaluation & Classification Training

IV-14

### 12. Toxicological Examination



Drug Evaluation & Classification Training

IV-15

### Interview of Arresting Officer: Issues Concerning Subject's Behavior

- Was the subject operating a vehicle?
- What actions, maneuvers, etc. were observed?
- Was there a collision?
- Was the subject observed smoking, drinking or eating?

Drug Evaluation &amp; Classification Training

IV-16A

### Interview of Arresting Officer: Issues Concerning Subject's Behavior

- Was the subject inhaling any substance?
- How did subject respond to stop command?
- Did subject try to conceal or throw away any items?
- What has been subject's attitude and demeanor?

Drug Evaluation &amp; Classification Training

IV-16B

### Interview of Arresting Officer: Subject's Statements

- Has subject complained of illness or injury?
- Has subject used drug-related "street terms" or slang?
- How has subject responded to questions?
- Is subject's speech slurred, slow, thick, rapid, mumbled, etc.?
- What, specifically, has the subject said?

Drug Evaluation &amp; Classification Training

IV-16C

### Interview of Arresting Officer: Physical Evidence

- What items or materials were uncovered during search of subject and vehicle?
- Was any smoking paraphernalia uncovered?
- Were there any injection materials (e.g., needles, syringes, leather straps, rubber tubes, spoons, bottle caps, etc.)?
- Were there any balloons, plastic bags, small metal foil wrappings, etc.?
- What was the subject's BAC?

Drug Evaluation &amp; Classification Training

IV-16D

### Overview of the Preliminary Examination



- Questions
- Observations of face, breath and speech
- Initial checks of the eyes
- First check of the pulse

Drug Evaluation &amp; Classification Training

IV-17

### Preliminary Examination Questions

- Are you sick or injured?
- Do you have any physical defects?
- Are you diabetic or epileptic?
- Do you take insulin?
- Are you under a doctor's or dentist's care?
- Are you taking medication?

Drug Evaluation &amp; Classification Training

IV-18

### Initial Checks of the Eyes

- Check pupil size
- Assessment of tracking ability
- Initial estimate of nystagmus angle of onset



Drug Evaluation & Classification Training IV-19

### Eye Examinations



- Horizontal Gaze Nystagmus**
- Vertical Gaze Nystagmus**

Drug Evaluation & Classification Training IV-20

### Eye Examinations (Continued)



**Lack of Convergence**

Drug Evaluation & Classification Training IV-20A

### Divided Attention Tests

- Romberg Balance
- Walk and Turn
- One Leg Stand
- Finger to Nose



Drug Evaluation & Classification Training IV-21

### Vital Signs Measurements

- Blood Pressure
- Pulse
- Temperature



Drug Evaluation & Classification Training IV-22

### Dark Room Checks of Pupil Size

- Near-Total Darkness
- Direct Light



Drug Evaluation & Classification Training IV-23

## Examination of Muscle Tone

- Flaccid
- Near Normal
- Rigid



Drug Evaluation & Classification Training

IV-24

## Examination For Injection Sites



Drug Evaluation & Classification Training

IV-25

## Suspect Statements

- Document statements
- Ask additional probing questions in appropriate
- Miranda Rights



Drug Evaluation & Classification Training

IV-26

## Opinion of Evaluator

Based on the totality of the evaluation



Drug Evaluation & Classification Training

IV-27

## Toxicological Examination

- Follow State Implied Consent Laws
- Follow Department or Agency Evidence Policies
- Chain of Custody



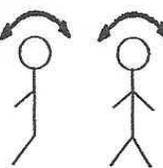
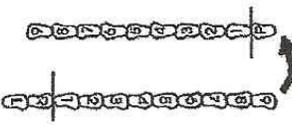
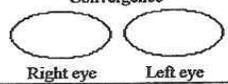
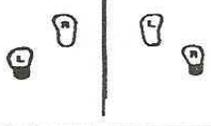
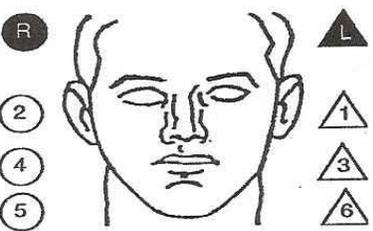
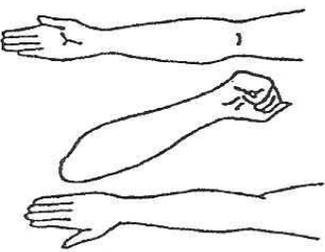
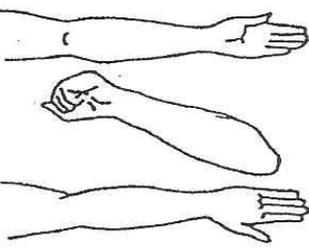
Drug Evaluation & Classification Training

IV-28

# QUESTIONS?

Drug Evaluation & Classification Training

## DRUG INFLUENCE EVALUATION

Evaluator		DRE No.		Rolling Log No.		<b>Session IV</b>				
Recorder/Witness		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property				Case #				
Arrestee's Name (Last, First MI)			DOB		Sex	Race	Arresting Officer (Name, ID No.)			
Date Examined/Time/Location					Breath Results: <input type="checkbox"/> Refused Instrument # _____ %			Chemical Test <input type="checkbox"/> Refused <input type="checkbox"/> Urine <input type="checkbox"/> Blood		
Miranda Warning Given: <input type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? When?			What have you been drinking? How much?			Time of last drink?		
By:		Time now?		When did you last sleep? How long?		Are you sick or injured? <input type="checkbox"/> Yes <input type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Do you take insulin? <input type="checkbox"/> Yes <input type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input type="checkbox"/> No			Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input type="checkbox"/> No					
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input type="checkbox"/> No		Attitude:			Coordination:					
		Breath:			Face:					
Speech:		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery			Blindness: <input type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye		Tracking: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal			
Corrective lens: <input type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Pupil size: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)			Able to follow stimulus: <input type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input type="checkbox"/> Normal <input type="checkbox"/> Droopy			
Pulse and time 1. ___/___ 2. ___/___ 3. ___/___		HGN Lack of smooth pursuit Maximum deviation Angle of onset			Left Eye _____ _____ _____	Right Eye _____ _____ _____	Vertical Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No		One Leg Stand	
Romberg Balance 		Walk and Turn test 			Cannot keep balance Starts too soon:		Convergence 			
					1 <sup>st</sup> Nine 2 <sup>nd</sup> Nine				L R <input type="checkbox"/> <input type="checkbox"/> Sways while balancing <input type="checkbox"/> <input type="checkbox"/> Uses arms to balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input type="checkbox"/> <input type="checkbox"/> Puts foot down	
Internal clock Est. as 30 seconds		Describe Turn			Cannot do test (explain)		Type of footwear:		Nasal area:	
Draw lines to spots touched 		Pupil Size Left Right	Room Light	Darkness	Direct	Hippus: <input type="checkbox"/> Yes <input type="checkbox"/> No		Rebound dilation <input type="checkbox"/> Yes <input type="checkbox"/> No	Reaction to Light:	
Blood pressure /		Temperature °f			RIGHT ARM 		LEFT ARM 			
Muscle tone: <input type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:								
What medication or drug have you been using? How much?				Time of use?		Where were the drugs used? (location)				
Date/Time of Arrest			Time DRE Notified		Evaluation Start Time		Time Completed			
DRE signature (Include rank)			ID #		Reviewed by:					
Opinion of evaluator:		<input type="checkbox"/> Rule Out <input type="checkbox"/> Medical	<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant	<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis				

One Hour and Forty-Five Minutes

**SESSION V**

**EYE EXAMINATIONS: NYSTAGMUS, CONVERGENCE,  
PUPIL SIZE AND REACTION TO LIGHT**

**SESSION V      **EYE EXAMINATIONS: NYSTAGMUS, CONVERGENCE,  
PUPIL SIZE AND REACTION TO LIGHT****

Upon successfully completing this session the student will be able to:

- o State the purposes of various eye examinations in the DEC drug influence evaluation procedure
- o Describe the administrative procedures for the eye examinations
- o Describe the clues for each eye examination
- o Conduct the eye examinations and note the clues observed
- o Prepare complete, clear and accurate records of the eye examinations

**Content Segments**

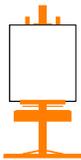
**Learning Activities**

- |                                |                                 |
|--------------------------------|---------------------------------|
| A. Purpose of the Examinations | o Instructor Led Presentations  |
| B. Procedures and Clues        | o Instructor Led Demonstrations |
| C. Demonstrations              | o Student Led Demonstrations    |
| D. Documentation Procedures    | o Students' Hands On Practice   |
| E. Practice                    | o Reading Assignments           |

Aids	Lesson Plan	Instructor Notes
 <b>V-1 (Title)</b>	<p><b>EYE EXAMINATIONS</b></p>	<p>Total Lesson Time: Approximately 105 Minutes</p> <p>Display Session Title</p> <p>Session title on wall chart.</p>
 <b>V-2A&amp;B</b> (Session Objectives)		<p>Briefly review the content, objectives and activities of this session.</p>
 <b>15 Minutes</b>		<p><b>A. Purposes of the Eye Examinations</b></p>
 <b>V-3</b> (Eye Exams)	<ol style="list-style-type: none"> <li>1. The principle purpose of all of the eye examinations is to obtain articulable facts indicating the presence or absence of specific categories of drugs.             <ol style="list-style-type: none"> <li>a. Certain drug categories usually cause the eyes to react in specific ways.</li> <li>b. Other drug categories usually do not cause those reactions.</li> </ol> </li> <li>2. The tests of <u>Horizontal and Vertical Gaze Nystagmus</u> provide important indicators of the drug categories that may or may not be present.             <ol style="list-style-type: none"> <li>a. If HGN is observed, it is likely that the subject may have ingested alcohol or another CNS Depressant, an Inhalant, a Dissociative Anesthetic, or a combination of those.</li> </ol> </li> </ol>	<p>Ask students “What causes Horizontal Gaze Nystagmus?” Alcohol and certain other drugs will cause Horizontal Gaze Nystagmus.</p>

Aids	Lesson Plan	Instructor Notes
	<p>b. If Vertical Gaze Nystagmus is observed, the implication may be that the subject ingested a large dose of alcohol for that individual, a Dissociative Anesthetic, such as PCP, or other Depressants or Inhalants.</p> <p>c. By comparing the subject's blood alcohol concentration with the angle of onset of Horizontal Gaze Nystagmus, it may be possible to determine that alcohol is or is not the sole cause of the observed Nystagmus.</p> <p>d. The consistency of onset angle and BAC can be compared using the following formula:</p> $\text{BAC} = 50 - A$	<p><u>Point out</u> that it is very unlikely that a subject would exhibit Vertical Gaze Nystagmus without also exhibiting HGN.</p> <p><u>Clarification:</u> If the onset angle is significantly inconsistent with the BAC, the implication may be that the subject has <u>also</u> taken a Dissociative Anesthetic, such as PCP, an inhalant, or some CNS Depressant other than alcohol.</p> <p><u>Write</u> the formula on the dry erase board or flip-chart.</p> <p>Note: Emphasize that this is not an absolute mathematical formula.</p> <p><u>Explanation:</u>  <math>\text{BAC} = 100 \times \text{blood alcohol}</math>        (i.e. if blood alcohol is 0.10, <math>\text{BAC} = 10</math>)</p> <p><math>A = \text{onset angle (in degrees)}</math></p> <p><u>Example:</u> If onset angle is 35 degrees, then  <math>\text{BAC} = 50 - 35 = 15</math>.</p> <p>The corresponding blood alcohol concentration would be approximately 0.15.</p>

Aids	Lesson Plan	Instructor Notes
	<p>e. Keep in mind that this formula is only a statistical approximation. It is <u>not</u> an exact relationship for all subjects at all times.</p> <p>f. The purpose of comparing BAC and onset angle is to obtain a gross indication of the possible presence of another CNS Depressant, a Dissociative Anesthetic such as PCP, or an Inhalant.</p> <p>3. The check for <u>Lack of Convergence</u> can provide another clue as to the possible presence of Depressants, a Dissociative Anesthetic, or Inhalants.</p> <p>4. Lack of Convergence is also an indicator of the possible presence of Cannabis.</p> <p>5. The checks of <u>pupil size and reaction to light</u> provide useful indicators of the possible presence of many drug categories.</p> <p>a. CNS Depressants, CNS Stimulants and Narcotic Analgesics will normally cause the pupils to react very slowly or not visibly at all to light.</p> <p>b. CNS Stimulants and Hallucinogens normally will cause the pupils to dilate.</p>	<p><u>Emphasize this point:</u> The formula can easily be "off" by 0.05 or more, even though the subject has consumed no drug other than alcohol.</p> <p><u>Emphasize</u> that many other facts will also be considered that will help to determine whether Dissociative Anesthetics, inhalants or CNS Depressants may be present.</p> <p><u>Point out</u> that a DRE might begin to suspect the presence of Cannabis if Lack of Convergence was observed but <u>no</u> nystagmus was observed.</p>

Aids	Lesson Plan	Instructor Notes
   V-4 (Hippus)   V-5 (Rebound)	<p>c. Cannabis normally causes dilation of the pupils, although this isn't always observed.</p> <p>d. Some specific Inhalants may cause pupil dilation.</p> <p>e. Narcotic Analgesics will normally cause observable constriction of the pupils.</p> <p>6. You will also check for <u>hippus</u> and <u>rebound dilation</u>.</p> <p>a. "Hippus" means a rhythmic pulsating of the pupils as they dilate and constrict within fixed limits.</p> <p>b. Hippus occurs under various conditions, including – at times – withdrawal from Narcotic Analgesics</p> <p>c. "Rebound dilation" is a period of constriction followed by dilation with a change equal to or greater than 2 mm. The final size determination being estimated at the end of a 15-second time period in which the light from the penlight is directed into the eye.</p> <p>d. Rebound dilation has been reported with persons under the influence of Cannabis.</p>	<p><u>Point out:</u> pupil dilation due to cannabis isn't always observed in laboratory studies, but may be due to that lab dose levels are less than "street" doses.</p> <p>Print on dry erase board or flip-chart: "HIPPIUS" "REBOUND DILATION".</p> <p>Note: Instructors are encouraged to use additional visual aides to demonstrate if necessary (i.e. balloon, videos, etc.).</p> <p><u>Point out</u> that these terms are defined in the glossary at the front of the Student's Manual.</p> <p><u>Point out</u> that Hippus and Rebound Dilation will not be present together or at the same time.</p> <p>Solicit students' comments and questions concerning the purposes of the eye examinations.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>50 Minutes</b></p>  <p><b>V-6 (HGN Clues)</b></p>  <p><b>V-6A (Lack of Smooth)</b></p>	<p><b>B. Procedures and Cues</b></p> <ol style="list-style-type: none"> <li>1. Horizontal Gaze Nystagmus test consists of <u>three separate checks</u>, administered independently to each eye. <ol style="list-style-type: none"> <li>a. The first check is for "lack of smooth pursuit". <ol style="list-style-type: none"> <li>o If the subject is wearing eyeglasses, have him or her remove them.</li> <li>o If the subject is wearing contact lenses, note that fact on the report, but don't have the subject remove them.</li> <li>o Position the stimulus approximately 12 -15 inches in front of subject's nose.</li> <li>o Hold the tip of the stimulus slightly above the level of the subject's eye.</li> <li>o Instruct the subject to hold the head still and follow the stimulus with the eyes.</li> </ol> </li> </ol> </li> </ol>	<p><u>Remind</u> students that prior to checking for the three clues of nystagmus, they need to check for equal pupil size, equal tracking and resting nystagmus.</p> <p><u>Select</u> a student, and demonstrate the first check of HGN on that student.</p> <p>Note: Research and testing has proven that contacts will not interfere with the HGN test or cause nystagmus.</p> <p><u>Point out</u> that this procedure ensures that the subject's eyes will be wide open and easy to observe.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>o Move the stimulus smoothly, all the way to the subject's left side and back all the way to the right side.</li> <li>o Make at least two complete passes of the stimulus: to the left side, to the right side, back to the left side, and finally back to the right side.</li> <li>o When doing this, <u>don't</u> pause at the center of the subject's face; move all the way to the left, then all the way to the right, then again all the way to the left and back all the way to the right, in a smooth, continuous motion.</li> <li>b. While the eye is moving, examine it for evidence of a lack of smooth pursuit.</li> </ul>	<p><u>Point out</u> that the stimulus should be moved at a speed that requires approximately 2 seconds to bring it from the center out all the way to the side. It should then be moved from side to side at the same speed. This means it should take approximately 4 seconds to move from the extreme left to the extreme right.</p> <p><u>Use these or similar analogies:</u></p> <p>(1) A <u>smoothly pursuing</u> eye will move without friction, much the way that a windshield wiper glides across the windshield when it is raining steadily. An eye showing <u>lack of smooth pursuit</u> will move in a fashion similar to a wiper across a <u>dry</u> windshield.</p> <p>(2) A <u>smoothly pursuing</u> eye will roll in the socket the way that a marble or ball bearing would glide smoothly across a polished pane of glass. An eye exhibiting <u>lack of</u></p>

Aids	Lesson Plan	Instructor Notes
 <p><b>V-6B</b> (Distinct...At Maximum)</p>	<p>c. Also, check to be sure that <u>both</u> eyes are tracking in the same way: if one eye is moving smoothly but the other moves hesitantly or not at all, an illness or injury may be present.</p> <p>d. Students' initial practice of the check for lack of smooth pursuit.</p> <p>e. The second check is for "distinct and sustained nystagmus at maximum deviation".</p> <ul style="list-style-type: none"> <li>o Again position the stimulus as before.</li> <li>o Move the stimulus all the way to the subject's left side and hold it there so that the subject's eye is turned as far to the side as possible.</li> <li>o Hold the eye at that position for a minimum of 4 seconds, to check</li> </ul>	<p><u>smooth pursuit</u> would move more like that marble rolling over a sheet of heavy gauge sandpaper.</p> <p>Excuse the student volunteer and thank him or her for participating.</p> <p><u>Instruct</u> students to work in pairs, taking turns checking each other's eyes for lack of smooth pursuit.</p> <p><u>Monitor</u>, coach and critique the students' practice.</p> <p>Allow this practice to continue for only about 2 minutes.</p> <p><u>Select</u> a student and demonstrate the second check of HGN on that student.</p>

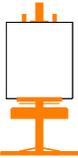
Aids	Lesson Plan	Instructor Notes
	<p>carefully for any jerking that may be present.</p> <ul style="list-style-type: none"> <li>o When you have completed this check for the left eye, repeat the process for the right eye. Then, do it once again for the left eye, and again for the right, to verify that distinct and sustained nystagmus is present.</li> <li>f. With this cue, the examiner looks for a <u>very distinct</u>, unmistakable jerking. <ul style="list-style-type: none"> <li>o A slight or barely visible tremor is not sufficient to consider this clue present.</li> <li>o A definite, sustained jerking must be seen.</li> </ul> </li> <li>g. Students' initial practice of the check for distinct and sustained nystagmus at maximum deviation.</li> </ul>	<p><u>Point out</u> that for this to be a clue, the nystagmus (jerking) must be distinct <u>and sustained</u>.</p> <p>Point out that people exhibit slight jerking of the eye at maximum deviation, even when unimpaired, but this will not be evident or sustained for more than a few seconds. When impaired by alcohol and "D.I.D." drugs, the jerking will be larger, more pronounced, sustained for more than 4 seconds, and easily observable.</p> <p>Excuse the student volunteer and thank him or her for participating.</p> <p><u>Instruct</u> students to work in pairs, taking turns checking each other's eyes for distinct and sustained nystagmus at maximum deviation.</p> <p><u>Monitor</u>, coach and critique the students' practice.</p> <p>Allow this practice to continue for only about 2 minutes.</p>

Aids	Lesson Plan	Instructor Notes
 <p>V-6C (Angle of Onset)</p>	<p>h. The final check is for the "angle of onset".</p> <ul style="list-style-type: none"> <li>o Position the stimulus as before.</li> <li>o <u>Slowly</u> move the stimulus to the subject's left side, carefully watching the eye for the first sign of jerking.</li> <li>o When you think that you see the eye jerk, stop moving the stimulus and hold it perfectly still.</li> <li>o Verify that the eye is, in fact, jerking.</li> <li>o Once you have established that you have located the point of onset, estimate the angle.</li> <li>o Then, repeat the process for the right eye.</li> <li>o Then, again check onset for the left eye, and again for the right.</li> </ul>	<p><u>Select</u> a student and demonstrate the third check of HGN on that student.</p> <p>Note: Stimulus should be moved at a speed that requires approximately four seconds to travel from center all the way out to the side.</p> <p><u>Point out</u> that, if the eye is <u>not</u> jerking, it will be necessary to resume moving the stimulus slowly to the side, again observing for the first sign of jerking.</p> <p><u>Point out</u> that angle estimation simply requires practice.</p> <p><u>Exhibit</u> a template.</p> <p><u>Point out</u> that the template will be used during practice. Excuse the student volunteer and thank them for participating.</p>

Aids	Lesson Plan	Instructor Notes
 <p>V-7 (VGN)</p>	<p>i. Students' initial practice of angle estimation.</p> <p>2. The <u>Vertical Gaze Nystagmus</u> test is very simple, and consists of a single check.</p> <p>a. Position the stimulus <u>horizontally</u>, approximately 12 -15 inches in front of the subject's nose.</p> <p>b. Instruct the subject to hold the head still and follow the stimulus with the eyes only.</p> <p>c. Raise the stimulus until the subject's eyes are elevated as far as possible.</p>	<p><u>Emphasize</u> that if the clues of Horizontal Gaze Nystagmus are markedly different for the two eyes, a neurological or other medical problem (such as a head injury) may be present.</p> <p><u>Instruct</u> students to work in pairs, taking turns estimating angles of each other's eyes.</p> <p><u>Instruct</u> students that they are to try to draw their partners' eyes to three different angles: 30 degrees 35 degrees 40 degrees</p> <p>Students will check their accuracy using the template.</p> <p><u>Monitor</u>, coach and critique the students' practice.</p> <p>Allow this practice to continue for only about 3 minutes.</p> <p><u>Select</u> a student and demonstrate the Vertical Gaze Nystagmus test on the student.</p>

Aids	Lesson Plan	Instructor Notes
 <p>V-8 (LOC))</p>	<p>d. Watch closely for evidence of jerking.</p> <p>e. Students' initial practice of the Vertical Gaze Nystagmus test.</p> <p>3. The test for <u>Lack of Convergence</u> is also very simple.</p> <p>a. Lack of Convergence means an inability to cross the eyes.</p> <p>b. Position the stimulus approximately 12-15 inches in front of the person's face.</p> <p>c. Instruct the person to hold their head still and follow the stimulus with the eyes only.</p> <p>d. Keep the object 12-15 inches away from the person's nose, and start to move the stimulus slowly in a circle, approximately the same size</p>	<p><u>Point out</u> that the examiner should keep the subject's eyes elevated for approximately four (4) seconds to verify that the jerking really is present.</p> <p>Excuse the student volunteer and thank them for participating.</p> <p><u>Instruct</u> students to work in pairs, taking turns administering the Vertical Gaze Nystagmus test to each other.</p> <p><u>Monitor</u>, coach and critique the students' practice.</p> <p>Allow this practice to continue for only about 2 minutes.</p> <p><u>Select</u> a student and demonstrate the test for Lack of Convergence on that student.</p> <p><u>Point out</u> that this initial circular motion helps to verify that the subject has focused on the stimulus and is able to track it. Emphasize that it doesn't matter whether the</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>V-9</b> (Est. of Pupil Size)</p>	<p>as the subject's face.</p> <ul style="list-style-type: none"> <li>e. Once you have verified that the subject is tracking the stimulus, move it slowly and steadily toward the bridge of the nose.</li> <li>f. Carefully observe the person's eyes to determine whether both eyes converge.</li> <li>g. Students' initial practice of the test for Lack of Convergence.</li> </ul> <p><b>4. Estimating Pupil Size</b></p> <ul style="list-style-type: none"> <li>a. The pupils of our eyes continually adjust in size to accommodate different lighting conditions.</li> <li>b. We use a device called a pupillometer to estimate the size of the subject's pupils.</li> </ul>	<p>circular motion is clockwise or counter-clockwise.</p> <p>Note: Hold stimulus near the bridge of nose for one (1) second. The stimulus should not come any closer than approximately two (2) inches from the bridge of the nose.</p> <p>Excuse the student volunteer and thank them for participating.</p> <p>Instruct students to work in pairs, taking turns testing each other's eyes for Lack of Convergence.</p> <p><u>Monitor</u>, coach and critique the students' practice.</p> <p>Allow this practice to continue for only about 2 minutes.</p> <p><u>Exhibit</u> a pupillometer</p>

Aids	Lesson Plan	Instructor Notes
	<p>c. The pupillometer is held alongside the subject's eye, moved up and down until the circle or semi-circle closest in size to the pupil is located.</p> <p>d. Pupil size estimations are recorded as the numeric value that corresponds to the diameter of the circle or semi-circle that is closest in size to the subject's pupil in each lighting condition.</p> <p>e. Pupil sizes are estimated under three different lighting conditions.</p> <ul style="list-style-type: none"> <li>o Room Light</li> <li>o Near Total Darkness</li> <li>o Direct Light</li> </ul> <p>5. Estimation of Pupil Size under Room Light.</p>	<p>Demonstrate the positioning of the pupillometer.</p> <p><u>Select</u> a student and demonstrate pupil size estimation using the student.</p> <p>Explain to the students that "Accommodation Reflex" is an adjustment of the eyes for viewing at various distances. Meaning the pupils will automatically constrict as objects move closer and dilate as objects move further away.</p> <p>This should not be confused with pupillary light reflex which is the pupil's normal reaction to changes in light.</p> <p>Demonstrate the Accommodation Reflex by having the students focus on an object very close and one at a distance.</p> <p>Write on the dry erase board or flip-chart "The Three Lighting Conditions."</p>

Aids	Lesson Plan	Instructor Notes
	<p>a. The pupils are examined in room light prior to darkening the room.</p> <p>b. Student's initial practice of pupil size estimation.</p> <p>c. After you have completed the pupil size estimations in room light, you must darken the room, wait 90 seconds, and then proceed with the darkroom exam.</p> <p>6. Estimation of Pupil Size under Near Total Darkness.</p> <p>a. For the check under near total darkness completely cover the tip of the penlight with your finger or thumb, so that only a reddish glow and no white light emerges.</p> <p>b. Bring the glowing tip up toward the subject's left eye until you can just distinguish the pupil from the colored portion of the eye (iris).</p> <p>c. Continue to hold the glowing red tip in that position and bring the pupillometer up alongside the subject's left eye and locate the <u>circle or semi-circle</u> that is closest in size to the pupil.</p>	<p>Point out that since room lighting conditions can vary considerably and often cannot be controlled, the range of pupil sizes may be broad.</p> <p><u>Instruct</u> students to work in pairs, taking turns checking each other's pupils.</p> <p><u>Monitor</u>, coach and critique the students' practice.</p> <p>Allow this practice to continue for only about 2 minutes.</p> <p><u>Select</u> a student to participate in demonstrations of darkroom pupil estimations.</p> <p><u>Demonstrate</u> this.</p> <p><u>Demonstrate</u> this.</p> <p>Demonstrate this.</p>

Aids	Lesson Plan	Instructor Notes
	<p>d. Repeat this procedure for the subject's right eye.</p> <p>7. Estimation of Pupil Size under Direct Light.</p> <p>a. Bring the penlight from the side of the subject's face and shine it directly into their left eye.</p> <p>b. Position the penlight so that it illuminates <u>and approximately fills</u> the subject's eye socket.</p> <p>c. Hold the penlight in that position for 15 seconds, and bring the pupillometer up alongside the left eye.</p> <p>d. Find the circle or semi-circle that is closest in size to the pupil.</p> <p>e. Repeat this procedure for the subject's right eye.</p>	<p><u>Demonstrate</u> this.</p> <p><u>Demonstrate</u> this.</p> <p><u>Emphasize</u> that the penlight should be positioned so that the beam just "fits" the eye socket.</p> <p><u>Demonstrate</u> this.</p> <p><u>Remind</u> students to position the penlight so that the beam exactly "fits" the eye socket when the beam is brought directly into the eye.</p> <p><u>Monitor</u>, coach and critique the students' practice.</p> <p>Allow the practice to continue for only about 2 minutes.</p> <p><u>Solicit</u> students' comments and questions concerning the eye examinations.</p>

Aids	Lesson Plan	Instructor Notes
	<p>8. Normal Sizes for the Pupil</p> <p>a. For most people, even under very bright light the pupils will not constrict much below a diameter of 2.5 millimeters (mm) or dilate to a diameter of not more than 8.5 mm in near total dark conditions.</p> <p>b. For a non-impaired person, the average pupil size and range for room light is approximately 4.0 mm, with an average of normal pupil sizes ranging from 2.5 to 5.0 mm.</p> <p>c. For a non-impaired person, the average pupil size and range for near total darkness is approximately 6.5 mm with an average range of normal pupil sizes ranging from 5.0 to 8.5 mm.</p> <p>d. For a non-impaired person, the average pupil size and range for direct light is approximately 3.0 mm with an average range of normal pupil sizes ranging from 2.0 to 4.5 mm.</p>	<p><u>Point out</u> that results of studies indicated there are significant differences between the average pupil size in the three test conditions.</p> <p>Consequently, the use of three distinct pupil size ranges for each of the different testing conditions may be considered more useful in the evaluation to determine impairment vs. non-impairment.</p>

Aids	Lesson Plan	Instructor Notes
	<p>9. Assessment of the pupil's <u>reaction to light</u> takes place immediately before the check of pupil size under direct light.</p> <p>a. Once again, start by bringing the uncovered light from the side of the subject's face directly into his or her left eye.</p> <p>b. As you bring the beam of light directly into the subject's eye, note how the pupil reacts.</p> <p>c. Under ordinary conditions, the pupil should react very quickly, and <u>constrict</u> noticeably when the light beam strikes the eye.</p> <p>d. Under the influence of certain categories of drugs, the pupil's reaction may be very sluggish, or there may be no visible reaction at all.</p> <p>e. Hold the direct light on the subject's eye for <u>15 seconds</u> to assess pupil reaction.</p> <p>f. Also check for <u>hippus</u> or <u>rebound dilation</u> during this 15 seconds period.</p> <p>g. When you have completed this process for the left eye, repeat it for the right eye.</p> <p>h. Students' initial practice in assessing the pupil's reaction to light.</p>	<p><u>Demonstrate</u> this.</p> <p><u>Demonstrate</u> this.</p> <p>Emphasize: We consider the pupil's reaction to be <u>slow</u> if it takes more than <u>one second</u> to reach full constriction.</p> <p>Caution should be used by the officer so as not to move the light beam or allow the bulb to change in light intensity.</p> <p>Have students work in pairs, checking each others pupil reaction.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>15 Minutes</b></p>	<p><b>C. Demonstrations</b></p> <ol style="list-style-type: none"> <li>1. Demonstration of Horizontal Gaze Nystagmus.               <ol style="list-style-type: none"> <li>a. Check for lack of smooth pursuit.</li> <li>b. Check for distinct and sustained nystagmus at maximum deviation.</li> <li>c. Estimation of onset angle.</li> </ol> </li> <li>2. Demonstration of Vertical Gaze Nystagmus and Lack of Convergence.</li> </ol>	<p><u>Select</u> two students to come before the class.</p> <p><u>Instruct</u> one student to demonstrate the administration of Horizontal Gaze Nystagmus to the other student.</p> <p><u>Coach</u> and critique the student administrator's performance.</p> <p><u>Make sure</u> that the student administrator checks both eyes.</p> <p>When the student administrator has completed the HGN test, <u>instruct</u> the student administrator to draw the student subject's eye to an angle of 35 degrees. <u>Check</u> the accuracy of this estimate, using the template.</p> <p>Excuse the two students and thank them for participating.</p> <p><u>Select</u> two other students to come before the class.</p> <p><u>Instruct</u> one student to check the other for Vertical Gaze Nystagmus.</p> <p><u>Coach</u> and critique the student administrator's performance.</p> <p><u>Instruct</u> the second student to check the eyes of the first student for Lack of Convergence.</p> <p><u>Coach</u> and critique the student administrator's performance.</p>

Aids	Lesson Plan	Instructor Notes
 <b>5 Minutes</b>	<p>3. Demonstration of pupil size checks and test for reaction to light.</p> <p>a. Pupil size estimation under room light.</p> <p>b. Darkroom checks of pupil size.</p> <ul style="list-style-type: none"> <li>o near total darkness</li> <li>o direct light</li> </ul> <p><b>D. Documentation Procedures</b></p>	<p>Excuse the two students and thank them for participating.</p> <p><u>Select</u> two other students to come before the class.</p> <p><u>Instruct</u> one student to check the other's pupils under room light.</p> <p><u>Coach</u> and critique the student administrator's performance.</p> <p><u>Instruct</u> the second student to demonstrate how to perform the dark room checks of pupil size.</p> <p><u>Coach</u> and critique the student administrator's performance.</p> <p><u>Point out</u> that assessment of the pupil's reaction to light takes place in conjunction with the direct light check.</p> <p>Excuse the two students and thank them for participating.</p> <p><u>Solicit</u> students' comments and questions concerning these demonstrations of the eye examinations.</p> <p>Instruct students to turn to the Standardized Drug Influence Evaluation Form in their manuals.</p>

Aids	Lesson Plan	Instructor Notes
 <p>V-10 (Sample Eye Data)</p>	<ol style="list-style-type: none"> <li>1. A brief examination of the eyes is made during the <u>Preliminary Examination</u>.               <ol style="list-style-type: none"> <li>a. Check for equal pupil size.</li> <li>b. Check for resting nystagmus</li> <li>c. Assessment of tracking ability.</li> <li>d. Initial assessment of Nystagmus.</li> </ol> </li> <li>2. The next section of the form is devoted to the Eye Examinations.               <ol style="list-style-type: none"> <li>a. Horizontal Gaze Nystagmus</li> <li>b. Vertical Gaze Nystagmus</li> <li>c. Lack of Convergence</li> </ol> </li> <li>3. The darkroom eye examinations are documented in a subsequent section of the form.</li> </ol>	<p><u>Point out</u> that section of the form.</p> <p><u>Emphasize</u> that all three checks of the HGN test must be documented for each eye.</p> <p><u>Point out</u> that "yes" implies that Vertical Gaze Nystagmus <u>was</u> observed, "no" implies that it was <u>not</u> observed.</p> <p><u>Point out</u> that it will be necessary to diagram the movement of the eyes.</p> <p><u>Point out</u> the location of that section.</p> <p><u>Emphasize</u> that all darkroom checks of the eyes must be performed and documented independently for each eye.</p> <p><u>Solicit</u> students' comments and questions concerning procedures for documenting the eye examinations.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>20 Minutes</b></p>	<p><b>E. Practice</b></p> <ol style="list-style-type: none"> <li>1. Preliminary eye exams           <ol style="list-style-type: none"> <li>a. Check for equal pupil size.</li> <li>b. Check for resting nystagmus.</li> <li>c. Assessment of tracking ability.</li> <li>d.. Initial estimation of Nystagmus onset angle.</li> </ol> </li> <li>2. Eye exams.           <ol style="list-style-type: none"> <li>a. Horizontal Gaze Nystagmus</li> <li>b. Vertical Gaze Nystagmus</li> <li>c. Lack of Convergence</li> </ol> </li> <li>3. Pupil Size Estimations           <ol style="list-style-type: none"> <li>a. Room light</li> <li>b. Near total darkness</li> <li>c. Direct light</li> </ol> </li> <li>4. Reporting out of Pupil Size estimations.</li> </ol>	<p><u>Instruct</u> students to practice in pairs.</p> <p>Each student will conduct a complete set of eye examinations on his or her partner.</p> <p>Students then will "reverse roles".</p> <p>Tell the students to record their estimations of their partners' pupil sizes on the standard Drug Influence Evaluation Form.</p> <p><u>Monitor</u>, coach and critique students' practice.</p> <p><u>Make sure</u> each student administers a complete series of eye examinations at least once.</p> <p><u>NOTE:</u> If possible, the training room should be at least somewhat darkened for this final stage of practice.</p> <p>Instructor: While the student's practice is still going on, print the matrix at the end of this session on the dry-erase board or flip-chart.</p> <p>Tell students that they should refer to the Drug Influence Evaluation forms on which</p>



<b>Aids</b>	<b>Lesson Plan</b>	<b>Instructor Notes</b>
	c. Direct light tabulation.	Make appropriate comments about the number of students whose pupils are outside the normal range of size under the various lighting levels.

Pupil Size	Room Light	Near Total Darkness	Direct Light
2.0 mm			
2.5 mm			
3.0 mm			
3.5 mm			
4.0 mm			
4.5 mm			
5.0 mm			
5.5 mm			
6.0 mm			
6.5 mm			
7.0 mm			
7.5 mm			
8.0 mm			

## Session V

### Eye Examinations



V-1

### Eye Examinations: Nystagmus, Convergence, Pupil Size and Reaction to Light

Upon successfully completing this session the student will be able to:

- State the purposes of various eye examinations in the DEC drug influence evaluation procedure
- Describe the administrative procedures for the eye examinations

Drug Evaluation &amp; Classification Training

V-2A

### Eye Examinations: Nystagmus, Convergence, Pupil Size and Reaction to Light (Continued)

- Describe the clues for each eye examination
- Conduct the eye examinations and note the clues observed
- Prepare complete, clear and accurate records of the eye examinations

Drug Evaluation &amp; Classification Training

V-2B

### The Eye Examinations



Drug Evaluation &amp; Classification Training

V-3

### Hippus

**A rhythmic pulsating of the pupils as they dilate and constrict within fixed limits.**

Drug Evaluation &amp; Classification Training

V-4

### Rebound Dilation

**A period of constriction followed by dilation with a change equal to or greater than 2 mm.**

**The final size determination being estimate at the end of the 15 second time period in which the light from the penlight is directed into the eye.**

Drug Evaluation &amp; Classification Training

V-5

## Three Clues of Horizontal Gaze Nystagmus

1. Lack of Smooth Pursuit
2. Distinct and Sustained Nystagmus at Maximum Deviation
3. Angle of Onset of Nystagmus

Drug Evaluation & Classification Training

V-6

## First Clue: Lack of Smooth Pursuit



Drug Evaluation & Classification Training

V-6A

## Second Clue: Distinct and Sustained Nystagmus at Maximum Deviation



Drug Evaluation & Classification Training

V-6B

## Third Clue: Angle of Onset of Nystagmus



Drug Evaluation & Classification Training

V-6C

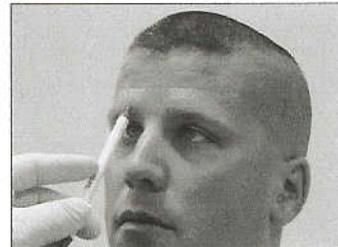
## Vertical Gaze Nystagmus



Drug Evaluation & Classification Training

V-7

## Lack of Convergence



Drug Evaluation & Classification Training

V-8

## Estimation of Pupil Size



Drug Evaluation & Classification Training

V-9

## Sample Eye Examination

Vision: <input type="checkbox"/> Normal <input type="checkbox"/> Blurred <input type="checkbox"/> Double <input type="checkbox"/> Color, Eye <input type="checkbox"/> Hand <input type="checkbox"/> Ball		Pupil Size: <input type="checkbox"/> Normal <input type="checkbox"/> Enlarged		Reaction: <input type="checkbox"/> Normal <input type="checkbox"/> Sluggish <input type="checkbox"/> No Reaction	
Pupil & Reaction	MDR	Left Eye	Right Eye	Vertical Alignment? <input type="checkbox"/> Yes <input type="checkbox"/> No	Reaction to Light: <input type="checkbox"/> Normal <input type="checkbox"/> Sluggish <input type="checkbox"/> No Reaction
1. _____	Loss of Smooth Pursuit			Convergence: <input type="checkbox"/> Normal <input type="checkbox"/> Abnormal	
2. _____	Accommodation			Left Eye: <input type="checkbox"/> Normal <input type="checkbox"/> Abnormal	
3. _____	Depth of Object				

PUPIL SIZE	Reaction Light	Darkness	Direct
Left Eye			
Right Eye			
HIPPUS <input type="checkbox"/> Yes <input type="checkbox"/> No	REBOUND DILATION <input type="checkbox"/> Yes <input type="checkbox"/> No	Reaction to Light	

Drug Evaluation & Classification Training

V-10

# QUESTIONS?

Drug Evaluation & Classification Training

Two Hours

**SESSION VI**  
**PHYSIOLOGY AND DRUGS:**  
**AN OVERVIEW**

## **SESSION VI      **PHYSIOLOGY AND DRUGS: AN OVERVIEW****

Upon successfully completing this session the student will be able to:

- o Explain in layman's terms the general concept of human physiology.
- o Explain in layman's terms the purpose and functions of major systems in the body (nervous system, circulatory system, respiratory system, etc.).
- o Explain in layman's terms how drugs work in the body.
- o Explain in general terms how the drug evaluation is used to detect signs or symptoms indicative of drug impairment.
- o Correctly answer the "topics for study" questions at the end of this session.

### Content Segments

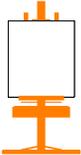
### Learning Activities

- |  |                                |
|--|--------------------------------|
| A. Body Systems  | o Instructor Led Presentations |
| B. Body Systems and Body Functions Relevant to Drug Evaluations  | o Reading Assignments          |
| C. How Drugs Work  |                                |
| D. Physiologic Signs and Symptoms of Drugs or Medical Impairment |                                |
| E. Medical Conditions  |                                |
| F. Summary   |                                |

Aids	Lesson Plan	Instructor Notes
 <p><b>5 Minutes</b></p>  <p><b>VI-1 (Title)</b></p>  <p><b>VI-2A&amp;B</b> (Session Objectives)</p>	<p><b>PHYSIOLOGY AND DRUGS: AN OVERVIEW</b></p> <p><b>A. Introduction</b></p> <ol style="list-style-type: none"> <li>1. Before we can understand how drugs work we must have a <u>basic</u> understanding of how the body works.</li> <li>2. We will review general concepts of how the body functions in a "normal" or "standard" human.</li> <li>3. We will briefly review the chief functions of the body systems.</li> </ol>	<p>Total Lesson Time: Approximately 120 Minutes</p> <p>Display Session Title</p> <p>Briefly review the content, objectives and activities of this session.</p> <p>Point out that it is not necessary to have detailed knowledge of specific functions or medical terminology. Students will not become medical specialists as a result of this limited overview, however, they should be encouraged to learn as much as possible about human physiology through additional instruction and independent reading.</p> <p>Point out that all human beings are different and a "normal" or "standard" human does not exist. However, experience and scientific studies have produced a range of normal values that can be used for comparison purposes.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>VI-3</b> (Bodily Functions)</p> 	<p>4. Primary focus will be on the systems or component parts of those systems that are examined during the drug evaluation.</p>	<ul style="list-style-type: none"> <li>• Central Nervous System</li> <li>• Eyes</li> <li>• Blood Pressure and Pulse</li> <li>• Balance and Coordination</li> <li>• Body Temperature</li> </ul>
<p><b>15 Minutes</b></p>	<p><b>B. Human Physiology</b></p>	
 <p><b>VI-4</b> (Physiology)</p>	<p>1. Physiology is the study of the functions of living organisms and their parts.</p>	
 <p><b>VI-5A</b> (Murders Inc)</p>	<p>2. A convenient way of discussing human physiology is to list the ten major systems of the body.</p> <p>a. The phrase "MURDERS, INC." helps us remember the names of the ten systems.</p> <p>b. Each letter stands for the name of one system.</p>	<p>Selectively reveal the systems as you discuss each of them.</p>
 <p><b>VI-5B</b> (The Ten Systems)</p>	<p>3. M stands for the MUSCULAR SYSTEM.</p> <p>a. The body has three different kinds of muscles.</p> <p>(1) the heart, or cardiac muscle.</p>	<p><u>Point out</u> that we assess the muscular system in the drug influence evaluation when we test coordination and balance by administering divided attention tests, and when we check for muscle rigidity.</p>

Aids	Lesson Plan	Instructor Notes
	<p>(2) smooth muscles, which control the body's involuntary operations.</p> <p>(3) striated muscles, which carry out our voluntary movements.</p> <p>b. All three types of muscles are examined at various stages of the drug influence evaluation.</p> <p>4. U is for the URINARY SYSTEM.</p> <p>a. The system consists of two kidneys, the bladder, ureters connecting the kidneys to the bladder, and the urethra, which transports the urine out of the body.</p> <p>b. Kidneys filter waste or harmful products, such as drugs and their metabolites, from the blood, and dump these waste products into the bladder.</p> <p>5. The first R in "MURDERS, INC." stands for the RESPIRATORY SYSTEM.</p> <p>a. The major parts of the Respiratory System are the lungs and the diaphragm.</p> <p>b. The diaphragm is a smooth muscle that draws the air into the lungs and forces it out.</p>	<p>Examples: Smooth muscles control breathing, the operation of the pyloric valve (a muscle located at the base of the stomach), dilation and constriction of the pupils, and all other things that we do not consciously control.</p> <p><u>Point out</u> that drugs can usually be detected in the urine, and that collection of a urine specimen or other suitable bodily substance is an important part of the drug influence evaluation.</p> <p><u>Point out</u> that some drugs cause the user to breathe slowly and shallowly, while others cause rapid breathing.</p>

Aids	Lesson Plan	Instructor Notes
	<p>c. Lungs take in oxygen and transfer it to the blood, and remove carbon dioxide and some other waste products from the blood, and expel them into the outside air.</p> <p>6. D stands for the DIGESTIVE SYSTEM.</p> <p>a. Major components of this system are the tongue, teeth, esophagus, stomach, intestines, liver and pancreas.</p> <p>b. The Digestive System breaks down large particles of food, until they are of a size and chemical composition that can be absorbed in the blood.</p> <p>7. E is for the ENDOCRINE SYSTEM.</p> <p>a. The Endocrine system is made up of a number of different glands, that secrete hormones.</p> <p>b. Hormones are complex chemicals that travel through the blood stream and that control or regulate certain body processes.</p>	<p><u>Point out</u> that important clues of drug use, i.e. odors of alcohol beverages, marijuana, chemicals, etc. may be present on a suspect's breath.</p> <p>Remind students that, when drugs are taken orally, they might be retained in the stomach for a while, until any food that is there has been broken down sufficiently to allow passage into the small intestine.</p> <p><b>INSTRUCTOR, FOR YOUR INFORMATION:</b> The glands that make up the Endocrine System include the Thyroid, Parathyroid, Pituitary and Adrenal glands, as well as portions of the pancreas, testes and ovaries.</p> <p><u>Print</u> HORMONES on the dry erase board or flip-chart.</p>

Aids	Lesson Plan	Instructor Notes
	<p>c. Some drugs can mimic the effects of certain hormones, or can react with the hormones in ways that alter the hormones' effects.</p> <p>8. The second R in "MURDERS, INC." stands for the REPRODUCTIVE SYSTEM.</p> <p>9. S is for the SKELETAL SYSTEM.</p> <p>a. Consists of bones, cartilage and ligaments.</p> <p>b. The Skeletal System provides support to the body, permits movement, and forms blood cells.</p> <p>10. The I in "INC" stands for the INTEGUMENTARY SYSTEM.</p> <p>a. Consists of the skin, hair, finger and toe nails, and accessory structures.</p>	<p>The functions of the reproductive system fall into two categories: 1) self-producing (cytogenic), and 2) hormone-producing (endocrinic). We are primarily concerned with hormone production since the hormones produced by the reproductive system aid the nervous system in its regulatory role.</p> <p><u>Point out</u> that the Reproductive and Skeletal Systems are the only major components of physiology and that are not directly involved in the drug influence evaluation.</p> <p><u>Point out</u> that DREs examine the skin for hypodermic injection sites, and for sweating, clamminess, and temperature.</p>

Aids	Lesson Plan	Instructor Notes
	<p>b. The chief functions of the Integumentary System include protection of the body, control of body temperature, excretion of wastes (i.e. through the sweat) and sensory perception.</p> <p>11. N is for the NERVOUS SYSTEM.</p> <p>a. This system consists of the brain, the brain stem, the spinal cord and the nerves.</p> <p>b. Nerves keep the brain informed of changes in the body's external and internal environments.</p> <p>c. Nerves also carry messages from the brain to the body's muscles, tissues and organs.</p> <p>d. The nervous system controls, coordinates and integrates all physiological processes, so that normal body functions can be maintained.</p> <p>12. C is for the CIRCULATORY SYSTEM.</p> <p>a. For our purposes, the most important parts of the Circulatory System are the heart, the blood vessels (e.g., arteries, veins, capillaries, etc.) and the blood.</p>	<p>EMPHASIZE that the Nervous System is one of the most important components of physiology, as far as the drug influence evaluation is concerned.</p> <p>CLARIFICATION: Nerves carry messages to the brain from the sense organs (eyes, ears, nose, etc., and also from pain sensors).</p> <p>CLARIFICATION: The brain uses nerves to send messages commanding the heart to beat, the fingers to move, the pupils to dilate, etc.</p> <p><u>Point out</u> that this is another very important component of physiology, as far as the drug influence evaluation is concerned.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>VI-5C</b> (Interrelated Body Systems)</p>	<ul style="list-style-type: none"> <li>b. Blood is the body's primary transport mechanism: it carries food, water, oxygen, hormones, antibodies, etc. to the body's tissues and organs.</li> <li>c. Blood is also primarily responsible for carrying heat throughout the body.</li> <li>d. And, blood is the main transport mechanism for bringing drugs to the brain.</li> <li>e. The heart, of course, pumps the blood, and causes it to circulate through the body.</li> </ul> <p>13. Homeostasis</p> <ul style="list-style-type: none"> <li>a. Human body is exposed to constantly changing <u>external</u> environment.</li> <li>b. Changes are neutralized by the <u>internal</u> environment - the blood.</li> <li>c. Oxygen, foods, water and other substances are constantly leaving body fluids to enter cells, while carbon dioxide and other wastes are leaving the cells to enter these fluids...</li> <li>d. Yet, the chemical composition of these fluids remains within very narrow limits.</li> </ul>	<p>Solicit students' comments and questions about "MURDERS, INC", the ten major systems of human physiology. Point out that much more will be said about the last two systems (Nervous and Circulatory) later in this session.</p> <p><u>Homeostasis</u> is the dynamic balance, or steady state, involving levels of salts, water, sugars and other materials in the body's fluids.</p>
 <p><b>VI-6</b> (Homeostasis)</p>		

Aids	Lesson Plan	Instructor Notes
<div> </div> <p>45 Minutes</p> <div> </div> <p>VI-7 (Basic Plan of Circulatory System)</p>	<p>e. This phenomenon is called homeostasis.</p> <p><b>C. Major Systems and Body Functions of Concern in Drug Evaluations</b></p> <p>1. Heart and circulatory system.</p> <p>a. Circulation is a closed system, round which blood is propelled by contractions of the heart.</p> <p>b. Blood is driven into arteries, arteries divide into smaller and smaller branches and finally into meshwork of fine capillaries which pervade body tissues.</p> <p>c. Meshwork joins up again to form small veins which become larger trunks as they travel centrally towards the heart.</p>	<p>Point out that “homeo” means elements and “stasis” means balance.</p> <p>Point out that the rhythm of the heart, breathing, constancy of body temperature, and the steady level of blood pressure under specific circumstances or conditions are all manifestations of homeostatic mechanisms at work within the body.</p> <p>Drugs interfere with the homeostatic mechanisms and produce signs and symptoms that can be recognized by a trained DRE.</p> <p>Point out that arteries constrict to aid distribution of blood.</p> <p>Point out that blood does not come into direct contact with the cells, but rather stays in the blood vessels.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>VI-8</b> (Circulatory System)</p>	<p>d. There are two separate circulation systems:</p> <ol style="list-style-type: none"> <li>(1) A systemic circulation concerned with the body as a whole and driven by the left side of the heart.</li> <li>(2) A pulmonary circulation concerned with passage of blood through the lungs and driven by the right side of the heart.</li> </ol>	
 <p><b>VI-9</b> (Heart)</p>	<p>e. The heart is the pump and has two sides:</p> <ol style="list-style-type: none"> <li>(1) Left side pumps blood through the aorta and the arteries to the tissues.</li> <li>(2) Blood, after passing through the tissues, returns via the veins to the right side.</li> <li>(3) Right side pumps blood through the pulmonary artery to the lungs and returns it to the left side of the heart again via the four pulmonary veins.</li> </ol>	<p>Consists of the left atrium and ventricle. The upper chamber (atrium) receives blood from the great veins, the lower chamber discharges blood into the great arteries.</p> <p>Consists of the right atrium and ventricle.</p> <p>Note: The Pulmonary Artery is the only artery that carries <u>de-oxygenated</u> blood; all other arteries carry blood that has received fresh oxygen from the lungs. Likewise, the Pulmonary Vein is the only vein that carries blood <u>rich in oxygen</u>; all other veins carry blood depleted of oxygen back to the heart.</p>

Aids	Lesson Plan	Instructor Notes
	<p>f. The normal heart continues to beat regularly and continuously, with a rest interval never longer than a fraction of a second.</p> <p>(1) Heart rate is the number of beats per minute.</p> <p>(2) Pulse rate is the number of pulsations per minute.</p> <p>(3) Blood pressure (BP) is the force of the blood circulating in the arteries.</p> <p>(4) BP is categorized as systolic or diastolic BP.</p> <p>(5) Systolic pressure is the maximum force that occurs during contraction.</p> <p>(6) Diastolic pressure represents the minimum force that occurs when the heart relaxes.</p>	<p>Point out that heart rate is regulated by the autonomic nervous system: sympathetic nerve fibers insure that heart beats fast enough to maintain circulation during any activity. Parasympathetic nerve fibers tend to slow the heart. This coordinated nerve supply assures that the heart does not beat too fast or too slowly.</p> <p>For the DEC program, the normal range is 60-90 pulsation beats per minute.</p> <p>Point out that some people may exhibit <u>irregular</u> (or arrhythmic) heart beats, i.e. where the interval between pulses varies.</p> <p>Ask students to define "systolic" and "diastolic".</p> <p>Point out that physical conditioning can also affect blood pressure and pulse rate.</p>



Aids	Lesson Plan	Instructor Notes
 <p><b>VI-11</b> (How a neurotransmitter works)</p>	<p>(3) We can imagine messages running along the "wire segments" in much the same manner that electrical impulses run along telephone wires.</p> <p>(4) When the message reaches the end of the "wire segment", it triggers the release of chemicals that flow across the gap, and contact the next "wire segment".</p> <p>(5) When the chemical contacts the next wire segment, it generates an electrical impulse which runs along the wire until it reaches the next gap.</p> <p>(6) At that gap, the message again triggers the release of chemicals that flow across to the next "wire segment", and the process continues.</p> <p>c. In our simple model of nerves, each "wire segment" corresponds to a nerve cell, called a <u>neuron</u>.</p> <p>d. The chemical that flows across the gaps separating neurons is called a <u>neurotransmitter</u>.</p>	<p>Point to a "wire segment".</p> <p>Point to the close up of the gap.</p> <p>Point out that this concept of a nerve as a series of separated "wire segments" is not a true physical model. But it does accurately convey the basic idea of message transmission along nerves.</p> <p>Solicit students' questions about this concept.</p> <p><b>CLARIFICATION:</b> neurotransmitter are the body's <u>chemical messengers</u>.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>VI-12A</b> (Nerve Cell)</p>	<p>e. The body has a number of different neurotransmitter; each carries a different chemical message.</p> <p>f. Each neuron, or "wire segment" has three main parts:</p> <ol style="list-style-type: none"> <li>(1) the cell body.</li> <li>(2) the axon.</li> <li>(3) the dendrite.</li> </ol> <p>g. The <u>axon</u> is the part of the neuron that sends out the neurotransmitter, or chemical messenger.</p> <p>h. The dendrite is the part that receives the neurotransmitter.</p> <p>i. The gap between two neurons is called a <u>synapse</u>, or <u>synaptic gap</u>.</p>	<p><u>Point out</u> that by using a baseball analogy, the Axon would be the "pitcher" of the neurotransmitter and the Dendrite is the "catcher" of the neurotransmitter.</p> <p>Solicit students' questions about nerve cells (neurons).</p>
 <p><b>VI-12B</b> (Classification of Nerves)</p>	<p>3. Classifications of Nerves.</p> <p>a. Some nerves carry messages <u>away from</u> the brain, to the body's muscles and organs.</p> <ol style="list-style-type: none"> <li>(1) These are called <u>Motor</u>, or <u>Efferent</u> nerves.</li> <li>(2) The brain uses motor nerves to send commands to the heart to beat, the lungs to</li> </ol>	

## Aids

## Lesson Plan

## Instructor Notes

breathe, the muscles to contract or expand, and so forth.

- b. Other nerves carry messages to the brain, i.e. from the eyes, ears and other senses, from the muscles, etc.
  - (1) These are called Sensory, or Afferent nerves.
  - (2) The brain decodes the messages that come along the sensory nerves to monitor the condition of the body and of the outside world.
- c. A Fundamental Notion: If something interferes with the messages the brain sends along the motor nerves, the brain's control over the heart, the lungs, the muscles and other organs will be distorted.
- d. Another Fundamental Notion: If something interferes with the messages the brain receives from the sensory nerves, the brain's perception of the outside world and of the body's status will be distorted.
- e. Focus on the Motor nerves. There are two sub-systems of motor nerves.
  - (1) The voluntary nerves send messages to the striated muscles that we consciously control.

Point out that, basically, this is how drugs work: they interfere with transmission or reception of the messages that travel along nerves.

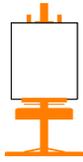


VI-13 (Motor Nerves)

## Aids

## Lesson Plan

## Instructor Notes



(2) The autonomic nerves send messages to the muscles and organs that we do not consciously control, i.e. smooth muscle and cardiac muscle.

f. The Autonomic Sub-system divides into two groups.



(1) The Sympathetic nerves command the body to react in response to fear, stress, excitement, etc.

(2) Parasympathetic nerves carry messages that produce relaxed and tranquil activities.

On the dry erase board or flip-chart print the word "autonomic", and draw two lines from the word one line angling down toward the left, the other angling down toward the right.

Write "Sympathetic" at the end of one line, "Parasympathetic" at the end of the other.

**CLARIFICATION:**

Sympathetic nerves control the body's "fight or flight" responses.

**EXAMPLES:** Sympathetic nerves carry the messages that cause:

- blood pressure to elevate
- pupils to dilate
- sweat glands to activate
- hair to stand on end
- heartbeat to increase & strengthen
- blood vessels of the skin to constrict
- the walls of the hollow viscera to relax (inhibiting digestion)

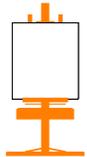
**EXAMPLES:** Parasympathetic nerves carry messages that cause:

- pupils to constrict
- heartbeat to slow
- peripheral blood vessels to dilate
- blood pressure to decrease
- digestion to be facilitated

## Aids

## Lesson Plan

## Instructor Notes



g. Certain neurotransmitter (i.e. chemical messengers) aid in the transmission of messages along sympathetic and parasympathetic nerves.

h. Some drugs mimic the action of these neurotransmitters: When taken into the body, these drugs artificially cause the transmission of messages along sympathetic or parasympathetic nerves.

i. Drugs that mimic the neurotransmitter associated with sympathetic nerves are called sympathomimetic drugs.

(1) Sympathomimetic drugs artificially cause the transmission of messages that produce elevated blood pressure, dilated pupils, etc.

(2) Examples: CNS Stimulants, Hallucinogens, and to some extent PCP and Cannabis.

j. Drugs that mimic neurotransmitters associated with parasympathetic nerves are called para-sympathomimetic drugs.

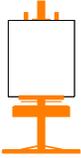
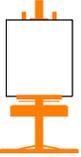
(1) Parasympathomimetic drugs artificially cause the transmission of messages

Write "Sympathomimetic" on the dry erase board or flip-chart.

Ask students to name a category of drugs that would be considered sympathomimetic.

Write "Parasympathomimetic" on the dry erase board or flip-chart.

Ask students to name a drug category that would be con-

Aids	Lesson Plan	Instructor Notes
	<p>that produce lowered blood pressure, drowsiness, etc.</p> <p>(2) Examples: Narcotic Analgesics and CNS Depressants.</p> <p>4. Although there are more than 100 chemicals in the brain, only about two dozen probably are true neurotransmitters.</p> <p>a. Among the primary neurotransmitters that have been identified are:</p> <ul style="list-style-type: none"> <li>o Norepinephrine (also called Noradrenaline)</li> </ul>	<p>sidered parasympathomimetic.</p> <p>Write these neurotransmitter on the dry erase board or flip-chart.</p> <p>Point out that Norepinephrine is a <u>neurotransmitter</u> that produces effects on the body that are similar to the effects produced by Adrenaline (a <u>hormone</u>). Many neurotransmitter correspond to hormones that produce similar effects.</p>
	<ul style="list-style-type: none"> <li>o Acetylcholine</li> <li>o Dopamine</li> <li>o Serotonin</li> <li>o Gama Amino Butric Acid (Abbreviated GABA)</li> <li>o Endorphins and Enkephalins</li> </ul>	<p>Acetylcholine plays a role in muscle control, and affects neuromuscular or myoneural junctions.</p> <p>Dopamine plays a role in mood control and is used in treating Parkinson Disease.</p> <p>Serotonin is a vasoconstrictor, thought to be involved in sleep, wakefulness and sensory perception. Tryptophan is a precursor to serotonin, and has been used to treat insomnia.</p> <p>GABA inhibits various neurotransmitter and also causes a release of growth hormones.</p> <p>These are the body's natural pain relievers.</p>

Aids	Lesson Plan	Instructor Notes
 <b>30 Minutes</b>	<p>b. There are many drugs that artificially induce the effects of neurotransmitter and hormones.</p> <p><b>D. How Drugs Work</b></p> <p>1. In very simple terms, drugs work by artificially creating natural body reactions generally associated with the work of neurotransmitters and hormones.</p>	Solicit students' questions and comments about nerves and neurotransmitter.

Aids	Lesson Plan	Instructor Notes
	<p>a. Therapeutic doses of legitimate prescriptive and over the counter drugs are designed to produce mild and carefully controlled simulations of the natural action of neurotransmitters and hormones.</p> <p>b. Large, abusive doses of drugs may produce greatly exaggerated simulations of the natural action of hormones and neurotransmitters, sometimes with disastrous results.</p> <p>2. When a person ingests a drug and artificially simulates the natural action of hormones and neurotransmitters, the body's dynamic balance is disrupted.</p> <p>a. The body automatically responds to the presence of the drug by producing other hormones and chemicals that can oppose the drug's effects, and bring the body back into balance.</p> <p>(1) <u>Example #1</u>: If a person ingests a stimulant drug that mimics neurotransmitters associated with the sympathetic nerves, the body may react by excreting hormones that depress the bodily functions that the drug is exciting.</p>	<p>Ask students: What drug do many people take to overcome artificially the drowsiness they feel in the morning?</p> <p>Example: Cocaine (a sympathomimetic drug) may artificially create a message commanding the heart to beat so rapidly that cardiac arrest results.</p> <p>Remind students that the body struggles to maintain homeostasis, the dynamic balance of salts, sugars and other substances.</p> <p>If a person ingested Cocaine, for example, the Cocaine would artificially stimulate the body functions. The body would then produce hormones and neurotransmitters to slow down the body functions to try to maintain homeostasis.</p>

## Aids

## Lesson Plan

## Instructor Notes

- (2) Example #2: If a person ingests a drug that depresses some bodily function, the body may pour out one of its natural chemicals that stimulate that same function.
- b. An interesting situation can occur when the drug is no longer psychoactive.
- (1) The chemicals produced by the body in an effort to counteract the drug may still be active.
- (2) These natural chemicals have exactly the opposite effect on the body that the drug had: after all, that is precisely why the body produced those chemicals.
- (3) As a result, the person may feel, appear and act in a manner exactly opposite to the way he or she would feel, appear and act when under the influence of the drug.

Example: Ask students if they have ever experienced this situation...After drinking several drinks, they become drowsy, go to bed and fall asleep quickly. But, after a few hours, when it is still the middle of the night, they suddenly awaken and are wide awake, unable to fall asleep again. What has happened is that the alcohol has worn off,

## Aids

## Lesson Plan

## Instructor Notes



c. We call this situation being on the "downside" of the drug.

(1) It is not uncommon for a DRE to encounter someone on the "downside".



(2) The concept of "Downside" will be especially important to us when we discuss the effects of CNS stimulants and drug combinations.

3. Another interesting effect that drugs can produce is called Negative Feedback.

but the natural CNS Stimulants the body produced to counteract the alcohol are still around.

Write "Downside" on the dry erase board or flip-chart.

Example: with cocaine (a drug that is metabolized, or broken down by the body fairly quickly) the user may be exhibiting drowsiness and general depression by the time the DRE is called to the scene.

DRAW this diagram on the dry erase board or flip-chart:

Solicit students' questions about Downside.

Point out that persons on the "downside" can be dangerous when trying to operate a motor vehicle.

Point out that two common examples of "downside" occur with Cocaine and Methamphetamine. Both drugs stimulate the body.

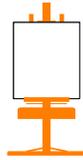
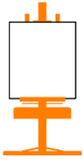
Then the body attempts to "counteract" the stimulant effects. When the effects of the drug diminish, the results may mimic a CNS depressant or a Narcotic Analgesic.

Write "Negative Feedback" on the dry erase board or flip-chart.

## Aids

## Lesson Plan

## Instructor Notes



VI-14  
(Tolerance)

- a. By taking the drug, the person artificially simulates the action of certain hormones and/or neurotransmitters.
- b. If the person continues to take the drug, the body may simply cease producing the natural chemicals that the drug simulates.
- c. In effect, the body comes to rely on the drug to supply itself with those chemicals.
- d. One result of this may be increased tolerance to the drug: since the body isn't producing its own natural chemicals, it can more easily stand the drug.
- e. Example of Negative Feedback: When people regularly use heroin, cocaine or marijuana, their bodies may cease producing the neurotransmitters and hormones known to be crucial for proper pain relief, stress reduction, mental stability and motivation.

Write "The Body Quits Producing The Natural Chemicals" on the dry erase board or flip-chart.

Write "Increased Tolerance" on the dry erase board or flip-chart.

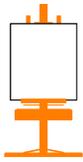
Emphasize: Habitual users of drugs may develop tolerance to the drug. As a result, they may exhibit relatively little evidence of impairment on the psychophysical tests. Even tolerant drug users, when impaired, usually exhibit clinical evidence. (i.e. in the vital signs and eye signs - such as HGN)

Point out that because of this Negative Feedback, the user becomes dependent on the drug to cope with the stresses and strains of daily life.

## Aids

## Lesson Plan

## Instructor Notes



f. Another result may be physical dependence, or addiction.

4. Why do people take drugs?

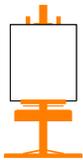
a. In simplest terms, people take drugs because they like the feelings the drugs produce.

b. The artificial simulation of the natural action of hormones and neurotransmitters appears to permit the user to create any feeling or mood he or she desires.

c. As time goes on, and negative feedback develops, the user finds that he or she can only achieve those feelings and moods if the drug is taken.

5. One final concept is important for an understanding of how drugs work.

a. A Metabolite is a product of metabolism, the chemical changes that take place when the drug reacts with enzymes and other substances in the body.



Write "Physical Dependence" on the dry erase board or flip-chart.

Pose the questions to the class. Solicit responses.

Write "Metabolite" on the dry erase board or flip-chart.

Instructor information:

Metabolism is defined as the combined chemical and physical processes that take place in the body involving the distribution of nutrients and resulting in growth, energy production, the elimination of wastes, and other body functions. There are two basic phases of metabolism: anabolism, the constructive phase, during which small molecules resulting from the digestive process are built up into com-

**Aids****Lesson Plan****Instructor Notes****15 Minutes**

**VI-15A**  
(Medical  
Conditions)

- b. The body uses chemical reactions to break down the drug, and ultimately to eliminate it.
- c. Sometimes, metabolites of the original drug are themselves drugs, and cause impairment.
- d. For example, the body quickly metabolizes heroin into morphine, and it is the morphine that actually produces the effects the heroin user experiences.

**E. Medical Conditions**

- 1. Certain medical conditions or injuries may cause signs and symptoms similar to those of drug impairment.
  - a. Bipolar Disorder (Manic Depression) - a condition characterized by the alteration of manic and depressive states.

plex compounds that form the tissues and organs of the body; and catabolism, the destructive phase, during which larger molecules are broken down into simpler substances with the release of energy.

Example: When we drink alcohol, we initiate a series of chemical reactions that ultimately transform the alcohol into harmless carbon dioxide and water.

Solicit students' questions and comments about how drugs work.

Refer students to the list contained in their manuals.

Point out that many of the conditions listed are serious enough to prevent driving.

**Aids****Lesson Plan****Instructor Notes**

**VI-15B**  
(Other  
Conditions)

- b. Conjunctivitis - inflammation of the conjunctiva.
  
- c. Diabetes - a condition that can result in insulin shock (taking too much insulin) which may produce tremors, increased blood pressure, rapid respiration, lack of coordination, headache, confusion and seizures.
  
- d. Head Trauma - normally due to a severe blow or bump to the head.
  
  
  
  
  
  
  
  
  
- e. Multiple Sclerosis (MS) - a degenerative muscular disorder.

Conjunctivitis is a condition caused by infection, allergy or irritation of the mucous membrane lining of the eyes, resulting in a "pink eye" appearance. A casual observer might mistake this for the bloodshot conditions associated with Cannabis or alcohol.

The most common problem with diabetics arises when they take too much insulin, so that their blood sugar levels become extremely low. They may be very confused, sweat profusely, and exhibit increased pulse rate and increased blood pressure.

Head Trauma may injure the brain and create disorientation, confusion, lack of coordination, slowed responses and speech impairment.

Point out that head trauma may produce disorientation, confusion, unequal pupil size, unequal tracking ability of the eyes, or the drooping of one eyelid while the other remains normal

MS is a progressive disease in which the nerve fibers of the brain and spinal cord lose their myelin cover. Some signs and symptoms are abnormal sensations in the

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>f. Shock - a sudden or violent disturbance in the mental or emotional faculties.</li> <li>g. Stroke - a medical condition caused by a rupture or obstruction (as by a clot) of an artery of the brain.</li> <li>h. Others - Carbon Monoxide poisoning, Seizures, Endocrine disorders, Neurological conditions, Psychiatric conditions and infections.</li> </ul> <p>2. Normal conditions can affect vital signs.</p> <ul style="list-style-type: none"> <li>a. Exercise</li> <li>b. Excitement</li> <li>c. Fear</li> <li>d. Anxiety</li> <li>e. Depression</li> <li>f. Other</li> </ul>	<p>face or extremities, weakness, double vision, etc.</p> <p>A shock victim may be dazed, uncoordinated, non-responsive.</p> <p><u>Point out</u> that stroke may produce many of the same indicators as will head trauma. In addition, stroke victims may have pupils that are markedly different in size, and one pupil may exhibit no visible reaction to light while the other reacts normally.</p> <p>Review physiologic changes that may be mistaken for drug induced symptoms. For example, strenuous exercise increases heart rate and rapidity and rate of respiration; surprise, fear and pain dilate the pupils markedly.</p> <p>Total effect is greater than the sum of the effects taken independently.</p> <p>For example, a CNS stimulant/ CNS depressant combination may cause the suspect to look and act like a "wide awake drunk".</p>

**Aids****Lesson Plan****Instructor Notes****10 Minutes****F. Summary**

1. Briefly review main points of the lesson.
  - a. Basic understanding of how the body works is necessary to:
    - o understand why the drug evaluation is conducted in a systematic manner.
    - o understand why the results, when viewed in their totality, provide reliable indicators of impairment within broad categories of drugs.

For example, a person who has been using Marijuana, Cocaine, or some other drug may also consume a moderate amount of alcohol in the hope that, if they are stopped and asked to submit to a breath test, the arresting officer will be fooled by the low to moderate BAC into thinking that the suspect is simply "slightly" impaired by alcohol alone.

Suspect alcohol, however, impairment is not consistent with BAC.

Emphasize that research in drug intoxication and the interaction with neurotransmitters and neurohormones is in its infancy. There are many unknowns!

This limited overview will not qualify students as medical specialists!

The knowledge gained during this session must be supplemented by additional reading and/or instruction. The body of knowledge is being constantly expanded.

Point out that the best response to questions regarding bodily functions

**Aids****Lesson Plan****Instructor Notes**

- b. The body maintains homeostasis (equilibrium) by constantly adjusting to changes in the external and internal environment:
- (1) When drugs are introduced into the body this process comes into play.
  - (2) When drugs interact in the body they tend to:
    - speed things up, or
    - slow things down, or
    - confuse signals, or
    - block signals, or
    - some combination of the above.
  - (3) The effects of drugs can be detected and/or observed in the drug evaluation.

and or specific drug interactions is "I don't know. I conducted a series of evaluations and documented my observations. Based on my training and experience the results of my observations are consistent with those produced by persons impaired by \_\_\_\_."

Point out that the body functions as a total unit in an integrated and coordinated manner.

Point out that this is a very simplistic overview of how drugs work.

Aids	Lesson Plan	Instructor Notes
 <p><b>VI-16</b> (Physiological Pursuit)</p>	<ol style="list-style-type: none"><li>2. Drug Evaluations<ol style="list-style-type: none"><li>a. Detailed instructions on procedures and expected results will be covered in following sessions.</li></ol></li><li>3. Physiological Pursuit</li></ol>	<p>Solicit and answer students' questions.</p> <p>For review of the Physiology and Drugs session, questions can be asked of the students as if it were a game of Trivial Pursuit. See attachment.</p>

## Session VI

### Physiology and Drugs: An Overview



VI-1

### Physiology and Drugs: An Overview

Upon successfully completing this session the student will be able to:

- Explain in layman's terms the general concept of human physiology
- Explain in layman's terms the purpose and functions of major systems in the body (nervous system, circulatory system, respiratory system, etc.)

Drug Evaluation &amp; Classification Training

VI-2A

### Physiology and Drugs: An Overview (Continued)

- Explain in layman's terms how drugs work in the body
- Explain in general terms how the drug evaluation is used to detect signs or symptoms indicative of drug impairment
- Correctly answer the "topics for study" questions at the end of this session

Drug Evaluation &amp; Classification Training

VI-2B

### Bodily Functions Examined During Drug Evaluation

- Central Nervous System
- Eyes
- Blood Pressure and Pulse
- Balance and Coordination
- Body Temperature

Drug Evaluation &amp; Classification Training

VI-3

### Physiology:

The study of the functions of  
living organisms and their parts

Drug Evaluation &amp; Classification Training

VI-4

### MURDERS, INC.

Drug Evaluation &amp; Classification Training

VI-5A

## The Ten Systems of Human Physiology: *MURDERS, INC.*

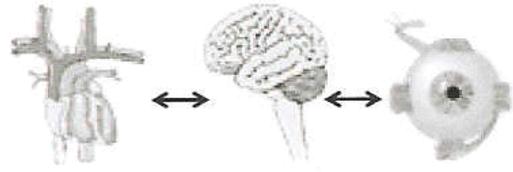
**M** is for Muscular System  
**U** is for Urinary System  
**R** is for Respiratory System  
**D** is for Digestive System  
**E** is for Endocrine System  
**R** is for Reproductive System  
**S** is for Skeletal System  
**I** is for Integumentary System  
**N** is for Nervous System\*  
**C** is for Circulatory System\*

**\*For DRE officers, these are key systems**

Drug Evaluation & Classification Training

VI-5B

## Interrelated Body Systems



Drug Evaluation & Classification Training

VI-5C

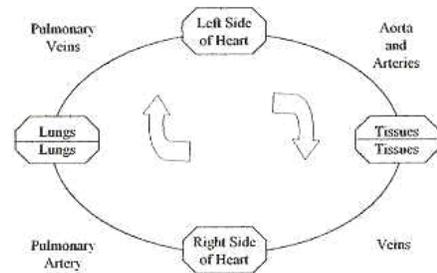
## Homeostasis

Dynamic balance or steady state involving levels of salts, water, sugars and other material in the body's fluids

Drug Evaluation & Classification Training

VI-6

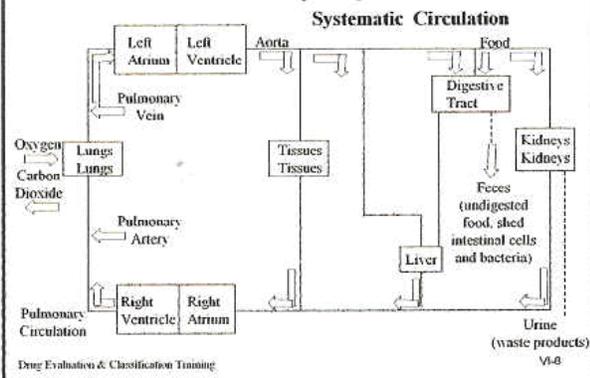
## Basic Plan of the Circulatory System



Drug Evaluation & Classification Training

VI-7

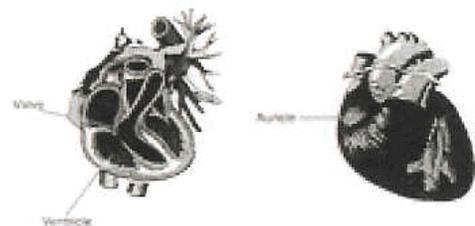
## Circulatory System



Drug Evaluation & Classification Training

VI-8

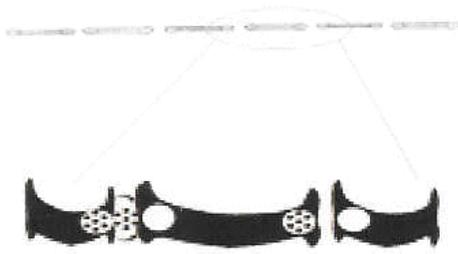
## The Heart



Drug Evaluation & Classification Training

VI-9

## A Simple Concept of a Nerve



Drug Evaluation &amp; Classification Training

VI-10

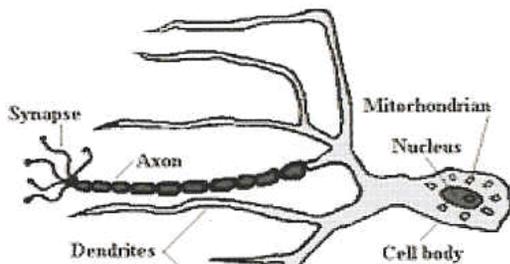
## How a Neurotransmitter Works

Steps are numbered sequentially:

1. Neuron makes a neurotransmitter
2. Vesicles store neurotransmitter
3. Neurotransmitter enters gap to transmit electrical impulse to receptor site
4. Receptor performs a function

Drug Evaluation &amp; Classification Training

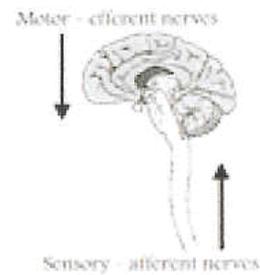
VI-11



Drug Evaluation &amp; Classification Training

VI-12A

## Classification of Nerves



Drug Evaluation &amp; Classification Training

VI-12B

## Motor Nerves

- Voluntary
- Autonomic

Drug Evaluation &amp; Classification Training

VI-13

## Tolerance

- May exhibit relatively little evidence of impairment on the psychophysical tests.
- Even tolerant drug users, when impaired, usually exhibit clinical evidence (i.e. vital signs, eye signs, etc.).

Drug Evaluation &amp; Classification Training

VI-14

## Medical Conditions

- **Bipolar Disorder**
- **Diabetes**
- **Conjunctivitis**
- **Multiple Sclerosis and similar conditions**

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VI-15A

## Other Medical Conditions

- **Shock**
- **Head Trauma**
- **Stroke**

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VI-15B

## Physiological Pursuit

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VI-16

## QUESTIONS?

Drug Evaluation & Classification Training

## INSTRUCTIONS FOR PHYSIOLOGICAL PURSUIT

1. Preparation and Rules of the Game
  - a. Ahead of time, secure five like items as prizes (such as lottery scratch off tickets).
  - b. Select two teams of five students each. Appoint a captain for each team. (Usually home team and visitors team. Attempt to balance teams and avoid “sharks”.)
  - c. Appoint a time keeper.
  - d. Appoint a score keeper.
  - e. Select a panel of instructor judges.
  - f. On a flip-chart or dry erase board, mark as follows:

	Questions	Score	<u>V</u>
		<u>Home</u>	<u>i</u>
			<u>s</u>
			<u>i</u>
			<u>t</u>
			<u>o</u>
			<u>r</u>
	1.		
	2.		
	3.		
	4.		
	5.		
	6.		
	7.		
	8.		
	9.		
	10.		
	11.		
	12.		
	13.		
	14.		
	15.		

g. Place the teams on opposite sides of the

room in view of the screen.

- h. Selectively reveal the questions.

- i. Cover all the questions with two pieces of paper. When a question is selected, reveal the question using the two papers to cover all others and turn the projector on long enough to read the question and repeat it. Then turn the projector off. The team getting the question has 20 seconds to discuss and come up with the “correct” answer. The captain can answer the question or designate a team member to do so.
- j. The judges decide if the answer is correct. If not, the other team may answer. If neither team gets the answer, no points are scored and the game goes on to the next question.

## 2. Playing the Game

- a. To start the game, flip a coin and have the team captains call the result while the coin is in the air. The winning team captain can elect to receive or pass the first question selection to the opposing team.
- b. The selected team starts with the question selection and the selection alternates until the game ends.
- c. As the questions are selected, the score keeper crosses out those selected. He also awards one point to the team answering the question correctly.
- d. “No coaching from the audience.”
- e. The team with the most points after 14 questions wins. If the score is tied, use the last question to the break tie.

## QUESTIONS FOR PHYSIOLOGICAL PURSUIT

**1. Name the major body systems.**

Muscular, Urinary, Respiratory, Digestive, Endocrine, Reproductive, Skeletal, Integumentary, Nervous, and Circulatory.

**2. What vein carries oxygenated blood?**

Pulmonary vein. The pulmonary vein returns oxygenated blood from the lungs to the left side of the heart. The left side of the heart then pumps the oxygenated blood via arteries throughout the body. The pulmonary artery carries de-oxygenated blood from the right side of the heart to the lungs.

**3. What is the function of the endocrine system?**

The endocrine system is composed of ductless glands that release chemical messengers, called hormones, into the bloodstream. The function is the regulation of various bodily processes by the production and release of hormones.

**4. Explain the “downside” effect of a drug.**

The “downside” effect of a drug refers to the post euphoric stage of a drug’s effects. As the effects of a drug wear off, the individual may display effects that are essentially the opposite of the “high” state that was brought about by the drug. This effect is in part due to the body’s attempt to counteract the effects of a drug.

**5. Define homeostasis.**

Homeostasis is basically a physiological equilibrium or dynamic balance. Homeostasis refers to the body’s mechanisms that keep the levels of fluids, salts, chemicals and other internal substances in a safe balance. The regulation of temperature is an example of homeostasis at work.

**6. Hair and nails are part of what system?**

The Integumentary system. This system also includes the skin.

**7. Name the two circulatory systems.**

The systemic circulatory system, which is driven by the left side of the heart, and pulmonary circulatory system, driven by the heart’s right side.

**8. The functions of the organs of the body are controlled by what two systems?**

The endocrine and nervous system.

**9. Define synapse, axon, and dendrite.**

These structures are all part of the nerve cell, or neuron. The axon is the part of the neuron that releases neurotransmitter from a terminal into the synapse. An electrical impulse causes the axon to release the neurotransmitter. The synapse is the gap between nerve cells and is also called the synaptic gap. The dendrite refers to a structure that receives the chemical message from the neurotransmitter. There are often many dendrites on each neuron. The neurotransmitter fits into receptor sites on the dendrite and causes an electrical message to be sent to the neuron's body.

**10. Define neurotransmitter and hormone.**

Both are chemical messengers. Neurotransmitter are chemicals that send messages within the nervous system. Hormones are released by glands in the endocrine system into the bloodstream.

**11. \_\_\_\_\_ nerves carry messages AWAY from the brain to the body's muscles and organs.**

Efferent, or Motor nerves. These nerves cause a motor response. Afferent nerves send sensory messages to the brain. The central nervous system interprets these messages and if appropriate, calls for a response through the efferent nerves.

**12. The \_\_\_\_\_ nervous system commands the body to react to stress, fear, and excitement.**

The Sympathetic nervous system, a division of the Autonomic Nervous System, produces the body's "fight or flight" response to real or perceived danger. Drugs that mimic the activation of the sympathetic nervous system are "sympathomimetics". CNS Stimulants have effects closest to the effects of sympathetic nervous system activation.

**13. Explain "negative feedback."**

Refers to the body's response to taking a drug that has effects similar to natural internal chemicals. After repeated exposure to the drug, the body responds by slowing, or even stopping the production of the internal chemical. In time, the body begins to rely on the drug. An example of negative feedback involving legitimate substances is insulin dependant

diabetics. Once an individual begins to take insulin, the person's body will eventually stop making its own insulin. The person must obtain insulin by administering it.

**14. What two types of nerves make up the autonomic nervous subsystem?**

The Sympathetic and Parasympathetic nerves. The sympathetic nervous system initiates the body's "fight or flight" response to real or perceived danger. The parasympathetic nervous system parallels or balances the sympathetic nervous system. This system initiates calming and digestive processes.

**15. Define metabolite.**

A metabolite is the by-product of the body's chemical breakdown of various substances for elimination. Metabolites may or may not be psychoactive by themselves. Often times a toxicological analysis will disclose various metabolites of a drug, rather than the parent drug.

## Topics for Study

1. What is a neurotransmitter? What is a hormone?

**A Neurotransmitter is a chemical that passes from the axon of one nerve cell to the dendrite of the next cell, and that carry messages across the gap between the two nerve cells.**

**Hormones are chemicals produced by the body's endocrine system that are carried through the blood stream to the target organ. They exert great influence on the growth and development of the individual, and they aid in the regulation of numerous body processes.**

2. What is a dendrite? What is an axon? What is a synapse?

**The dendrite is the part of a neuron (nerve cell) that receives a neurotransmitter.**

**The axon is the part of a neuron (nerve cell) that sends out a neurotransmitter.**

**The synapse is the gap or space between two neuron (nerve cells).**

3. Do arteries carry blood toward the heart or away from the heart?

**Arteries carry blood away from the heart.**

4. What is unique about the Pulmonary Artery?

**The pulmonary artery is the only artery that carries blood depleted of oxygen.**

5. What are the two types of nerves that make up the Autonomic Nervous Subsystem?

**Sympathetic Nerves**

**Parasympathetic Nerves**

6. Is Cocaine sympathomimetic or parasympathomimetic? What about Heroin?

**Cocaine is a sympathomimetic drug.**

**Heroin is a parasympathomimetic drug.**

7. Explain the concept of the "downside effect". Explain the concept of "Negative Feedback".

**Downside effect occurs when the body reacts to the presence of a drug by producing hormones or neurotransmitters to counteract the effects of the drug consumed.**

**Negative feedback occurs when the brain becomes accustomed to the presence of drugs and stops producing the natural chemicals that correspond to the drug.**

8. What do we call the nerves that carry messages away from the brain? What do we call the nerves that carry messages toward the brain?

**The nerves that carry messages away from the brain are called the Motor Nerves, or the Efferent Nerves.**

**The nerves that carry messages toward the brain are called the Sensory Nerves, or the Afferent Nerves.**

Two Hours

**SESSION VII**  
**EXAMINATION OF VITAL SIGNS**

## SESSION VII      **EXAMINATION OF VITAL SIGNS**

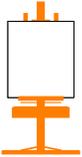
Upon successfully completing this session the student will be able to:

- o Explain the purposes of the various vital signs examinations in the drug influence evaluation procedure
- o Explain the administrative procedures for these examinations
- o Explain the cues obtained from these examinations
- o Document the examinations of vital signs accurately and completely
- o Correctly answer the "topics for study" at the end of this session

### Content Segments

### Learning Activities

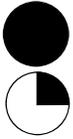
- |                                |                                 |
|--------------------------------|---------------------------------|
| A. Purpose of the Examinations | o Instructor Led Presentations  |
| B. Procedures and Cues         | o Instructor Led Demonstrations |
| C. Demonstrations              | o Audio Tape Presentation       |
| D. Documentation Procedures    | o Student Led Demonstrations    |
| E. Practice                    | o Students' Hands On Practice   |
|                                | o Reading Assignments           |

Aids	Lesson Plan	Instructor Notes
 <p><b>5 Minutes</b></p>  <p><b>VII-1 (Title)</b></p>  <p><b>VII-2A&amp;B (Session Objectives)</b></p> 	<p><b>EXAMINATIONS OF VITAL SIGNS</b></p> <p><b>A. Purposes of the Examinations</b></p> <ol style="list-style-type: none"> <li>1. The vital signs that are relevant to the drug influence evaluation include: <ol style="list-style-type: none"> <li>a. Pulse rate</li> <li>b. Blood pressure</li> <li>c. Temperature</li> </ol> </li> <li>2. Different types of drugs affect these vital signs in different ways. <ol style="list-style-type: none"> <li>a. Certain drugs tend to "speed up" the body and <u>elevate</u> these vital signs.</li> <li>b. Other drugs tend to "slow down" the body and <u>lower</u> these vital signs.</li> </ol> </li> </ol>	<p>Total Lesson Time: Approximately 120 Minutes</p> <p>Display Session Title</p> <p>Briefly review the content, objectives and activities of this session.</p> <p><u>Point out</u> these vital signs on the wall chart.</p> <p><u>Clarification</u></p> <ul style="list-style-type: none"> <li>o pulse may quicken</li> <li>o blood pressure may rise</li> <li>o temperature may rise</li> </ul> <p><u>Clarification</u></p> <ul style="list-style-type: none"> <li>o pulse may slow</li> <li>o blood pressure may drop</li> <li>o temperature may fall</li> </ul>

## Aids

## Lesson Plan

## Instructor Notes



75 Minutes



VII-3 (Pulse Definitions)

3. Systematic examination of the vital signs gives us much useful information concerning the possible presence or absence of various categories of drugs.

**B. Procedures and Cues**

1. Measurement of pulse rate.
  - a. Pulse is the expansion and relaxation of an artery generated by the pumping action of the heart.
  - b. Pulse Rate is the number of pulsations in an artery per minute.
  - c. An artery is a strong, elastic blood vessel that carries blood from the heart to the body tissues.
  - d. A vein is a blood vessel that carries blood back to the heart from the body tissues.

Point out that pulse rate is equal to the number of contractions of the heart per minute.

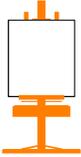
Instructor, for your information: Technically speaking, pulse rate is not quite the same thing as heart beat rate. There are rare and very serious conditions that could cause the heart to beat so weakly that it is unable to force blood through some or all arteries. In that case, there might be no discernable pulse even though the heart is beating. But with a normal, healthy heart, pulse rate will equal heart beat rate.

Aids	Lesson Plan	Instructor Notes
 <p><b>VII-4 (Radial Artery)</b></p>	<ul style="list-style-type: none"> <li>e. When the heart contracts, it squeezes blood out of its chambers into the arteries.</li> <li>f. The surging blood causes the arteries to expand.</li> <li>g. By placing your fingers on the skin next to an artery and pressing down, you can feel the artery expand as the blood surges through.</li> <li>h. By keeping your fingers on the artery and counting the number of pulses that occur in one minute, you will measure the pulse rate.</li> <li>i. Pulse is easy to measure, once you locate an artery close to the surface of the skin.</li> <li>j. One convenient pulse point involves the radial artery. <ul style="list-style-type: none"> <li>o The radial artery can be located in or near the natural crease of the wrist, on the side of the wrist next to the thumb.</li> <li>o Hold your left hand out, with the palm down.</li> <li>o Place the tips of your right hand's index finger and middle finger into the crease of your left wrist, and exert a slight pressure.</li> <li>o Allow your left hand to curl downward.</li> </ul> </li> </ul>	<p><u>Emphasize:</u> The "surge" can be felt as the blood is squeezed from the heart through an artery. The pulse cannot be felt in a vein.</p> <p><u>Demonstrate this,</u> by holding your fingers on your own radial artery.</p> <p><u>Point to</u> the radial artery pulse point on your own wrist.</p> <p><u>Demonstrate</u> this.</p> <p><u>Demonstrate</u> this.</p> <p><u>Demonstrate</u> this.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>VII-5</b> (Brachial Artery)</p>	<ul style="list-style-type: none"> <li>o You should be able to feel the pulse in your radial artery.</li> <li>k. Another pulse point involves the brachial artery. <ul style="list-style-type: none"> <li>o The brachial artery can be located in the crook of the arm, halfway between the center of the arm and the side of the arm closest to the body.</li> <li>o Hold your left hand out, with the palm up.</li> <li>o Place the tips of your right hand's index and middle fingers into the crook of your left arm, close to the body, and exert a slight pressure.</li> <li>o You should be able to feel the pulse in your brachial artery.</li> </ul> </li> <li>l. Another pulse point involves the carotid artery. <ul style="list-style-type: none"> <li>o The carotid artery can be located in the neck, on either side of the Adam's apple.</li> <li>o Place the tips of your right hand's index and middle fingers alongside the right side of your Adam's apple.</li> </ul> </li> </ul>	<p><u>Ask</u> students whether they can feel their pulses. <u>Coach</u> any students who have difficulty in locating the pulse.</p> <p><u>Point to</u> the brachial artery pulse point in your own arm.</p> <p><u>Instruct</u> students to roll up their sleeves, if necessary, to expose their brachial artery pulse points.</p> <p><u>Demonstrate</u> this.</p> <p><u>Demonstrate</u> this.</p> <p><u>Ask</u> students whether they can feel their pulses. <u>Coach</u> any students who have difficulty locating the pulse.</p> <p><u>Point out</u> the carotid artery pulse point on your own neck.</p> <p><u>Demonstrate</u> this.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>VII-6</b> (Pulse Technical Terms)</p>	<ul style="list-style-type: none"> <li>o You should be able to feel the pulse in your carotid artery.</li> <li>m. Basic do's and don'ts of measuring pulse. <ul style="list-style-type: none"> <li>o <u>Don't</u> use your thumb to apply pressure while measuring a subject's pulse.</li> <li>o If you use the carotid artery pulse point, <u>don't</u> apply pressure to both sides of the Adam's apple: this can cut off the supply of blood to the brain.</li> <li>o When measuring the pulse rate, use time intervals of 30 seconds.</li> </ul> </li> <li>n. Some technical terms associated with pulse rate: <ul style="list-style-type: none"> <li>(1) <u>Tachycardia</u>: Abnormally rapid heart rate.</li> <li>(2) <u>Bradycardia</u>: Unusually slow heart rate.</li> <li>(3) <u>Arrhythmia</u>: Abnormal heart rhythm.</li> </ul> </li> </ul>	<p><u>Ask</u> students whether they can feel their pulses. <u>Coach</u> any students who have difficulty locating the pulse.</p> <p><u>Note</u>, however, that there is wide variation in "normal" human pulse rate.</p> <p><u>Point out</u> that there is an artery located in the thumb close to the surface of the skin. If you apply pressure with the thumb, you may wind up measuring your own pulse when you think you are measuring the suspect's.</p> <p><u>Point out</u> that pulse rate is always expressed as "beats per minute". When you count the beats during an interval of 30 seconds, you must double the result to obtain the pulse rate.</p>



Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>o Example: a blood pressure of 120 means that the blood is pressing on the walls of the artery with enough force to push liquid mercury 120 millimeters up a glass tube.</li> <li>o We commonly abbreviate "millimeters of mercury" as mmHg.</li> </ul> <ul style="list-style-type: none"> <li>b. Blood Pressure changes constantly as the heart contracts and relaxes.</li> <li>c. Blood Pressure reaches its maximum as the heart contracts and sends the blood surging through the arteries. This is called the <u>systolic</u> pressure.</li> <li>d. Blood Pressure reaches its minimum when the heart is fully expanded. This is called the <u>diastolic</u> pressure.</li> <li>e. It is always necessary to measure and record both the systolic and diastolic blood pressure.</li> <li>f. The device used for measuring blood pressure is called a <u>sphygmomanometer</u>.</li> </ul>	<p><u>Point out</u> that 120 millimeters is approximately four and three-quarter inches.</p> <p>Print "mmHg" on the dry erase board or flip-chart.</p> <p><u>Instructor, for your information:</u> "Hg" is the chemical symbol for the element mercury. It comes from Hydrargyrum, the Latin word for mercury.</p> <p><u>Remind</u> students that "systolic" is the higher number, "diastolic" the lower number.</p> <p><u>Memory aid:</u>  <u>S</u>ystolic: "S" for "Superior"  <u>D</u>iastric: "D" for "Down"</p> <p><u>Exhibit</u> a sphygmomanometer.</p>

Aids	Lesson Plan	Instructor Notes
	<p>g. The sphygmomanometer has a special cuff that can be wrapped around the subject's arm and inflated with air pressure.</p> <p>h. As the pressure in the cuff increases, the cuff squeezes tightly on the arm.</p> <p>i. When the pressure gets high enough, it will squeeze the artery completely shut.</p> <p>j. Blood will cease flowing through the brachial artery. And, since the brachial artery "feeds" the radial artery, blood will also cease flowing through the radial artery.</p> <p>k. If we <u>slowly</u> release the air in the cuff, the pressure on the arm and on the artery will start to drop.</p>	<p><u>Write</u> "SPHYGMOMANOMETER" on the dry erase board or flip-chart.</p> <p><u>Select</u> a student to come before the class. Have the student sit in a chair facing the class, and roll up a sleeve (if necessary) to expose a bicep.</p> <p>Advise students to check for birth control implants in the upper left arm. If subject has an implant, blood pressure should be taken on the right arm and documented.</p> <p><u>Instruct</u> the student to elevate the arm and squeeze the fist several times; explain that this helps to drain blood from the arm.</p> <p><u>Wrap</u> the cuff around the student volunteer's arm and inflate it.</p> <p><u>Ask</u> the student volunteer whether they can feel the pressure of the cuff.</p> <p><u>Ask</u> students: "What artery is located in the crease of the elbow?" (<u>Point</u> to that location on the student volunteer's arm).</p> <p><u>Release</u> the pressure in the cuff on the student volunteer's arm.</p>

Aids	Lesson Plan	Instructor Notes
	<ol style="list-style-type: none"> <li>1. Eventually, the pressure will drop enough so that blood will once again start to flow through the artery.               <ul style="list-style-type: none"> <li>o Blood will start flowing in the artery once the pressure <u>inside</u> the artery equals the pressure <u>outside</u> the artery.</li> <li>o The two pressures will become equal when the air pressure in the cuff drops down to the <u>systolic</u> pressure.</li> <li>o When that happens, blood will spurt through the artery each time the heart contracts.</li> </ul> </li>   <li>o Once the air pressure in the cuff drops down to the <u>diastolic</u> level, the blood will flow continuously through the artery.</li> </ol>	<p><u>Ask</u> students: "How far must the pressure in the cuff drop before the blood can start to squeeze through the artery."</p> <p><u>Ask</u> students: "What would happen if we allowed the pressure in the cuff to drop down to the <u>systolic</u> level, and held the air pressure at that level?"</p> <p><u>Point out</u> that the blood would spurt through the artery each time the heart <u>contracted</u>, but would cease flowing when the heart <u>expanded</u>.</p> <p><u>Ask</u> students: "How far down must the air pressure in the cuff drop before the blood will flow through the artery <u>continuously</u>?"</p>

Aids	Lesson Plan	Instructor Notes
 <p>VII-8 (Basics of BP)</p>	<p>m. Overview of procedures for measuring blood pressure.</p> <ul style="list-style-type: none"> <li>o Apply enough air pressure to the cuff to cut off the flow of blood through the artery.</li> <li>o Slowly release the air pressure until the blood just begins to spurt through the artery: that level will be the <u>systolic</u> pressure.</li> <li>o Continue to release the air pressure until the blood flows continuously through the artery: that level will be the <u>diastolic</u> pressure.</li> </ul> <p>n. We can <u>listen</u> to the spurting blood, using a <u>stethoscope</u>.</p> <ul style="list-style-type: none"> <li>o Apply the stethoscope to the skin directly above the artery.</li> <li>o Apply pressure to the cuff, enough to cut off the flow of blood.</li> </ul>	<p><u>Demonstrate</u>, using the student-volunteer (apply pressure to the cuff).</p> <p>Slowly release the pressure in the cuff.</p> <p><u>Ask</u> students:</p> <p>(1) "How can we tell when the blood starts to spurt through the artery?"</p> <p>(2) "How can we tell when the blood is flowing continuously through the artery?"</p> <p><u>Exhibit</u> a stethoscope.</p> <p><u>Demonstrate</u>, using the student volunteer.</p> <p><u>Inflate</u> the cuff on the student volunteer's arm.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>VII-9</b> (Korotkoff Sounds)</p>	<ul style="list-style-type: none"> <li>o When no blood is flowing through the artery, we hear <u>nothing</u> through the stethoscope.</li> <li>o Slowly release the air from the cuff, letting the pressure start to drop.</li> <li>o When we drop to the systolic pressure, we start to hear a <u>spurting</u> sound.</li> <li>o As we continue to allow the air pressure to drop, the surges of blood become steadily longer.</li> <li>o When we drop to the diastolic pressure, the blood flows steadily and all sounds cease.</li> <li>o. The sounds that we listen to are called <u>Korotkoff Sounds</u>. They are divided into 5 phases.</li> <li>o Phase 1 - the first appearance of clear, tapping sounds that gradually increase in intensity.</li> <li>o Phase 2 - the sounds change to a murmur and take on a swishing quality.</li> </ul>	<p><u>Release</u> the air in the cuff.</p> <p><u>NOTE:</u> This begins as a clear, tapping sound.</p> <p><u>NOTE:</u> The sounds take on a swishing quality, and become fainter.</p> <p>Excuse the student volunteer and thank them for participating.</p> <p><u>Point out</u> that the beginning of Phase 1 corresponds to the systolic pressure.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>VII-10</b> (Sphygmomanometer)</p>	<ul style="list-style-type: none"> <li>o Phase 3 - the sounds develop a loud, knocking quality (not quite as clear as the Phase 1 sounds).</li> <li>o Phase 4 - the sounds become muffled and again have a faint swishing quality.</li> <li>o Phase 5 - the sounds cease.</li> <li>q. Familiarization with the sphygmomanometer.</li> <li>o The <u>compression cuff</u> contains an inflatable rubber bladder.</li> <li>o A tube connects the bladder to the <u>manometer</u>, or pressure gauge.</li> <li>o Another tube connects the bladder to the <u>pressure bulb</u>, which can be squeezed to inflate the bladder.</li> <li>o The <u>pressure control valve</u> permits inflation</li> </ul>	<p><u>Point out</u> that the beginning of Phase 5 corresponds to the diastolic pressure.</p> <p><u>Hand out</u> stethoscopes and sphygmomanometers (one per each student is desirable. At a minimum, there should be one for every four students).</p> <p><u>Point out</u> the components of the sphygmomanometer on visual.</p> <p>Point out that blood pressure cuffs come in three sizes, child, adult and extra large, depending on the size of the bladder.</p> <p><u>Clarification:</u> The manometer displays the air pressure inside the bladder. In the DEC program, we use an aneroid (without fluid) pressure gauge.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>VII-11A&amp;B</b> (Details of BP)</p>	<p>of the bladder and regulates the rate at which the bladder is deflated.</p> <ul style="list-style-type: none"> <li>• To <u>inflate</u> the bladder, the pressure control valve must be twisted all the way to the right.</li> <li>• When the valve is twisted all the way to the right, air can be pumped <u>into</u> the bladder, but no air can escape <u>from</u> the bladder.</li> <li>• To <u>deflate</u> the bladder, twist the valve to the left.</li> <li>• The more the valve is twisted to the left, the faster the bladder will deflate.</li> </ul> <p>r. Details of blood pressure measurement.</p> <ul style="list-style-type: none"> <li>o If it proves difficult to hear the Korotkoff sounds, simply have the subject elevate the arm and squeeze the fist several times, to drain the arm: this will make the Korotkoff sounds <u>louder</u>.</li> <li>o The manometer (pressure gauge) may be clipped on the subject's sleeve, so that it is readily viewable.</li> </ul>	<p><u>Demonstrate</u> this.</p> <p><u>Select</u> a student to serve as a blood pressure subject. Demonstrate the procedures using the student.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>o Twist the pressure control valve all the way to the right.</li> <li>o Put the stethoscope earpieces in your ears.</li> <li>o Place the diaphragm or bell of the stethoscope over the brachial artery.</li> <li>o Rapidly inflate the bladder to a pressure of at least 180.</li> <li>o Twist the pressure control valve slightly to the left to release the pressure slowly.</li> <li>o Keep your eyes on the gauge and listen for the Korotkoff sounds.</li> </ul>	<p><u>Make sure</u> the earpieces are turned forward, i.e. toward the nose.</p> <p><u>Point out</u> that, if the subject's blood pressure is very elevated, it may be necessary to inflate the bladder to a higher pressure.</p> <p><b>EMPHASIZE</b> the need to release the pressure <u>slowly</u>. If the pressure drops too fast, the needle will sweep down the gauge too quickly to be read accurately.</p> <p>The pressure should be released at a speed that takes one full second for the needle to move a single gradation (i.e. 2 millimeters of mercury) on the gauge.</p> <p><u>Point out</u> that the needle on the pressure gauge generally will "bounce" slightly when blood starts to spurt through the artery.</p> <p>Excuse the student and thank him or her for participating. <u>Solicit</u> students' questions concerning these procedures.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>VII-12 (BP Technical Terms)</b></p>	<p>s. Do's and Don'ts of Blood Pressure Measurement.</p> <ul style="list-style-type: none"> <li>o If you inflate the bladder and then need to repeat the measurement, wait at least three minutes to allow the subject's artery to return to normal.</li> <li>o Hold the bell of the stethoscope with your fingers; don't slide it under the cuff: that will distort the measurement.</li> </ul> <p>t. Some technical terms associated with blood pressure:</p> <ul style="list-style-type: none"> <li>(1) <u>Hypertension</u>: Abnormally high blood pressure.</li> <li>(2) <u>Hypotension</u>: Abnormally low blood pressure.</li> </ul> <p>u. Students initial practice at measuring blood pressure.</p>	<p><u>Point out</u> that "normal" values of blood pressure are: Systolic 120 - 140 Diastolic 70 - 90</p> <p><u>Note</u>, however, that "normal" people can have significantly different blood pressures: there is wide variation in human blood pressure.</p> <p>If at least one sphygmomanometer and stethoscope are available for every two students, instruct students to practice in pairs. Otherwise, assign students to practice in teams of 3 or 4 members.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>15 Minutes</b></p>	<p>3. Measurement of temperature.</p> <p>a. Body temperature is measured using an oral thermometer.</p> <p>b. Make sure that a fresh disposable mouthpiece is used each time.</p> <p><b>C. Demonstrations</b></p> <p>1. Pulse rate measurement demonstrations.</p> <p>a. Radial artery pulse point. <u>Instruct</u> the first student to measure the second student's pulse using the radial artery pulse point. (<u>Simultaneously</u>, the instructor should measure the subject's pulse using a carotid artery pulse point).</p> <p>b. Carotid artery pulse point.</p>	<p><u>Monitor</u>, coach and critique the students' practice.</p> <p>Allow this practice to continue for only about 10 minutes.</p> <p>Note: A digital thermometer with plastic sleeves is recommended.</p> <p><u>Exhibit</u> this.</p> <p><u>Point out</u> that when measuring temperature to ensure that the thermometer remains under the subject's tongue. DRE's should also try to refrain from letting the subject's drink hot or cold fluids immediately prior to measuring temperature.</p> <p>Solicit students' comments and questions concerning this overview of procedures and cues.</p> <p><u>Select</u> two students to come before the class.</p> <p><u>Instruct</u> the second student to measure the first student's pulse using the carotid artery pulse point. (<u>Simultaneously</u>,</p>

the instructor should measure the subject's pulse using a radial artery pulse point.)

Excuse the two students and thank them for participating.

2. Blood pressure measurement demonstrations.

Select two other students to come before the class.

Instruct the first student to measure the second student's blood pressure.

Have the students reverse roles.

Excuse the two students and thank them for participating.



**5 Minutes**

**D. Documentation Procedures**

Review the sections of the Standardized Form used to record vital signs measurements.



**20 Minutes**

**E. Practice**

Instruct students to practice in teams of 2-4 members, taking turns measuring each other's vital signs.

Monitor, coach and critique the students' practice.

## **Topics for Study**

1. Where is the Radial Artery pulse point?

**Crease of the wrist**

2. Why should you never attempt to feel a subject's pulse with your thumb?

**You can mistakenly measure your own pulse**

3. Does an artery carry blood to the heart or from the heart?

**Away from the heart**

4. What does the symbol "Hg" represent?

**Mercury (Hydrargyrum)**

5. What is Diastolic pressure?

**The pressure when the heart relaxes**

6. When do the Korotkoff Sounds begin?

**At the systolic level when the blood begins to spurt through the brachial artery**

7. Name and describe the major components of a Sphygmomanometer.

**Compression Cuff, Pressure bulb, Manometer, Pressure control valve, Tubes**

8. Which of the seven categories of drugs generally will cause blood pressure to be elevated?

**CNS Stimulants, Hallucinogens, Dissociative Anesthetics, Inhalants, Cannabis**

## Session VII

### Examination of Vital Signs



VII-1

### Examination of Vital Signs

Upon successfully completing this session the student will be able to:

- Explain the purposes of the various vital signs examinations in the drug influence evaluation procedure
- Explain the administrative procedures for these examinations
- Explain the clues obtained from these examinations

Drug Evaluation &amp; Classification Training

VII-2A

### Examination of Vital Signs

(Continued)

- Document the examinations of vital signs accurately and completely
- Correctly answer the "topics for study" at the end of this session

Drug Evaluation &amp; Classification Training

VII-2B

### Definitions Concerning "Pulse"

- **Pulse**
  - The expansion and relaxation of an artery due to the pumping action of the heart
- **Pulse Rate**
  - The number of pulsations in an artery per minute
- **Artery**
  - A strong, elastic blood vessel that carries blood from the heart to the body's tissues
- **Vein**
  - A blood vessel that carries blood back to the heart from the body's tissues

Drug Evaluation &amp; Classification Training

VII-3

### Radial Artery Pulse Point



Drug Evaluation &amp; Classification Training

VII-4

### Brachial Artery Pulse Point



Drug Evaluation &amp; Classification Training

VII-5

## Technical Terms Associated With Pulse Rate

- **Tachycardia**  
Abnormally rapid heart rate
- **Bradycardia**  
Abnormally slow heart rate
- **Arrhythmia**  
Abnormal heart rate rhythm

Drug Evaluation &amp; Classification Training

VII-6

## Definitions Concerning Blood Pressure

- **Blood Pressure**  
The force that the circulating blood exerts on the walls of the arteries
- **Systolic Pressure**  
The maximum blood pressure, reached as the heart contracts
- **Diastolic Pressure**  
The minimum pressure, reached when the heart is fully expanded

Drug Evaluation &amp; Classification Training

VII-7

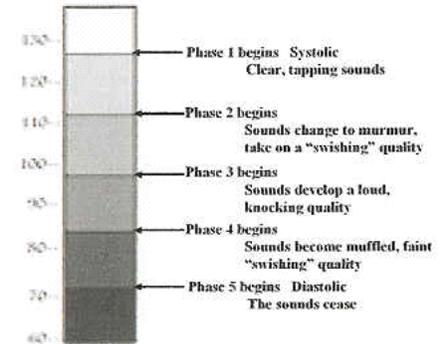
## The Basics of Blood Pressure Measurement

- Apply enough air pressure to cut off the flow of blood through the artery
- Slowly release the air, 2 mmHg per second, until the blood just begins to spurt through the artery: that will be the systolic pressure
- Continue to release the air until the blood flows continuously: that will be the diastolic pressure

Drug Evaluation &amp; Classification Training

VII-8

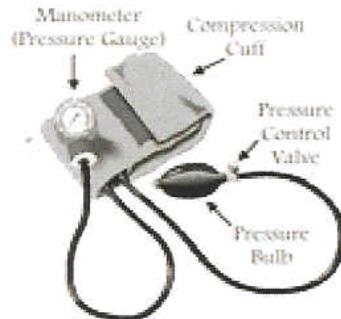
## Korotkoff Sounds



Drug Evaluation &amp; Classification Training

VII-9

## Sphygmomanometer



Drug Evaluation &amp; Classification Training

VII-10

## Details of Blood Pressure Measurement

1. Position cuff on bicep so that tubes extend down middle of arm
2. Wrap cuff snugly around bicep
3. Clip manometer to subject's sleeve
4. Twist pressure control valve all the way to the right
5. Put stethoscope earpieces in your ears



Drug Evaluation &amp; Classification Training

VII-11A

## Details of Blood Pressure Measurement

6. Place stethoscope over brachial artery
7. Rapidly inflate bladder to 180 mmHg
8. Twist the valve slightly to the left
9. Keep your eyes on the gauge and listen for the Korotkoff sounds



Drug Evaluation & Classification Training

VII-11B

## Technical Terms Associated With Blood Pressure

- **Hypertension**  
Abnormally high blood pressure
- **Hypotension**  
Abnormally low blood pressure

Drug Evaluation & Classification Training

VII-12

# QUESTIONS?

Drug Evaluation & Classification Training

One Hour and Forty-Five Minutes

**SESSION VIII**  
**DEMONSTRATIONS OF THE**  
**EVALUATION SEQUENCE**

## **SESSION VIII    DEMONSTRATIONS OF THE EVALUATION SEQUENCE**

Upon successfully completing this session the student will be able to:

- o Describe the sequence in which examinations and other activities are performed during the drug influence evaluation procedure.

### Content Segments

- A. Live Demonstrations
- B. Video Demonstrations

### Learning Activities

- o Instructor Led Presentations
- o Instructor Led Demonstrations
- o Video Presentations
- o Reading Assignments

Aids	Lesson Plan	Instructor Notes
 <p><b>70 Minutes</b></p>  <p><b>VIII-1 (Title)</b></p>  <p><b>VIII-2 (Objective)</b></p>	<p><b>DEMONSTRATIONS OF THE EVALUATION SEQUENCE</b></p> <p><b>A. Live Demonstrations</b></p>	<p>Total Lesson Time: Approximately 105 Minutes</p> <p>Display Session Title</p> <p><u>Briefly</u> review the objective, content and activities of this session.</p> <p>For these live demonstrations, students must be grouped into teams of not more than 12 members. Each team must be taken to a separate classroom. At least two instructors must work with each team. This is to ensure that all students have the opportunity for a close and detailed observation of the demonstrations.</p> <p><u>NOTE:</u> Instructors should conduct at least two <u>complete</u> demonstrations of the evaluation sequence, articulating each step in the process.</p> <p><u>Instruct</u> students to follow along with copies of the report form.</p> <p>Handout 12-step checklists to the students if needed.</p>

Aids	Lesson Plan	Instructor Notes
	<ol style="list-style-type: none"> <li>1. Preliminary Examination.               <ol style="list-style-type: none"> <li>a. Preliminary eye checks                   <ol style="list-style-type: none"> <li>o equal tracking</li> <li>o equal pupil size</li> <li>o resting nystagmus</li> <li>o blindness</li> <li>o eyelids</li> <li>o initial check for nystagmus</li> </ol> </li> <li>b. First measurement of pulse rate.</li> </ol> </li> <li>2. Eye Examinations (Room Light).               <ol style="list-style-type: none"> <li>a. Horizontal Gaze Nystagmus</li> <li>b. Vertical Gaze Nystagmus</li> <li>c. Lack of Convergence</li> </ol> </li> </ol>	<p>Select a student <u>or one of the volunteer drinkers for Session XII (prior to drinking)</u> to serve as the "subject" for the preliminary examination.</p> <p><u>Ask</u> each question, exactly as it should be asked during an actual preliminary examination.</p> <p><u>Explain</u> the kinds of clues and evidence that may be gleaned during the preliminary examination.</p> <p><u>Check</u> the student subject's eyes for tracking, equal pupil size, resting nystagmus, eyelids.</p> <p><u>Conduct</u> a check of the student subject's pulse.</p> <p><u>Solicit</u> students' comments or questions about the preliminary examination.</p> <p>Excuse the student subject and thank him/her for participating in the demonstration.</p> <p>Select another student <u>or a volunteer drinker</u> to serve as the "subject" for the eye examinations.</p> <p><u>Conduct</u> a complete demonstration of an eye examination.</p> <p><u>Explain</u> the kinds of clues and other evidence that may be seen during the eye examinations.</p>

Aids	Lesson Plan	Instructor Notes
	<p>3. Psychophysical Tests.</p> <ul style="list-style-type: none"> <li>a. Romberg Balance</li> <li>b. Walk and Turn</li> <li>c. One Leg Stand</li> <li>d. Finger to Nose</li> </ul> <p>4. Vital Signs Examinations.</p> <ul style="list-style-type: none"> <li>a. Blood Pressure</li> <li>b. Temperature</li> <li>c. Second Check of Pulse</li> </ul>	<p><u>Solicit</u> students' comments or questions about the eye examinations.</p> <p>Excuse the student subject and thank him or her for participating in the demonstration.</p> <p>Select another student <u>or a volunteer drinker</u> to serve as the "subject" for the psychophysical tests.</p> <p><u>Conduct</u> a complete set of psychophysical tests on the student subject.</p> <p><u>Explain</u> the kinds of clues and other evidence that may be gleaned during the psychophysical tests.</p> <p>Solicit students' comments or questions about the psychophysical tests.</p> <p>Excuse the student subject and thank them for participating in the demonstration.</p> <p><u>Select</u> another student to serve as the "subject" for the vital signs examination.</p> <p><u>Conduct</u> a complete set of vital signs examinations on the student subject.</p> <p><u>Explain</u> the kinds of clues and other evidence that may be gleaned during the vital signs examinations.</p>

Aids	Lesson Plan	Instructor Notes
	<p>5. Dark Room Examinations.</p> <p>a. Pupil Size Examinations</p> <ul style="list-style-type: none"> <li>o room light</li> <li>o darkness</li> <li>o direct light</li> </ul> <p>b. Reaction to Light</p> <p>c. Check of Nasal Area</p> <p>d. Check of Oral Cavity</p>	<p><u>Solicit</u> students' comments or questions about the vital signs examination.</p> <p>Excuse the student subject, and thank them participating in the demonstration.</p> <p><u>Point out</u> that this portion of the drug influence evaluation procedure is to be carried out in a darkened room.</p> <p>However, this demonstration will be conducted in normal room light, so that all students can observe the proper procedures for using the pen light.</p> <p><u>Select</u> another student to serve as the "subject" for the dark room examination.</p> <p><u>Conduct</u> a complete set of "dark room" examinations on the student subject.</p> <p><u>Explain</u> the kinds of clues and other evidence that may be gleaned during the dark room examinations.</p> <p>Point out that the checks of the oral and nasal cavities actually are part of the examination for <u>signs of ingestion</u>.</p> <p><u>Solicit</u> students' comments or questions about the dark room examinations.</p>





## Session VIII

### Demonstrations of the Evaluation Sequence



VIII-1

## Demonstrations of the Evaluation Sequence

Upon successfully completing this session the student will be able to:

- Describe the sequence in which examinations and other activities are performed during the drug influence evaluation procedure

Drug Evaluation & Classification Training VIII-2

# QUESTIONS?

Drug Evaluation & Classification Training

One Hour and Forty-Five Minutes

**SESSION IX**  
**CENTRAL NERVOUS SYSTEM DEPRESSANTS**

## **SESSION IX      CENTRAL NERVOUS SYSTEM DEPRESSANTS**

Upon successfully completing this session the student will be able to:

- o Explain a brief history of the CNS Depressant category of drugs.
- o Identify common drug names and terms associated with this category.
- o Identify common methods of administration for this category.
- o Describe the symptoms, observable signs and other effects associated with this category.
- o Explain the typical time parameters, i.e. onset and duration of effects, associated with this category.
- o List the clues that are likely to emerge when the drug influence evaluation is conducted for a person under the influence of this category of drugs.
- o Correctly answer the "topics for study" questions at the end of this session.

### Content Segments

### Learning Activities

- |                                       |  |
|---------------------------------------|--|
| A. Overview of the Category           | o Instructor Led Presentations                           |
| B. Possible Effects                   | o Review of Drug Evaluation and Classification Exemplars |
| C. Onset and Duration of Effects      | o Reading Assignments                                    |
| D. Overdose Signs and Symptoms        | o Video Presentations                                    |
| E. Expected Results of the Evaluation | o Slide Presentations                                    |

Aids	Lesson Plan	Instructor Notes
 <p><b>20 Minutes</b></p>  <p><b>IX-1 (Title)</b></p>  <p><b>IX-2A-C (Objectives)</b></p>	<p><b>CENTRAL NERVOUS SYSTEM DEPRESSANTS</b></p> <p>A. Overview of the Category.</p> <ol style="list-style-type: none"> <li>1. Central Nervous System Depressants slow down the operations of the brain. <ol style="list-style-type: none"> <li>a. Depressants first affect those areas of the brain that control a person's conscious, voluntary actions.</li> <li>b. As the dose is increased, depressants begin to affect the parts of the brain that control the body's automatic processes. <ol style="list-style-type: none"> <li>o heartbeat</li> <li>o respiration</li> <li>o etc.</li> </ol> </li> </ol> </li> <li>2. The CNS depressant category includes the single most commonly abused drug in America.</li> </ol>	<p>Total Lesson Time: Approximately 105 Minutes</p> <p>Display Session Title</p> <p><u>Briefly</u> review the objectives, content and activities of this session.</p> <p>Point out that other common names for CNS Depressants are "downers" and "sedative-hypnotics".</p> <p>Judgment, inhibitions and reaction time are some of the things that CNS Depressants affect first.</p> <p><u>Ask</u> this question: "What is the single most commonly abused drug?"</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>IX-3</b> (Alcohol The Most Familiar CNS Depressant)</p>	<ul style="list-style-type: none"> <li>a. Alcohol has been used and abused since prehistoric times.</li> <li>b. Alcohol and its effects are familiar to most people.</li> <li>c. Alcohol is a model for the CNS depressant category: with some exceptions, all depressants produce effects that are quite similar to the effects of alcohol.</li> </ul> <p>3. Non-Alcohol CNS depressants have been around for more than 150 years.</p>	<p><u>Point out</u> that the remainder of this session will focus on the non-alcohol CNS depressants.</p>
 <p><b>IX-4</b> (Chloral Hydrate)</p>	<ul style="list-style-type: none"> <li>a. The first non-alcohol CNS depressant was <u>Chloral Hydrate</u>.</li> <li>b. It was developed in 1832.</li> <li>c. It is commonly referred to as "Mickey Finn" or "Knockout drops" because of its fast acting effects.</li> <li>d. Chloral Hydrate is still produced and prescribed today.</li> </ul>	<p>Chloral Hydrate was derived from alcohol.</p> <p><u>Clarification:</u> "Mickey Finn" was a well known British prizefighter of the 19th Century.</p> <p>"Felsule" and "Noctec" are two registered brand names of Chloral Hydrate.</p>
 <p><b>IX-5</b> (Types of Non-Alcohol Depressants)</p>	<p>4. There are six major subcategories of CNS depressants other than alcohol.</p> <ul style="list-style-type: none"> <li>a. Barbiturates <ul style="list-style-type: none"> <li>o derivatives of Barbiturate Acid</li> </ul> </li> </ul>	<p>More than 250 different barbiturates have been produced. Of these, about 50 have been accepted for medical use.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>o first produced in 1864</li> <li>o in very common use and abuse today</li> </ul> <p>b. Non-Barbiturates</p> <ul style="list-style-type: none"> <li>o synthetic compounds with a variety of chemical structures</li> <li>o avoid some of the undesirable side effects of barbiturates</li> <li>o still produce physical and psychological dependence.</li> </ul> <p>c. Anti-Anxiety Tranquilizers</p> <ul style="list-style-type: none"> <li>o first produced in 1950</li> <li>o in very wide spread use</li> <li>o frequently abused</li> </ul> <p>d. Anti-Depressants</p> <ul style="list-style-type: none"> <li>o sometimes called the "mood elevators"</li> </ul> <p>e. Anti-Psychotic Tranquilizers</p> <ul style="list-style-type: none"> <li>o sometimes called the "major tranquilizers"</li> </ul>	<p><u>Note:</u> Chloral Hydrate belongs to the non-barbiturate subcategory.</p> <p>i.e. sleepiness or drowsiness</p> <p>The Anti-Anxiety Tranquilizers are also know as the "Minor Tranquilizers"; They include the group of drugs known as the "Benzodiazepines", examples of which are Valium, Xanax and Librium.</p> <p><u>Point out</u> that it is not a contradiction to call one sub-category of CNS Depressants the <u>Anti</u>-depressants. It is <u>psychological</u> depression that they are "anti". Prozac is an anti-depressant but generally doesn't have psycho-active properties or side effects.</p> <p><u>Point out</u> that the anti-psychotic tranquilizers are generally more powerful than the anti-anxiety tranquilizers.</p> <p>The most familiar Anti-Psychotic Tranquilizer is "Thorazine".</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>IX-6A</b> (Barb's)</p>	<ul style="list-style-type: none"> <li>o Anti-Psychotic Tranquilizers were first introduced in the early 1950's. They provide a way to manage schizophrenia and other mental disorders, and allow psychiatric patients to be released from hospitals and to lead fairly normal lives.</li> <li>f. Combinations of the other five subcategories.</li> <li>5. Examples of specific common CNS Depressants. <ul style="list-style-type: none"> <li>a. The Barbiturates <ul style="list-style-type: none"> <li>o <u>Amobarbital</u> (Trade name "Amytal") (Street names "blues"; "blue heavens")</li> <li>o <u>Amosecobarbital</u> (Trade name "Tuinal") (Street names "rainbows"; "Christmas trees")</li> <li>o <u>Pentobarbital</u> (Trade name "Nembutal") (Street names "yellows"; "yellow jackets")</li> </ul> </li> </ul> </li> </ul>	<p><u>Note:</u> Briefly review these examples.</p> <p><u>Emphasize</u> that students are <u>not</u> expected to memorize the names of these various CNS depressants. <u>But</u>, if they see these names, they should be able to recognize them as depressants.</p> <p><u>Note:</u> this is a combination of Amobarbital <u>and</u> Secobarbital.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>IX-6B</b> (Non-Barb's)</p>	<ul style="list-style-type: none"> <li>o <u>Phenobarbital</u> (Many trade names) (Street name "pink ladies")</li> <li>o <u>Secobarbital</u> (Trade name "Seconal") (Street names "reds"; "red devils"; "RDs"; "fender benders"; "F-40s")</li> <li>b. The Non-Barbiturates           <ul style="list-style-type: none"> <li>o <u>Carisoprodol</u> (Trade name "Soma")</li> <li>o <u>Chloral Hydrate</u> (Trade names "Felsule"; "Noctec") (Street names "Knock out drops"; "Mickey Finn")</li> <li>o <u>Diphenhydramine Hydrochloride</u> (Trade names "Benadryl"; "Somnex", "Dramamine")</li> <li>o <u>Diphenhydantoin Sodium</u> (Trade name "Dilantin")</li> <li>o <u>Ethchlorvynol</u> (Trade name "Placidyl")</li> <li>o <u>Gamma-Hydroxybutyrate</u> (Street name "GHB", "GBL", "Liquid X", 1,4</li> </ul> </li> </ul>	<p>According to the "Physician's Guide to Psychoactive Drugs", 1 ounce of 80-proof alcohol is equivalent to about 15 milligrams of Phenobarbital.</p> <p><u>If available</u>: display slides of these various drugs.</p> <p>Point out that primary medical use for the Non-Barbiturates is the treatment of insomnia.</p> <p><u>Note</u>: the absence of street names implies only that <u>illicitly</u> manufactured versions of these drugs are not common. The <u>legally</u> manufactured versions are abused, however.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>IX-6C</b> (Anti-Anxiety)</p>	<p><u>Butanediol</u>)</p> <ul style="list-style-type: none"> <li>o <u>Glutethimide</u> (Trade name "Doriden")</li> <li>o <u>Methaqualone</u> (Trade names "Parest"; "Quaalude"; "Sopor" "Optimil"; "Mandrax") (Street name "ludes")</li> <li>o <u>Methyprylon</u> (Trade Name "Noludar")</li> <li>o <u>Paraldehyde</u> (Trade name "Paral")</li> <li>o <u>Zolpidem</u> (Trade names: "Ambien", "Zaleplon")</li> </ul> <p>c. The Anti-Anxiety Tranquilizers</p> <ul style="list-style-type: none"> <li>o <u>Alprazolam</u> (Trade name "Xanax")</li> <li>o <u>Clonazepam</u> (Trade name "Klonopin")</li> <li>o <u>Chlordiazepoxide</u> (Trade name "Librium")</li> <li>o <u>Diazepam</u> (Trade name "Valium")</li> <li>o <u>Estazolam</u> (Trade name "ProSom")</li> <li>o <u>Flunitrazepam</u> (Trade name "Rohypnol")</li> </ul>	<p><u>Note:</u> Methaqualone continues to be pharmaceutically manufactured in Mexico, trade name "Mandrax".</p> <p><u>If available:</u> display slides of these various drugs.</p> <p>Point out that <u>tens of millions</u> of prescriptions for these anti-anxiety tranquilizers are written in America each year.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>IX-6D</b> (Anti-depressants)</p>	<p>(Street Name "Roofies", "Roches")</p> <ul style="list-style-type: none"> <li>o <u>Flurazepam</u> (Trade name "Dalmane")</li> <li>o <u>Lorazepam</u> (Trade name "Ativan")</li> <li>o <u>Meprobamate</u> (Trade names: "Miltown", "Equanil")</li> <li>o <u>Oxazepam</u> (Trade name "Serax")</li> <li>o <u>Temazepam</u> (Trade name "Restoril")</li> <li>o <u>Triazolam</u> (Trade name "Halcion")</li> </ul> <p>d. The Anti-Depressants</p> <ul style="list-style-type: none"> <li>o <u>Amitriptyline Hydrochloride</u> (Trade names "Elavil"; "Endep")</li> <li>o <u>Bupropion</u> (Trade name: "Wellbutrin")</li> <li>o <u>Citalopram</u> (Trade name: "Celexa")</li> <li>o <u>Desipramine Hydrochloride</u> (Trade names "Norpramin"; "Pertofrane")</li> </ul>	<p><u>If available:</u> display slides of these various drugs.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>IX-6E</b> (Anti-Psychotic)</p>	<ul style="list-style-type: none"> <li>o <u>Doxepin Hydrochloride</u> (Trade names "Adapin"; "Sinequan")</li> <li>o <u>Escitalopram</u> (Trade name: "Lexapro")</li> <li>o <u>Fluoxetine</u> (Trade names "Prozac", "Sarafem")</li> <li>o <u>Imipramine</u> (Trade name "Tofranil")</li> <li>o <u>Paroxetine</u> (Trade name: "Paxil")</li> <li>o <u>Phenelzine Sulfate</u> (Trade name "Nardil")</li> <li>o <u>Sertraline</u> (Trade name: "Zoloft")</li> <li>o <u>Venlafaxine</u> (Trade name "Effexor")</li> </ul> <p>e. The Anti-Psychotic Tranquilizers</p> <ul style="list-style-type: none"> <li>o <u>Chlorpromazine</u> (Trade name "Thorazine")</li> <li>o <u>Droperidol</u> (Trade name "Inapsine")</li> <li>o <u>Lithium Carbonate</u> (Trade name "Lithane")</li> <li>o <u>Lithium Citrate</u></li> <li>o <u>Haloperidol</u> (Trade name "Haldol")</li> </ul>	<p>Prozac generally does not have psychoactive properties in therapeutic doses.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>IX-6F</b> (Combos)</p>	<p>f. The Combinations</p> <ul style="list-style-type: none"> <li>o <u>Chlordiazepoxide</u> in combination with <u>Amitriptyline</u> (Trade name "Limbitrol")</li> <li>o <u>Chlordiazepoxide Hydrochloride</u> in combination with <u>Clidinium Bromide</u> (Trade name "Librax")</li> <li>o <u>Perphenazine</u> in combination with <u>Amitriptyline Hydrochloride</u> (Trade names "Triavil" and "Etrafon")</li> </ul>	<p><u>Point out</u> that "Limbitrol" is a combination of an Anti-Anxiety Tranquilizer and an Anti-Depressant.</p> <p><u>Point out</u> that "Librax" is a combination of a benzodiazepine and an anti-spasmodic, used to relax the muscles in the stomach wall.</p> <p><u>Point out</u> that "Triavil" is a combination of an Anti-Psychotic Tranquilizer and an Anti-Depressant.</p>
 <p><b>IX-7</b> (Methods of Ingestion)</p>	<p>6. Methods of ingestion of CNS Depressants.</p> <ul style="list-style-type: none"> <li>a. Most common and easiest method is <u>orally</u>.</li> <li>b. Some abusers prefer to use intravenous injection for Barbiturates.</li> <li>c. Some abusers experience a "flash" or "rush" from intravenous injection of Barbiturates, that they do not experience from oral ingestion.</li> <li>d. The injection paraphernalia used for Barbiturates are very similar to those used</li> </ul>	<p><u>Examples:</u></p> <ul style="list-style-type: none"> <li>o spoon, for heating and dissolving the barbiturate</li> </ul>

Aids	Lesson Plan	Instructor Notes
	<p>for Heroin.</p> <p>e. However, the Barbiturate abuser will use a larger hypodermic needle, because the barbiturate solution is thicker than the heroin solution.</p> <p>f. The injection sites on the skin of a Barbiturate abuser appear quite different from those of an Heroin addict.</p> <p>g. A large swelling, about the size of a quarter or fifty cent piece frequently will appear at the Barbiturate injection site.</p> <p>h. <u>Necrosis</u> may occur: i.e. a decaying of the body's tissue at the injection site.</p> <p>i. The dead tissue may begin to separate from the living tissue, producing ulcerations.</p> <p>j. The Barbiturate user who injects the drug usually will not display the same type of track marks as the heroin addict who uses repeated injections along the same vein.</p> <p>k. Barbiturate abusers often will inject in parts of the body other than the</p>	<p>o cotton, for filtering the solution when drawing it into the needle.</p> <p>o hypodermic syringe</p> <p>o tourniquet</p> <p>Note: The "gauge" of a hypodermic needle indicates the width of the needle's inside diameter. The smaller the number, the larger the needle. For example, a 16 gauge needle is larger in diameter than a 20 gauge needle.</p> <p>Point out that these effects result from the skin's reaction to the high alkaline content of the barbiturate solution.</p> <p><u>If available</u>, display a slide showing ulcerated injection sites.</p> <p><u>Point out</u> that these ulcerations resemble burns placed on the skin by the tip of a cigarette.</p>

Aids	Lesson Plan	Instructor Notes
<div> </div> <p><b>5 Minutes</b></p> <div> </div> <p><b>IX-8</b> (Possible Effects)</p>	<p>forearm, and will commonly exhibit the characteristic swellings at random locations on the extremities.</p> <p><b>B. Possible Effects</b></p> <ol style="list-style-type: none"> <li>1. CNS Depressants produce impairments of the human mind and body that essentially mirror alcohol impairment. <ol style="list-style-type: none"> <li>a. reduced social inhibitions</li> <li>b. divided attention impairment</li> <li>c. slowed reflexes</li> <li>d. impaired judgment and concentration</li> <li>e. impaired vision</li> <li>f. lack of coordination</li> <li>g. slurred, mumbled, or incoherent speech</li> <li>h. produce a variety of emotional effects, such as euphoria, depression, suicidal</li> </ol> </li> </ol>	<p>Solicit students' questions and comments about the overview of CNS depressants.</p> <p><u>Point out</u> that these effects will not necessarily appear in a predictable sequence as dose increases.</p> <p><u>Clarification:</u> impede the person's ability to concentrate on more than one thing at a time.</p> <p><u>Elaboration:</u> ability to focus eyes may be impaired; "double vision" may develop.</p> <p><u>Emphasize:</u> The extent to which a CNS depressant user will exhibit these effects will depend, in part, on the user's tolerance to these drugs. Persons habituated to a drug often won't exhibit its effects as clearly as will a novice user.</p>

Aids	Lesson Plan	Instructor Notes
<div> </div> <div> <p>15 Minutes</p> </div> <div> </div> <div> <p>IX-9 (Onset and Duration)</p> </div>	<p>tendencies, laughing or crying without provocation, etc.</p> <p>2. Generally speaking, a person under the influence of CNS Depressants will look and act drunk.</p> <p><b>C. Onset and Duration of Effects</b></p> <p>1. Depressant drugs can be grouped loosely into four classes, based on how quickly they take effect and how long their effects last.</p> <p>a. <u>Ultrashort</u>: very fast acting, very brief effects.</p> <ul style="list-style-type: none"> <li>o take effect in a matter of seconds.</li> <li>o effects last only a few minutes.</li> <li>o very rarely are the "drugs of choice" for drug abusers.</li> </ul>	<p>Solicit students' questions and comments concerning possible effects of CNS depressants.</p> <p>Selectively reveal.</p> <p><u>Ask</u> students: "Why is there little or no street abuse of the <u>ultrashort</u> CNS depressants"?</p> <p>Solicit responses.</p> <p>Guide respondents to bring out the point that abusers seek drugs that will produce reasonably long lasting effects. Effects that last for only a few minutes aren't attractive or satisfying to most drug abusers.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>o ultra short depressants are sometimes used at the beginning of a surgical operation, in conjunction with an inhaled anesthetic.</li> <li>o psychiatrists sometimes use ultra short depressants at the beginning of a session, to reduce the client's inhibitions and foster a free and open communication.</li> <li>o common example of an ultra short depressant is Thiopental, brand name "Pentothal".</li> </ul> <p>b. <u>Short</u>: fairly fast acting, effects last for several hours.</p> <ul style="list-style-type: none"> <li>o generally take effect in 10-15 minutes.</li> <li>o effects last for approximately 4 hours.</li> <li>o this is the most commonly abused class of CNS Depressants.</li> </ul>	<p><u>Clarification</u>: to provide a momentary sedation to ease the patient's anxiety and allow for the proper administration of the anesthetic.</p> <p><u>Point out</u> that this is sometimes called "truth serum".</p> <p><u>Point out</u> that short acting depressants are attractive to many drug abusers because:</p> <ul style="list-style-type: none"> <li>o they produce effects reasonably quickly.</li> <li>o the effects last long enough to "enjoy".</li> <li>o the effects don't last so long that the user is in a prolonged state of impairment.</li> </ul>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>o short acting Depressants frequently are prescribed as a treatment for insomnia.</li> <li>o they also may be used as a pre-anesthetic medication to calm a patient prior to surgery.</li> <li>o common example of a short acting Depressant: Secobarbital, brand name "Seconal".</li> <li>c. <u>Intermediate</u>: relatively slow acting, but prolonged effects. <ul style="list-style-type: none"> <li>o generally take effect in about 30 minutes.</li> <li>o effects typically last about 6-8 hours.</li> <li>o fairly often abused, especially by users who desire a longer lasting state of intoxication.</li> <li>o medical use of this class of drugs is similar to that of short acting Depressants. (i.e. treat insomnia, etc.)</li> <li>o common example of an intermediate Depressant: Amobarbital, brand name "Amytal", "Tuinal".</li> <li>o a popularly abused drug is Amobarbital in combination with Secobarbital.</li> </ul> </li> </ul>	<p>"Tuinal" i.e. two-in-all, is in between short and intermediate depressants.</p> <p><u>Point out</u> that Tuinal is a combination of a fast acting drug (10-20 minutes onset, due to the Seconal) with prolonged</p>

Aids	Lesson Plan	Instructor Notes
	<p>d. <u>Long</u>: delayed but long lasting effects.</p> <ul style="list-style-type: none"> <li>o generally take effect about one hour after ingestion.</li> <li>o effects typically last 8-14 hours.</li> <li>o generally not the "drugs of choice" for abusers.</li> <li>o however, some people <u>will</u> abuse the long acting Depressants if the more popular short and intermediate types are not readily available.</li> <li>o long acting depressants are used medically in the control of epilepsy and of other conditions that can cause convulsions.</li> <li>o they can also be used to provide continuing sedation to patients suffering from extreme anxiety.</li> <li>o example of a long acting Depressant: Barbitol, brand name "Veronal".</li> </ul>	<p>effects (up to 8 hours, due to the Amytal).</p> <p>Ask students: "Why don't drug abusers usually prefer the long acting depressants?"</p> <p>Solicit students' questions and comments about the overview of CNS depressants.</p> <p>Barbitol, also marketed under the name of Veronal, was the first commercially marketed barbiturate used as a sleeping aid.</p>



Aids	Lesson Plan	Instructor Notes
 <b>5 Minutes</b>	<ul style="list-style-type: none"> <li>o Quaalude ("Ludes")</li> <li>o Placidyl</li> <li>o Equanil or Miltown</li> <li>o Soma</li> <li>o Gamma-Hydroxybutyrate (GHB)</li> <li>o Zolpidem</li> </ul> <p>c. Anti-anxiety tranquilizers</p> <ul style="list-style-type: none"> <li>o Valium</li> <li>o Librium</li> <li>o Xanax</li> <li>o Serax</li> <li>o Klonopin</li> <li>o Ativan</li> <li>o Rohypnol</li> </ul> <p><b>D. Overdose Signs and Symptoms</b></p> <ol style="list-style-type: none"> <li>1. Overdoses of Central Nervous System Depressants produce symptoms essentially identical to those of alcohol overdoses. <ul style="list-style-type: none"> <li>a. Subject will become extremely drowsy and may pass out.</li> <li>b. The heartbeat (pulse) will slow.</li> <li>c. Respiration will become shallow.</li> <li>d. Skin may feel cold and clammy.</li> </ul> </li> <li>2. One major danger with CNS Depressant overdoses is death from respiratory failure.</li> </ol>	<p><u>Point out</u> that Rohypnol is currently not legally manufactured in the United States and is illegal to possess. However, it is legally manufactured and prescribed in other countries. Along with GHB, it is known as one of the "date rape" drugs.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>a. A sufficiently high dose of CNS Depressant will suppress the portions of the brain that control respiration.</li> <li>b. This situation only rarely occurs from alcohol intoxication: usually, a drinker will pass out before he or she consumes enough alcohol to suppress respiration completely.</li> <li>c. With other Depressants, it is relatively easy to take a fatal overdose.</li> </ul> <p>3. Another major danger with CNS Depressants occurs when they are combined with alcohol.</p> <ul style="list-style-type: none"> <li>a. There is <u>at least</u> an additive effect when alcohol and another Depressant are taken together.</li> <li>b. With many CNS Depressants, there may be a <u>more than additive</u> effect.</li> <li>c. Coroners have reported a number of cases in which neither the Alcohol level nor the Depressant level independently, would have been close to a fatal dose.</li> <li>d. It is not possible to predict how great an effect will occur when Alcohol is mixed with another Depressant.</li> <li>e. However, it is clear that the combination is always risky.</li> </ul>	<p><u>Point out</u> that CNS depressants are often used as a means of suicide.</p> <p><u>Clarification:</u> the combination of alcohol and certain other CNS Depressants may produce an effect greater than the sum of the effects of the two drugs independently.</p> <p>Solicit students' questions and comments concerning overdoses of CNS depressants.</p>

Aids	Lesson Plan	Instructor Notes
<p></p> <p><b>60 Minutes</b></p> <p></p> <p><b>IX-11A</b> (Eval of Suspects)</p> <p></p> <p><b>IX-11B</b> (Vital Signs Exam)</p>	<p><b>E. Expected Results of the Evaluation</b></p> <p>1. Observable evidence of impairment.</p> <ul style="list-style-type: none"> <li>o Horizontal Gaze Nystagmus will be present with suspects under the influence of CNS Depressants.</li> <li>o Vertical Gaze Nystagmus <u>may</u> be present, with high doses, of Depressants for that individual.</li> <li>o Performance on Romberg, Walk and Turn, One Leg Stand, and Finger to Nose tests will be similar to that of suspects impaired by alcohol.</li> <li>o blood pressure will be down</li> <li>o pulse will be down</li> <li>o body temperature generally will be normal</li> </ul>	<p>Point out that, if a person is under the influence of a combination of alcohol and some other CNS Depressant, the onset angle of HGN will not be consistent with the person's BAC: in other words, the eyes will start to jerk earlier than would be expected due to the alcohol alone.</p> <p><u>Point out</u> that subject's perception of time (on Romberg) may be slowed, i.e. may estimate "30 seconds" after more than 30 seconds have elapsed.</p> <p><u>Possible exceptions:</u> Methaqualone and alcohol may cause the pulse to be <u>increased</u>.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>IX-11C</b> (Darkroom)</p>	<ul style="list-style-type: none"> <li>o pupil size generally will be normal</li> <li>o pupillary reaction to light will be slowed</li> </ul>	<p><u>Exception:</u> Methaqualone or Soma usually will cause pupils to dilate.</p>
 <p><b>IX-11D</b> (General Indicators)</p>	<p>b. General indicators</p> <ul style="list-style-type: none"> <li>o disoriented</li> <li>o droopy eyes (ptosis)</li> <li>o drowsiness</li> <li>o drunk-like behavior</li> <li>o flaccid muscle tone</li> <li>o gait ataxia</li> <li>o slow, sluggish reactions</li> <li>o thick, slurred speech</li> <li>o uncoordinated</li> </ul> <p>3. Summary</p>	<p><u>Note:</u> speech may also be incoherent.</p> <p><u>Analogy:</u> drunken behavior without the odor of alcoholic beverages.</p> <p><u>But remind students:</u> suspects may have consumed alcohol and some other CNS depressant. Hence, odor of alcoholic beverage may also be present.</p>
	<p>4. Demonstrations</p> <p>a. Video demonstrations</p>	<p><u>Show video</u> of subject(s) under the influence of CNS Depressants. Relate behaviors and observations to the CNS Depressant Symptomatology Chart.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>IX-12</b> (Depressant Symptomatology Chart)</p>	<p>b. Drug Evaluation and Classification Exemplar Demonstrations</p>	<p>Refer students to the exemplars found at the end of section IX of their student manuals.</p> <p>Relate the items on the exemplars to the CNS Depressant Symptomatology Chart.</p> <p>Solicit students' questions or suggestions concerning Expected Results of the Evaluation of subjects under the influence of Depressants.</p>

## **Topics for Study**

1. Name the six major subcategories of CNS Depressants.

**Barbiturates, Non-Barbiturates, Anti-Anxiety Tranquilizers, Anti-Depressants, Anti-Psychotic Tranquilizers, Combinations**

2. Name the four groups of Depressants based on onset and duration time factors.

**Ultra short, Short, Intermediate, Long**

3. To which subcategory of Depressants does Thorazine belong? To which subcategory does Chloral Hydrate belong? To which subcategory does Xanax belong?

**Anti-Psychotic Tranquilizers, Non-Barbiturates, Anti-Anxiety Tranquilizers**

4. Name a CNS Depressant that usually causes the pupils to dilate.

**Soma, Methaqualone**

5. What is the generic name for the drug that has the trade name "Prozac"?

**Fluoxetine**

## Session IX

### Central Nervous System Depressants



IX-1

### Central Nervous System Depressants

Upon successfully completing this session the student will be able to:

- Explain a brief history of the CNS Depressant category of drugs
- Identify common drug names and terms associated with this category
- Identify common methods of administration for this category

Drug Evaluation &amp; Classification Training

IX-2A

### Central Nervous System Depressants (Continued)

- Describe the symptoms, observable signs and other effects associated with this category
- Explain the typical time parameters, i.e. on-set and duration of effects associated with this category

Drug Evaluation &amp; Classification Training

IX-2B

### Central Nervous System Depressants (Continued)

- List the clues that are likely to emerge when the drug influence evaluation is conducted for a person under the influence of this category of drugs
- Correctly answer the "topics for study" questions at the end of this session

Drug Evaluation &amp; Classification Training

IX-2C

### Alcohol - The Most Familiar CNS Depressant



Drug Evaluation &amp; Classification Training

IX-3

### Chloral Hydrate ("Mickey Finn")

The first non-alcohol CNS depressant

Drug Evaluation &amp; Classification Training

IX-4

## Major Types of Non Alcohol CNS Depressants

- Barbiturates
- Non-Barbiturates
- Anti-Anxiety Tranquilizers
- Anti-Depressants
- Anti-Psychotic Tranquilizers
- Combinations

Drug Evaluation &amp; Classification Training

IX-5

## Specific Barbiturates Examples

Drug	Brand Name	Street Names
Amobarbital	Amytal	Blues, Blue Heavens
Amosecobarbital	Tuinal	Rainbows, Christmas Trees
Pentobarbital	Nembutal	Yellows, Yellow Jackets
Phenobarbital	Luminal	Pink Ladies
Secobarbital	Seconal	Reds, Red Devils, RDS, Fender Benders, F-40's

Drug Evaluation &amp; Classification Training

IX-6A

## Specific Non-Barbiturates Examples

DRUG	BRAND NAMES	STREET NAMES
Carisoprodol	Soma	
Chloral hydrate	Febule, Noctec	Knock Out Drops, Mickey Finn
Diphenhydramine Hydrochloride	Benadryl, Somnax	
Diphenhydantoin Sodium	Dilantin	
Ethelorynaol	Placidyl	
Gamma Hydroxybutyrate		GHB, Liquid X
Glatethimide	Dorsiden	
Methypyrion	Noludar	
Methaqualone	Parcet, Quaalude, Sopor, Optimid, Mantrax	Ludes
Paraldehyde	Paral	
Zolpidem	Ambien, Zaleplon	

Drug Evaluation &amp; Classification Training

IX-6B

## Specific Anti-Anxiety Tranquilizers Examples

DRUG	BRAND NAMES	STREET NAMES
Alprazolam	Xanax	Bars, Zanny Bars
Chlordiazepoxide	Librium	
Clonazepam	Clonopin	
Diazepam	Valium	
Estazolam	Prosom	
Flunitrazepam	Rohypnol	Roofies, Roches
Flurazepam	Dalmane	
Lorazepam	Ativan	
Meprobamate	Miltown	
Oxazepam	Serax	
Temazepam	Restoril	
Triazolam	Halcion	

Drug Evaluation &amp; Classification Training

IX-6C

## Specific Anti-Depressants Examples

DRUG	BRAND NAMES
Amitriptyline hydrochloride	Elavil, Endep
Bupropion	Wellbutrin
Citalopram	Celexa
Desipramine Hydrochloride	Norpramin, Pertofrane
Doxepin Hydrochloride	Adapin, Sinequan
Escitalopram	Lexapro
Fluoxetine	Prozac, Sarafem
Paroxetine	Paxil
Phenelzine Sulfate	Nardil
Sertraline	Zoloft
Venlafaxine	Effexor

Drug Evaluation &amp; Classification Training

IX-6D

## Specific Anti-Psychotic Tranquilizers Examples

DRUG	BRAND NAMES
Chlorpromazine	Thorazine
Droperidol	Inapsine, Innovar
Haloperidol	Haldol
Lithium Carbonate	Lithane
Lithium Citrate	

Drug Evaluation &amp; Classification Training

IX-6E

## Specific Combinations of Depressants

- Chlordiazepoxide in combination with Amitriptyline  
Trade name: "Limbitrol"
- Chlordiazepoxide Hydrochloride in combination with Clidinium Bromide  
Trade name: "Librax"
- Perphenazine in combination with Amitriptyline Hydrochloride  
Trade name: "Triavil"

Drug Evaluation &amp; Classification Training

IX-6F

## Methods of Ingestion CNS Depressants



Orally



Injection

Drug Evaluation &amp; Classification Training

IX-7

## Possible Effects of CNS Depressants

- Reduced inhibitions
- Divided attention impairment
- Slowed reflexes
- Impaired judgment and concentration
- Impaired vision
- Lack of coordination
- Slurred mumbled or incoherent speech
- Emotional instability

Drug Evaluation &amp; Classification Training

IX-8

## Onset and Duration Classes

- Ultrashort  
Very fast acting, very brief effects
- Short  
Fairly fast acting, effects last several hours
- Intermediate  
Relatively slow acting but prolonged effects
- Long  
Delayed but long-lasting effects

Drug Evaluation &amp; Classification Training

IX-9

## Examples of Short to Intermediate CNS Depressants

- Barbiturates
  - Seconal
  - Nembutal
  - Tuinal
  - Amytal
- Anti-anxiety tranquilizers
  - Valium
  - Librium
  - Xanax
  - Serax
- Non-barbiturates
  - Noctec or Felsule
  - Doriden
  - Noludar
  - Quaalude
  - Placidyl
  - Equanil or Miltown
  - Soma

Drug Evaluation &amp; Classification Training

IX-10

## Evaluation of Subjects Under the Influence of CNS Depressants

- Horizontal Gaze Nystagmus - present
- Vertical Gaze Nystagmus may be present (with high doses for that individual)
- Lack of Convergence - present
- Impaired performance will be evident on Romberg, Walk and Turn, One Leg Stand and Finger to Nose

Drug Evaluation &amp; Classification Training

IX-11A

## Evaluation of Subjects Under the Influence of CNS Depressants

### Vital Signs

- Blood pressure - down
  - Pulse - down\*
  - Body temperature - normal
- \* Quaaludes and ETOH may elevate

Drug Evaluation &amp; Classification Training

IX-11B

## Evaluation of Subjects Under the Influence of CNS Depressants

### Dark Room Examinations

- Pupil size - normal\*
- Pupillary reaction to light - slow

\* Methaqualone and Soma will cause pupil dilation

Drug Evaluation &amp; Classification Training

IX-11C

## Evaluation of Subjects Under the Influence of CNS Depressants

### General Indicators

- Disoriented
- Droopy eyelids (Ptosis)
- Drowsiness
- Drunk-like behavior
- Flaccid muscle tone
- Gait Ataxia
- Slow, sluggish reactions
- Thick, slurred speech
- Uncoordinated

Drug Evaluation &amp; Classification Training

IX-11D

## CNS Depressant Symptomatology Chart

HGN	Present
Vertical Gaze Nystagmus	Present (High dose for that individual)
Lack of Convergence	Present
Pupil Size	Normal*
Reaction to Light	Slow
Pulse Rate	Down**
Blood Pressure	Down
Temperature	Normal
Muscle Tone	Flaccid

\* Soma and Quaaludes usually dilate pupils

\*\* Quaaludes and ETOH may elevate

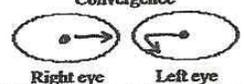
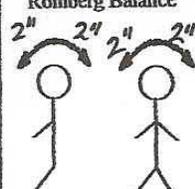
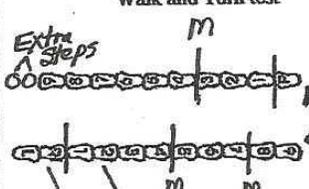
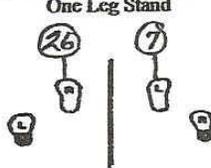
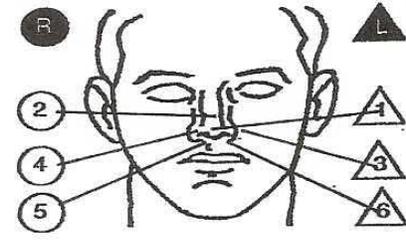
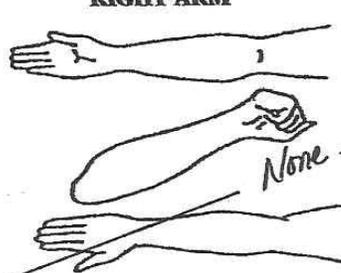
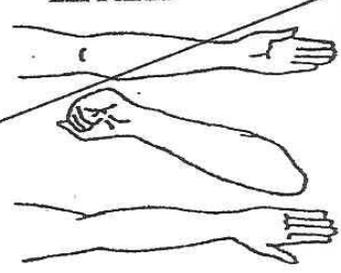
Drug Evaluation &amp; Classification Training

IX-12

# QUESTIONS?

Drug Evaluation &amp; Classification Training

## DRUG INFLUENCE EVALUATION

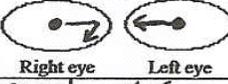
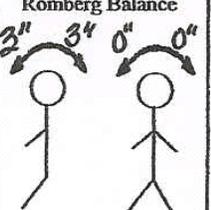
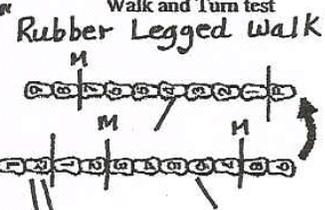
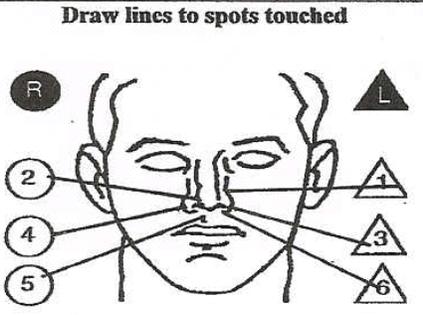
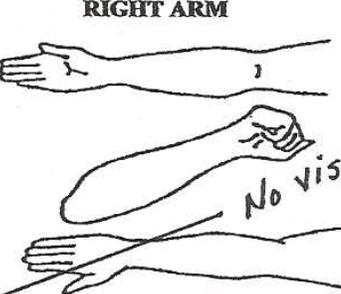
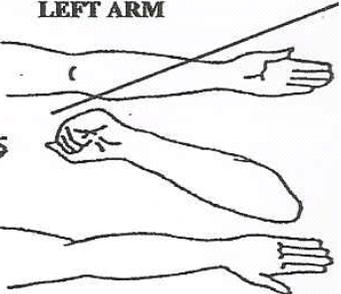
Evaluator <b>PFC David Pacoe, BCPD 5293</b>		DRE No. <b>5293</b>		Rolling Log No. <b>2-11-0301</b>		Session IX #1	
Recorder/Witness <b>Sgt. Tom Woodward</b>		Crash: <input type="checkbox"/> Fatal <input checked="" type="checkbox"/> None <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>04-5403-36042</b>			
Arrestee's Name (Last, First MI) <b>Cockroft, Carolyn</b>		DOB <b>04-21-60</b>		Sex <b>F</b>	Race <b>W</b>	Arresting Officer (Name, ID No.) <b>Ofc. Mike Gregor, MTA PD</b>	
Date Examined/Time/Location <b>08-06-04, 0045, Tunnel Command</b>		Breath Results: Instrument # <b>00324</b> <b>0.00 %</b>		Chemical Test <input type="checkbox"/> Refused <input checked="" type="checkbox"/> Urine <input type="checkbox"/> Blood			
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? By: <b>Ofc. Gregor</b> <b>Chicken Soup</b> <b>8 pm</b>		When? <b>8 pm</b>		What have you been drinking? How much? <b>Nothing</b>	
Time of last drink? <b>N/A</b>		Time now? <b>Midnight</b>		When did you last sleep? <b>Last night</b>		How long? <b>6 hrs.</b>	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"It's none of your business."</b>		Attitude: <b>Sullen; with-drawn; non-responsive</b>		Coordination: <b>Poor; Stumbling, staggering</b>		Face: <b>Normal</b>	
Speech: <b>Slurred</b>		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input checked="" type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy	
Pulse and time 1. <b>60 10050</b> 2. <b>58 10105</b> 3. <b>58 10117</b>		HGN Lack of smooth pursuit Maximum deviation Angle of onset		Left Eye <b>yes</b> Right Eye <b>yes</b> <b>35°</b> <b>35°</b>		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Convergence 	
Romburg Balance 		Walk and Turn test 		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon: <input checked="" type="checkbox"/>		One Leg Stand 	
				Stops walking		L R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing	
				Misses heel to toe <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms to balance	
				Steps off line <input checked="" type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> Hopping	
				Raises arms <input checked="" type="checkbox"/>		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down	
				Actual # steps <b>9</b> <b>11</b>		Type of footwear: <b>Loafers</b>	
Internal clock <b>46</b> Est. as 30 seconds		Describe Turn <b>Lost balance, staggered to right</b>		Cannot do test (explain) <b>N/A</b>		Nasal area: <b>Clear</b>	
Draw lines to spots touched 		Pupil Size		Room Light		Darkness	
		Left <b>4.0</b>		<b>4.0</b>		<b>6.0</b>	
		Right <b>4.0</b>		<b>4.0</b>		<b>6.0</b>	
		Direct <b>3.5</b>					
		Rebound dilation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: <b>Slow</b>			
Blood pressure <b>110 / 70</b>		Temperature <b>98.5° f</b>		RIGHT ARM 		LEFT ARM 	
Muscle tone: <input type="checkbox"/> Near normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:		None			
What medication or drug have you been using? How much? <b>unknown</b>		Time of use? <b>Don't remember</b>		Where were the drugs used? (location) <b>Brother's house</b>			
Date/Time of Arrest <b>08/06/04, 0015</b>		Time DRE Notified <b>0035</b>		Evaluation Start Time <b>0045</b>		Time Completed <b>0125</b>	
DRE signature (include rank) <b>David Pacoe</b>		ID # <b>5293</b>		Reviewed by 			
Opinion of evaluator: <input type="checkbox"/> Rule Out <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input checked="" type="checkbox"/> CNS Depressant		<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen		<input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis	

**DRUG INFLUENCE EVALUATION NARRATIVE**

Suspect: Cockroft, Carolyn

- 1. LOCATION:** The evaluation of Carolyn Cockroft took place in the Tunnel Command Processing Room at the Maryland Transportation Authority Police Department.
- 2. WITNESSES:** Arresting Officer Mike Gregor of the Maryland Transportation Authority P.D and Sgt. Tom Woodward of the Maryland State Police.
- 3. BREATH ALCOHOL TEST:** Officer Gregor administered a breath test to Cockroft with a 0.00% result.
- 4. NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was notified by dispatch that Officer Gregor had arrested a subject for DUI and was requesting a drug evaluation. Writer contacted Officer Gregor at the M.T.A. Tunnel Command office where it was determined that the suspect had been observed driving at 30 MPH on I-95 near the tunnel. When contacted, the suspect appeared dazed and disoriented. She was unable to perform the roadside SFST's as directed and was arrested for DUI.
- 5. INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the Processing Room. She was quiet, withdrawn and slow to respond to questions. When she would try to walk, she would stumble and several times nearly fell.
- 6. MEDICAL PROBLEMS AND TREATMENT:** None observed or stated.
- 7. PSYCHOPHYSICAL TESTS:** Romberg Balance: The suspect exhibited a 2" front to back and side to side sway. She estimated 30 seconds in 46 seconds. Walk and Turn: The suspect lost her balance during the instructions, started to soon, stepped off the line, missed heel to toe, raised her arms for balance, staggered to the right while turning and took two extra steps returning back down the line. One Leg Stand: The suspect swayed, raised her arms for balance, hopped and put her foot down. Finger to Nose: The suspect missed the tip of her nose on five of the six attempts.
- 8. CLINICAL INDICATORS:** The suspect exhibited six clues of HGN and a Lack of Convergence. Two of her pulse readings were below the normal range and her Systolic blood pressure was below the normal range.
- 9. SIGNS OF INGESTION:** None were evident.
- 10. SUSPECT'S STATEMENTS:** The suspect admitted taking "some medicine" her brother gave her. She also stated that she did not know what the medicine was.
- 11. DRE'S OPINION:** In my opinion Cockroft is under the influence of a CNS Depressant and unable to operate a vehicle safely.
- 12. TOXICOLOGICAL SAMPLE:** The suspect provided a urine sample for analysis.
- 13. MISCELLANEOUS:**

## DRUG INFLUENCE EVALUATION

Evaluator <b>Ofc. Jason Craven, CHP</b>		DRE No. <b>8225</b>	Rolling Log No. <b>05-09-174</b>	Session IX #2	
Recorder/Witness <b>Sgt. Helena Williams, CHP</b>		Crash: <input type="checkbox"/> Fatal <input checked="" type="checkbox"/> None <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>2005-4115-8912</b>	
Arrestee's Name (Last, First MI) <b>Henry, Michael J.</b>		DOB <b>3-11-70</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID No.) <b>Dpty. Mike Roger Sac. Co. S1</b>
Date Examined/Time/Location <b>09-06-05 2110 hrs, Stockton Blvd.</b>		Breath Results: <input type="checkbox"/> Refused Instrument # <b>128384</b> <b>0.05%</b>		Chemical Test <input type="checkbox"/> Refused <input type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood	
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		"What have you eaten today?" <b>"Cheeseburger"</b>		"When? Which time?" <b>"Couple beers"</b>	
By: <b>Dpty. Rogers</b>		"What have you been drinking? How much?" <b>"Couple beers"</b>		Time of last drink? <b>6 pm</b>	
Time now? <b>About 9 PM</b>		When did you last sleep? <b>Last night</b>		How long? <b>8 hrs</b>	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<b>Seeing a doctor for stress</b>	
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>"Valium, 4 times a day"</b>		Attitude: <b>Cooperative</b>		Coordination: <b>Poor, unstable</b>	
Breath: <b>Alcoholic Beverage</b>		Face: <b>Normal</b>			
Speech: <b>Slurred, thick</b>		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Eyelids: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy					
Pulse and time 1. <b>64 / 2130</b> 2. <b>62 / 2142</b> 3. <b>62 / 2157</b>		HGN Lack of smooth pursuit Maximum deviation Angle of onset <b>Yes</b> <b>Yes</b> <b>30°</b>		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Convergence  Right eye      Left eye	
Romberg Balance 		Walk and Turn test <b>"Rubber Legged Walk"</b> 		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon: <input checked="" type="checkbox"/>	
		1 <sup>st</sup> Nine      2 <sup>nd</sup> Nine		L      R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms to balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down	
		Stops walking <input checked="" type="checkbox"/> Misses heel to toe <input checked="" type="checkbox"/> Steps off line <input checked="" type="checkbox"/> Raises arms <b>Constant</b> Actual # steps <b>9</b> <b>9</b>		Type of footwear: <b>Lace up shoes</b>	
Internal clock <b>50</b> Est. as 30 seconds		Describe Turn Lost balance and staggered		Cannot do test (explain) <b>N/A</b>	
Draw lines to spots touched 		Pupil Size Left <b>4.5</b> Right <b>4.5</b>		Room Light <b>4.5</b> Darkness <b>6.5</b> Direct <b>3.5</b>	
		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Blood pressure <b>106/66</b>		Temperature <b>98.6 °f</b>		Reaction to Light: <b>Slow</b>	
Muscle tone: <input checked="" type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		RIGHT ARM 		LEFT ARM 	
Comments:					
What medication or drug have you been using? How much? <b>Valium "A couple of pills"</b>		Time of use? <b>6 o'clock</b>		Where were the drugs used? (location) <b>Joe's Tavern</b>	
Date/Time of Arrest <b>09-06-05, 2030 hrs.</b>		Time DRE Notified <b>2050 hrs.</b>		Evaluation Start Time <b>2115 hrs.</b>	
DRE Signature (Include rank) <b>Jason Craven, CHP</b>		ID # <b>8225</b>		Reviewed by <b>Sgt. Helena Williams 9/10/05</b>	
Time Completed <b>2210 hrs.</b>					
Opinion of evaluator: <input type="checkbox"/> Rule Out <input checked="" type="checkbox"/> Alcohol <input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant <input type="checkbox"/> Medical <input checked="" type="checkbox"/> CNS Depressant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis					

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Henry, Michael J.

1. **LOCATION:** The examination of Michael Henry took place in the DRE evaluation room of the Stockton Blvd. Partnership.
2. **WITNESSES:** Arresting Officer, Deputy Mike Rogers, Sacramento Co. S.O. and Sgt. Helena Williams, CHP.
3. **BREATH ALCOHOL TEST:** Deputy Rogers administered a breath test to Henry with a 0.05% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was contacted by dispatch and requested to conduct a drug evaluation for Deputy Rogers. Writer contacted Deputy Rogers at the Stockton Blvd. Partnership where he advised that he had located the suspect slumped over in the driver's seat of a vehicle stopped in the S/B traffic lane of S.R. 99. Deputy Rogers further advised that the suspect appeared to be highly intoxicated and performed poorly on the SFST's.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in a slumped position in a chair next to the interview room desk. The suspect was mumbling, had thick, slurred speech and was slow to respond to questions.
6. **MEDICAL PROBLEMS AND TREATMENT:** The suspect stated he was under the care of a doctor for stress.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: The suspect swayed approximately 3" front to back and estimated 30 seconds in 50 seconds. Walk and Turn: The suspect lost his balance twice during the instructions, stepped off the line, missed heel to toe, raised his arms for balance and staggered while turning. One Leg Stand: Suspect swayed, raised his arms and put his foot down. Finger to Nose: Suspect missed the tip of his nose on each attempt.
8. **CLINICAL INDICATORS:** The suspect exhibited HGN and a Lack of Convergence. One of his pulse readings and his blood pressure was below the normal range.
9. **SIGNS OF INGESTION:** Suspect had an odor of alcoholic beverage on his breath.
10. **SUSPECT'S STATEMENTS:** The suspect admitted drinking "a couple of beers" and taking Valium. He stated he takes the Valium four times a day for stress.
11. **DRE'S OPINION:** In my opinion Henry is under the influence of Alcohol (ETOH) and another CNS Depressant and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a blood sample.
13. **MISCELLANEOUS:** The suspect voluntarily produced a pill bottle containing his Valium pills. He admitted filling the prescription for 30 pills two days earlier. There were only 12 pills remaining in the bottle.

One Hour and Forty-Five Minutes

**SESSION X**

**CENTRAL NERVOUS SYSTEM STIMULANTS**

**SESSION X****CENTRAL NERVOUS SYSTEM STIMULANTS**

Upon successfully completing this session the student will be able to:

- o Explain a brief history of the CNS Stimulant category of drugs.
- o Identify common drug names and terms associated with this category.
- o Identify common methods of administration for this category.
- o Describe the symptoms, observable signs and other effects associated with this category.
- o Describe the typical time parameters, i.e. onset and duration of effects, associated with this category.
- o List the clues that are likely to emerge when the drug influence evaluation is conducted for a person under the influence of this category of drugs.
- o Correctly answer the "topics for study" questions at the end of this session.

**Content Segments****Learning Activities**

A.	Overview of the Category	o	Instructor Led Presentations
B.	Possible Effects	o	Review of Drug Evaluation and Classification Exemplars
C.	Onset and Duration of Effects	o	Reading Assignments
D.	Overdose Signs and Symptoms	o	Video Presentations
E.	Expected Results of the Evaluation	o	Slide Presentations

Aids	Lesson Plan	Instructor Notes
 <p><b>25 Minutes</b></p>  <p>X-1 (Title)</p>  <p><b>X-2A&amp;B</b> (Objectives)</p>	<p><b>CENTRAL NERVOUS SYSTEM STIMULANTS</b></p> <p><b>A. Overview of the Category</b></p> <ol style="list-style-type: none"> <li>1. CNS Stimulants speed up the operation of the Central Nervous System.           <ol style="list-style-type: none"> <li>a. "Speed Up" does <u>not</u> mean "improve".</li> <li>b. The "speeding up" results in increased heartbeat, pulse, respiration, blood pressure and temperature.</li> <li>c. All of these effects can lead to physical harm to the stimulant user.</li> </ol> </li> </ol>	<p>Total Lesson Time: Approximately 105 Minutes</p> <p>Display Title Slide</p> <p>Session title on wall chart.</p> <p><u>Briefly</u> review the objectives, content and activities of this session.</p> <p><u>Emphasize</u> that abuse of CNS Stimulants does not make the brain work "better" or "smarter". Rather, they induce the brain to cause many of the body's organs to work <u>harder</u>, but not <u>better</u>.</p> <p><u>However:</u> Robert Louis Stevenson wrote "The Strange Case of Dr. Jekyll and Mr. Hyde" while under the influence of cocaine. He wrote sixty thousand words in six days.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>X-3A</b> (Cocaine)</p>	<p>d. The "speeding up" also produces nervousness, irritability and an inability to concentrate or think clearly.</p> <p>e. These psychological effects can lead to unpredictable and bizarre behavior by the stimulant user.</p> <p>2. There are three major subcategories of Central Nervous System Stimulants.</p> <p>a. <u>Cocaine</u></p>	
 <p><b>X-3B</b> (Amphet)</p>	<p>b. <u>The Amphetamines</u></p> <p>Examples:</p> <ul style="list-style-type: none"> <li>o Methamphetamine</li> <li>o Amphetamine Sulfate</li> <li>o Desoxyn</li> </ul>	<p><u>Point out</u> that the Amphetamines include a large number of individual drugs, only a few of which are listed on Visual X-1.</p>
 <p><b>X-3C</b> (Others)</p>	<p>c. <u>Others</u></p> <ul style="list-style-type: none"> <li>o Ritalin (methylphenidate hydrochloride)</li> <li>o Preludin (phenmetrazine hydrochloride)</li> <li>o Cylert (pemoline)</li> <li>o Ephedrine</li> <li>o Caffeine</li> </ul>	<p><u>Point out</u> that there are many "other" CNS Stimulants (i.e., non-Cocaine and non-Amphetamines); the ones listed on the visual are only a few of those.</p> <p><u>Point out</u> that we will focus on Cocaine and the Amphetamines, because they are the most widely abused CNS Stimulants. But, the students should be aware that there <u>are</u> other stimulant drugs.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>X-4</b> (Coca Plant)</p>	<p>3. Cocaine derives from the <u>coca plant</u>.</p> <ul style="list-style-type: none"> <li>a. The plant is native to South America.</li> <li>b. Cocaine is made from the leaves of the coca plant.</li> <li>c. Archaeological evidence indicates that natives of Peru chewed coca leaves 5,000 years ago.</li> <li>d. Sigmund Freud personally experimented with Cocaine for approximately 3 years.</li> <li>e. Small quantities of cocaine originally were included in the formula for Coca Cola.</li> </ul> <p>4. Amphetamines were first synthesized near the end of the 19th Century.</p>	<p>Coca plant: Scientific name "Erythroxyton Coca".</p> <p><u>NOTE</u>: the coca plant should not be confused with the <u>cocoa</u> plant, from which chocolate is made.</p> <p>Use of Cocaine in products such as Coca Cola was outlawed by the Pure Food and Drug Law of 1906.</p>
 <p><b>X-5A</b> (Medical Uses)</p>	<ul style="list-style-type: none"> <li>a. The first use of Amphetamines for medical purposes began in the 1920's.</li> <li>b. Initial medical application was to treat colds. <ul style="list-style-type: none"> <li>o Amphetamines cause the nasal membranes to shrink.</li> </ul> </li> </ul>	

Aids	Lesson Plan	Instructor Notes
 <p><b>X-5B</b> (Medical Uses)</p>	<ul style="list-style-type: none"> <li>o This gives temporary relief from stuffy nasal passages.</li>   <li>c. Present day medical purposes for amphetamines include: <ul style="list-style-type: none"> <li>o control symptoms of narcolepsy</li>   <li>o control certain hyperactive behavioral disorders</li>   <li>o relieve or prevent fatigue to allow persons to perform essential tasks of long duration</li>   <li>o treat mild depression</li>   <li>o control appetite</li>   <li>o antagonize the effects of Depressant drugs</li>   <li>o prevent and treat surgical shock</li> </ul> </li> </ul>	<p><u>Point out</u> that much more effective drugs have been developed to treat cold symptoms. Amphetamines are no longer prescribed as cold remedies.</p> <p><u>Narcolepsy</u>: an extremely rare disorder that causes the individual to fall asleep compulsively, often several hundred times per day.</p> <p>Example: Ritalin or Cylert are commonly prescribed for children diagnosed with ADD or similar disorders.</p> <p>Point out that the U.S. Air Force previously gave pilots amphetamines to keep them alert on long flights. Amphetamines have also had other short term military applications.</p> <p>Many over the counter appetite control products contain CNS Stimulants as their active ingredient.</p> <p><u>Remind</u> students that two drugs are <u>antagonistic</u> when the signs and symptoms of one are opposite to the signs and symptoms of the other.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>X-6</b> (Pharm- aceutical Amphe- tamines)</p>	<ul style="list-style-type: none"> <li>o maintain blood pressure during surgery</li> <li>o treat Parkinson's Disease</li> <li>o enhance the action of certain analgesic (pain killer) drugs</li> <li>d. Numerous pharmaceutical companies manufacture Amphetamines for these purposes.</li> <li>e. Examples of common pharmaceutical Amphetamines. <ul style="list-style-type: none"> <li>o <u>Dexedrine</u> (dextroamphetamine sulfate) used to treat narcolepsy and hyperkinetic behavior, and for weight control. (Street names "Dexies", "Hearts")</li> <li>o <u>Benzedrine</u> (Amphetamine sulfate) used to treat narcolepsy, hyperkinetic behavior and weight problems. (Street names "Bennies", "Whites", "Cartwheels")</li> </ul> </li> </ul>	<p><u>Parkinson's Disease</u>: a form of paralysis characterized by muscular rigidity, tremor and weakness.</p> <p><u>NOTE</u>: Dexedrine probably is the most commonly prescribed Amphetamine.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>X-7A (Illicit Amphet's)</b></p>	<ul style="list-style-type: none"> <li>o <u>Desoxyn</u> (Methamphetamine hydrochloride, also known as desoxyephedrine) used in weight reduction.</li> <li>o <u>Adderall</u> (Combination of dextroamphetamine and amphetamine)</li> </ul> <p>5. Large quantities of Amphetamines are also <u>illegally manufactured</u> in this country.</p> <ul style="list-style-type: none"> <li>a. The most commonly abused illicit Amphetamine is Methamphetamine.</li> <li>b. Methamphetamine hydrochloride is a white to light brown crystalline powder, or clear chunky crystals resembling ice. Methamphetamine base is a liquid.</li> <li>c. The majority of street Methamphetamine is produced in clandestine laboratories.</li> <li>d. Medicinally, methamphetamine is used in the treatment of narcolepsy, ADD and ADHD.</li> </ul>	<p>Note: Clandestine production normally involves the reduction of L-ephedrine or d-pseudoephedrine over red phosphorus with hydroiodic acid, or reduction with sodium or lithium in condensed liquid ammonia.</p> <p>Attention Deficit Disorder (ADD)</p> <p>Attention Deficit Hyperactivity Disorder (ADHD)</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>X-7B</b> (Other Stimulants)</p>	<p>e. <u>Methamphetamine</u> is also known as Methedrine or methamphetamine hydrochloride.</p> <p>f. Its more common "street names" are "speed"; "crank"; "ice"; "crystal"; "meth"; and, "water".</p> <p>6. There are some other CNS Stimulants, apart from Cocaine or the Amphetamines.</p> <p>a. <u>Preludin</u> is a licitly manufactured CNS Stimulant that is not an Amphetamine:</p> <ul style="list-style-type: none"> <li>o generic name <u>phenmetrazine hydrochloride</u></li> <li>o used in weight control</li> <li>o has all of the basic effects of amphetamine</li> </ul> <p>b. <u>Ritalin</u> is another licitly manufactured, non-Amphetamine CNS Stimulant:</p> <ul style="list-style-type: none"> <li>o generic name <u>methylphenidate hydrochloride</u></li> <li>o used to treat mild depression, hyperkinetic behavior, narcolepsy and drug induced lethargy produced by CNS Depressants.</li> </ul>	<p><u>If available:</u> display slides of illicitly manufactured methamphetamine and amphetamine sulfate.</p> <p>Ask students if they know of any children for whom Ritalin has been prescribed.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>o has many of the basic clinical effects of Amphetamine.</li> <li>c. <u>Cylert</u> is a third licitly manufactured, non-Cocaine and non-Amphetamine CNS Stimulant: <ul style="list-style-type: none"> <li>o generic name <u>Pemoline</u>.</li> <li>o used to treat Attention Deficit Disorder (ADD), also known as "hyperactivity".</li> <li>o has many of the basic clinical effects of Amphetamine.</li> </ul> </li> <li>d. <u>Ephedrine</u> is a licitly manufactured stimulant used in diet aides, body building supplements. It can also be found in herbal teas and preparations.</li> <li>e. <u>Cathine and Cathinone</u> are the two psychoactive chemicals derived from the Khat plant. It originates from the sub-Sahara regions of Africa.</li> <li>f. <u>Methcathinone</u> is illicitly manufactured from common household chemicals. Effects are very similar to methamphetamine.</li> </ul>	<p><u>If available</u>: display slides of Preludin and Ritalin.</p> <p><u>Remind</u> the students that we will focus on Cocaine and the Amphetamines for our discussion of CNS Stimulants and their effects.</p> <p>Also known as "cat".</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>X-8A</b> (Methods of Ingestion)</p>	<p>7. Methods of ingestion of CNS Stimulants.</p> <ul style="list-style-type: none"> <li>a. There are a variety of ways in which the different CNS Stimulants may be ingested.</li> <li>b. <u>Cocaine</u> is commonly insufflated (snorted), smoked, injected and taken orally.</li> <li>c. In order to be smoked, a pure form of Cocaine is required. <ul style="list-style-type: none"> <li>o Much of the Cocaine sold in this country is mixed with other materials, or chemically bonded to other elements.</li> <li>o Various chemical processes can be used to "free" the Cocaine from other elements and impurities.</li> <li>o One such process produces pure Cocaine in the form of small chunks.</li> <li>o These chunks are known as "Crack" or "Rock Cocaine".</li> </ul> </li> <li>d. Licitly manufactured <u>Amphetamines</u> are taken orally, in the form of tablets, capsules and liquid elixirs.</li> </ul>	<p><u>NOTE:</u> the term "Crack" derives from the cracking sound produced when the chunks are burned for smoking.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>X-8B</b> (Methods of Ingestion)</p>	<p>e. Illicitly manufactured <u>Methamphetamine</u> most commonly is injected or smoked but sometimes may be snorted or taken orally.</p> <p>f. The smokeable forms of Methamphetamine are known as “Crystal Meth” or “Ice”. They contain the same active chemical compound as powdered Methamphetamine, but undergo a recrystallization process in which some impurities are removed.</p> <p>g. Illicitly manufactured <u>Amphetamine sulfate</u> usually is produced in tablet form (called "Mini bennies") and is taken orally.</p>	<p>Point out that bruising often will be seen around a Methamphetamine injection site.</p> <p><u>Point out</u> that "Ice" is a clear crystal similar in appearance to rock candy, crushed ice, or broken glass.</p> <p><u>Point out</u> that “Crystal Meth” is less pure and has a cloudy appearance or maybe yellowish, tan, or even brown in color.</p> <p>Solicit students' questions and comments about the overview of CNS Stimulants.</p>
 <p><b>5 Minutes</b></p>	<p><b>B. Possible Effects</b></p>	
 <p><b>X-9</b> (Possible Effects)</p>	<p>1. Both Cocaine and the Amphetamines produce <u>euphoria</u>, a feeling that there are no problems.</p> <p>a. A feeling of super strength and absolute self confidence may also be present.</p>	

Aids	Lesson Plan	Instructor Notes
 <b>10 Minutes</b>	<p>b. With Cocaine, but not with Amphetamines, there is an anesthetic effect, and the dulling of pain may contribute to the euphoria.</p> <p>2. Stimulant users tend to become <u>hyperactive</u>, indicated by a nervousness, extreme talkativeness, and an inability to sit still.</p> <p>3. CNS Stimulants tend to <u>release inhibitions</u>, allowing users to commit acts that they normally would avoid.</p> <p>4. Stimulant users <u>misperceive time and distance</u>.</p> <p>5. Persons under the influence of CNS Stimulants become easily confused, and lose the <u>ability to concentrate</u> or to think clearly for any length of time.</p> <p><b>C. Onset and Duration of Effects</b></p> <p>1. The onset and duration of effects are quite different for Cocaine as compared to the Amphetamines.</p> <p>a. Generally speaking, Cocaine's effects are much briefer than are Amphetamine's.</p>	<p><u>Example:</u> To the subject, time seems to be speeded up, so that 2 hours may seem like two minutes.</p> <p><u>Point out</u> that this lack of concentration makes it very difficult for the user to perform divided attention tests successfully.</p> <p>Solicit students' questions and comments concerning possible effects of CNS Stimulants.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>X-10</b> (Cocaine Time Factors)</p>	<p>b. The time parameters of Cocaine vary with the method of ingestion.</p> <p>2. When Cocaine is <u>smoked</u>, or "freebased", the drug goes immediately to the lungs, and is absorbed into the blood stream very rapidly.</p> <p>a. The smoker begins to feel the effects of the Cocaine virtually immediately.</p> <p>b. The "rush", or euphoria, is reported to be very intense.</p> <p>c. However, the euphoric effects only last 5-10 minutes after the Cocaine is smoked.</p> <p>3. When Cocaine is <u>injected</u>, the drug is passed directly to the blood stream, where it is carried swiftly to the brain.</p> <p>a. The effects are felt within seconds.</p> <p>b. The onset of effects is very intense.</p> <p>c. The effects usually continue to be felt for 45-90 minutes.</p>	<p>Note: Subjects that have ingested both Cocaine and Alcohol will produce a metabolite known as "Cocaethylene". Which has a half-life of four hours possibly extending the effects of Cocaine longer than the norm.</p> <p>Note: Injection sites will be discussed in Session XVII (Narcotic Analgesics).</p>

Aids	Lesson Plan	Instructor Notes
	<p>4. When Cocaine is <u>snorted</u> (insufflated), the onset of effects is not quite as rapid as with smoking or injecting.</p> <ul style="list-style-type: none"> <li>a. The user typically feels the onset of effects within 30 seconds after snorting the drug.</li> <li>b. Although the "rush" occurs, it is not quite as intense as it is when the Cocaine is smoked or injected.</li> <li>c. The effects from snorting usually last from 30-90 minutes.</li> </ul> <p>5. <u>Oral</u> ingestion of Cocaine usually is the least preferred method.</p> <ul style="list-style-type: none"> <li>a. The user generally does not begin to feel the effects for 3-5 minutes.</li> <li>b. The effects are not as intense as they are with other methods of ingestion.</li> <li>c. However, the effects may last 15-30 minutes longer than with other methods.</li> </ul> <p>6. With all methods of ingestion, the duration of Cocaine's effects tend to be briefer than the effects of most other drugs.</p> <ul style="list-style-type: none"> <li>a. As the effects wear off, it becomes very difficult to observe evidence of impairment.</li> </ul>	<p><u>Point out</u> that snorting remains a very popular method of ingesting Cocaine.</p> <p><u>Clarification:</u> the effects of Cocaine taken orally may last from 45-120 minutes.</p> <p><u>Point out</u> that it is very possible that a Cocaine user may not be examined by a DRE until at least 30 minutes following the use of the drug. Often, much more time will have elapsed. For this reason, Cocaine use may be difficult to ascertain from the drug evaluation.</p>

## Aids

## Lesson Plan

## Instructor Notes



**X-11** (Meth  
Time Factors)



**5 Minutes**

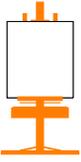
- b. If the suspect is not evaluated by a Drug Recognition Expert fairly soon after the suspect has been apprehended, the DRE may not uncover evidence of the CNS Stimulant.
7. When Methamphetamine is injected, the initial effects are very similar to the injection of Cocaine.
- a. The user begins to feel the effects within a few seconds.
  - b. The "rush" is very intense, and lasts at a high level of intensity for 5-30 seconds.
  - c. Unlike Cocaine, Methamphetamine's effects are longer and may last up to 12 hours after injection.
8. When Methamphetamine is smoked, the rush is very intense, and the effects are long lasting. The user stays "high" for 4-8 hours with residual effects lasting up to 12 hours.
9. When Methamphetamine is snorted or taken orally, the onset takes longer, the rush is much less intense, and the effects are much briefer.

**D. Overdose Signs and Symptoms**

1. Overdoses of Cocaine or Amphetamines can cause the pleasurable effects to turn into panic and often violent behavior. If the overdose is caused by

Source: Drugs and Human Performance Fact Sheets, NHTSA (2004)

Solicit students' comments and questions concerning time parameters of Cocaine and Methamphetamine.

Aids	Lesson Plan	Instructor Notes
	<p>Cocaine, it is commonly referred to as Cocaine Psychosis or Cocaine Delirium.</p> <ol style="list-style-type: none"> <li>a. Subject may become very confused and aggressive.</li> <li>b. Subject may suffer convulsions and faint or pass into a coma.</li> <li>c. Heartbeat (pulse) will increase, possibly dramatically.</li> <li>d. Hallucinations may occur.</li> </ol> <ol style="list-style-type: none"> <li>2. Death can occur from sudden respiratory failure, or from heart arrhythmia, leading to cardiac arrest.</li> <li>3. Another danger is that subjects may attempt to treat CNS Stimulant overdose with Barbiturates, possibly leading to overdose of CNS Depressants.</li> </ol>	<p>Write on dry erase board or flip-chart “Cocaine Psychosis or Cocaine Delirium”.</p> <p>Example: The feeling that bugs are crawling under the skin is also known as “Coke Bugs”.</p> <p>Note: It is important that officers are aware of this to avoid in custody deaths.</p> <p>Solicit students' comments and questions concerning overdoses of CNS Stimulants.</p>
 <p><b>60 Minutes</b></p>  <p><b>X-12A</b> (Evaluation Results)</p>	<p><b>E. Expected Results of the Evaluation</b></p> <ol style="list-style-type: none"> <li>1. Observable evidence of impairment. <ul style="list-style-type: none"> <li>o Horizontal Gaze Nystagmus will <u>not</u> be present with suspects under the influence of CNS Stimulants.</li> <li>o Vertical Gaze Nystagmus will <u>not</u> be present.</li> </ul> </li> </ol>	

Aids	Lesson Plan	Instructor Notes
 <p><b>X-12B</b> (Vital Signs Exams)</p>  <p><b>X-12C</b> (Darkroom)</p>	<ul style="list-style-type: none"> <li>o Lack of Convergence will not be evident</li> <li>o Performance on Romberg will be impaired.</li> <li>o Performance on Walk and Turn may be impaired due to the suspect's hyperactivity and inability to concentrate.</li> <li>o Performance on One Leg Stand may be impaired due to the suspect's hyperactivity.</li> <li>o Performance on Finger to Nose tests will be impaired.</li> <li>o blood pressure generally will be elevated</li> <li>o pulse generally will be increased</li> <li>o body temperature generally will be elevated</li> <li>o pupils generally will be dilated</li> <li>o pupil reaction to light generally will be slow</li> </ul>	<p><u>Point out</u> that CNS Stimulants impair the user's perception of time, so that the subject's estimate of 30 seconds, on the Romberg test, may be speeded up.</p> <p><u>Example:</u> suspect may start too soon on Walk and Turn, and may tend to walk fast, thus losing balance or missing heel to toe.</p> <p><u>Example:</u> Suspect may also count very rapidly on the one leg stand test.</p> <p>His or her finger movements may be abrupt, jerky and inaccurate.</p> <p><u>Point out</u> that the technical term for "dilated pupils" is <u>Mydriasis</u>.</p>

Aids	Lesson Plans	Instructor Notes
 <p><b>X-12D&amp;E</b> (General Indicators)</p>	<p>b. General indicators:</p> <ul style="list-style-type: none"> <li>o anxiety</li> <li>o body tremors</li> <li>o dry mouth</li> <li>o euphoria</li> <li>o excited</li> <li>o exaggerated reflexes</li> <li>o eyelid tremors</li> <li>o grinding teeth (bruxism)</li> <li>o increased alertness</li> <li>o insomnia</li> <li>o irritability</li> <li>o redness to nasal area</li> <li>o restlessness</li> <li>o rigid muscle tone</li> <li>o runny nose</li> <li>o talkative</li> </ul>	<p><u>NOTE:</u> Indicators associated with the nasal area may be evident if the subject is in the habit of snorting Cocaine.</p>
 <p><b>X-13</b> (Symptomatology Chart)</p>	<p>3. Summary</p> <p>4. Demonstrations</p> <p>a. Video demonstrations</p> <p>b. Drug Evaluation and Classification exemplar demonstrations.</p>	<p>Show video tape of subject(s) under the influence of CNS Stimulants. Relate behavior/ observations to the CNS Stimulant Symptomatology Chart.</p> <p>Refer students to the exemplars found at the end of Section X in their student manuals.</p>
		<p>Relate the items on the exemplars to the CNS Stimulant Symptomatology Chart.</p> <p>Solicit students' questions or comments concerning expected results of the evaluation of subjects under the influence or CNS Stimulants.</p>

## **Topics for Study**

1. Why is it sometimes difficult for a DRE to obtain evidence of CNS Stimulant influence when examining a cocaine user?

**Cocaine, in general, is a fairly fast-acting, but short duration drug. When smoked, the user feels a “rush,” or very intense euphoria, but the effects only continue for 5-10 minutes. When injected, the effects begin quickly but only last 45-90 minutes**

2. What kinds of illicitly manufactured Amphetamines are most commonly abused?

**The two most commonly illicitly abused amphetamines are Methamphetamine and Amphetamine Sulfate**

3. Name two CNS Stimulants other than Cocaine or the Amphetamine compounds.

**Ritalin, Preludin, Cylert**

4. How do CNS Stimulants usually affect the blood pressure and pulse rate?

**CNS Stimulants usually elevate both blood pressure and pulse rate**

5. True or false: A person under the influence of a CNS Stimulant alone usually will not exhibit Horizontal Gaze Nystagmus?

**True**

6. What is "bruxism"?

**Grinding the teeth. This behavior is often seen in persons who are under the influence of Cocaine or other CNS Stimulants**

# Session X

## Central Nervous System Stimulants



X-1

### Central Nervous System Stimulants

Upon successfully completing this session the student will be able to:

- Explain a brief history of the CNS Stimulant category of drugs
- Identify common drug names and terms associated with this category
- Identify common methods of administration for this category
- Describe the symptoms, observable signs and other effects associated with this category

Drug Evaluation & Classification Training

X-2A

### Central Nervous System Stimulants (Continued)

- Describe the typical time parameters, i.e. on-set and duration of effects associated with this category
- List the clues that are likely to emerge when the drug influence evaluation is conducted for a person under the influence of this category of drugs
- Correctly answer the "topics for study" questions at the end of this session

Drug Evaluation & Classification Training

X-2B

### Subcategories of CNS Stimulants

- Cocaine



Drug Evaluation & Classification Training

X-3A

### Subcategories of CNS Stimulants (Continued)

- Amphetamines
  - Methamphetamine
  - Amphetamine Sulfate
  - Desoxyn



Drug Evaluation & Classification Training

X-3B

### Subcategories of CNS Stimulants (Continued)

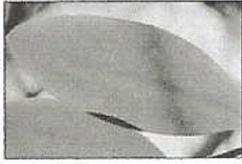
- Others
  - Ritalin
  - Preludin
  - Cylert
  - Ephedrine
  - Caffeine



Drug Evaluation & Classification Training

X-3C

## Coca Plant



“Erythroxyton Coca”

Drug Evaluation & Classification Training

X-4

## Medical Uses of Amphetamines

- Control appetite
- Control symptoms of narcolepsy
- Control hyperactivity in children
- Relieve or prevent fatigue
- Treat mild depression

Drug Evaluation & Classification Training

X-5A

## Other Medical Uses of Amphetamines

- Antagonize effects of depressants
- Prevent and treat surgical shock
- Maintain blood pressure during surgery
- Treat Parkinson's disease
- Enhance the action of analgesic drugs

Drug Evaluation & Classification Training

X-5B

## Commonly Prescribed Pharmaceutical Amphetamines

- **Dexedrine**
  - Dextroamphetamine Sulfate
- **Benzedrine**
  - Amphetamine Sulfate
- **Desoxyn**
  - Methamphetamine Hydrochloride

Drug Evaluation & Classification Training

X-6

## Commonly Abused Illicit Amphetamines

### Methamphetamine



Amphetamine Sulfate

Drug Evaluation & Classification Training

X-7A

## Other CNS Stimulants (Besides Cocaine or Amphetamines)

- **Preludin**
  - Phenmetrazine Hydrochloride
- **Ritalin**
  - Methylphenidate Hydrochloride
- **Cylert**
  - Pemoline

Drug Evaluation & Classification Training

X-7B

## Methods of Ingesting Stimulants

- Cocaine
  - Injection
  - Orally
  - Snorting
  - Smoking

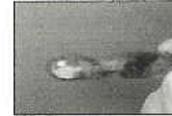


Drug Evaluation &amp; Classification Training

X-8A

## Methods of Ingesting Stimulants (Continued)

- Methamphetamine
  - Injection
  - Orally
  - Snorting
  - Smoking
- Other Amphetamines
  - Orally (tablets, capsules, etc.)



Drug Evaluation &amp; Classification Training

X-8B

## Possible Effects of CNS Stimulants

- Euphoria
- Hyperactivity
- Inability to concentrate
- Misperception of time and distance
- Release of inhibitions

Drug Evaluation &amp; Classification Training

X-9

## Cocaine Time Factors

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Smoked (freebase)               <ul style="list-style-type: none"> <li>– Virtually immediate effects</li> <li>– Very intense "rush"</li> <li>– Effects last 5-10 minutes</li> </ul> </li> <li>• Injected               <ul style="list-style-type: none"> <li>– Effects are felt within seconds</li> <li>– Very intense "rush"</li> <li>– Effects last 45-90 minutes</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Snorted               <ul style="list-style-type: none"> <li>– Effects are felt within 30 seconds</li> <li>– Intense "rush"</li> <li>– Effects last 30-90 minutes</li> </ul> </li> <li>• Orally               <ul style="list-style-type: none"> <li>– Effects begin within 3-5 minutes</li> <li>– Effects are less intense</li> <li>– Effects last 45-120 minutes</li> </ul> </li> </ul> |
|--|--|

Drug Evaluation &amp; Classification Training

X-10

## Methamphetamine Time Factors

- Effects are felt within seconds
- "Rush" is very intense for 5-30 seconds
- Effects can last up to 12 hours

Drug Evaluation &amp; Classification Training

X-11

## Evaluation of Subjects Under the Influence of CNS Stimulants

- HGN or VGN - none
- Lack of Convergence - none
- Impaired performance will be evident on Romberg, Walk and Turn, One Leg Stand and Finger to Nose

Drug Evaluation &amp; Classification Training

X-12A

### Evaluation of Subjects Under the Influence of CNS Stimulants

#### Vital Signs:

- Blood pressure - up
- Pulse - up
- Body temperature - up

Drug Evaluation &amp; Classification Training

X-12B

### Evaluation of Subjects Under the Influence of CNS Stimulants

#### Dark Room Examinations:

- Pupils - dilated (Mydriasis)
- Pupillary reaction to light - slow

Drug Evaluation &amp; Classification Training

X-12C

### Evaluation of Subjects Under the Influence of CNS Stimulants

#### General Indicators

- Anxiety
- Body tremors
- Bruxism
- Dry mouth
- Euphoria
- Exaggerated reflexes
- Eyelid and Leg tremors
- Irritability
- Redness to nasal area
- Restlessness
- Running nose
- Talkative

Drug Evaluation &amp; Classification Training

X-12D

### Evaluation of Subjects Under the Influence of CNS Stimulants

#### General Indicators

#### If subject snorts Cocaine:

- Redness to nasal area
- Runny nose



Drug Evaluation &amp; Classification Training

X-12E

### CNS Stimulant Symptomatology Chart

HGN	None
VGN	None
Lack of Convergence	None
Pupil Size	Dilated (mydriasis)
Reaction to Light	Slow
Pulse Rate	Up
Blood Pressure	Up
Temperature	Up
Muscle Tone	Possibly rigid

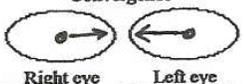
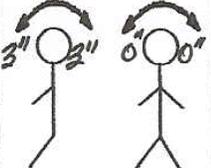
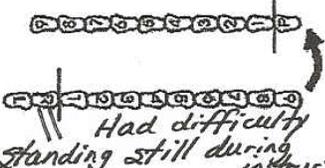
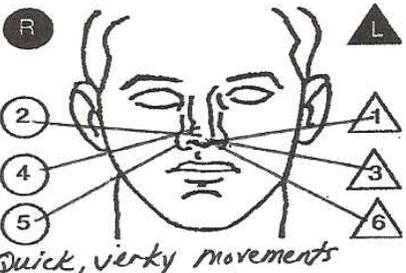
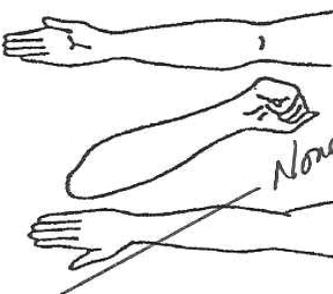
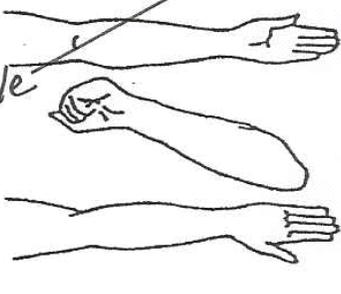
Drug Evaluation &amp; Classification Training

X-13

## QUESTIONS?

Drug Evaluation &amp; Classification Training

## DRUG INFLUENCE EVALUATION

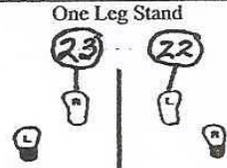
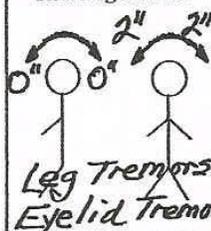
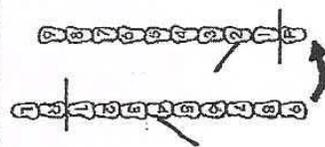
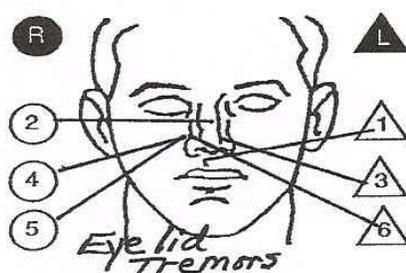
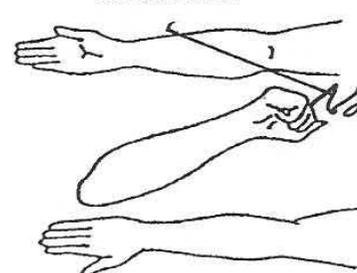
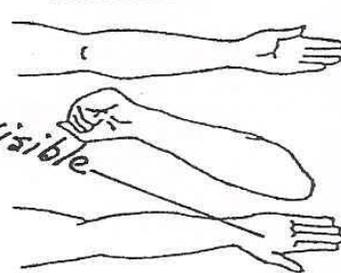
Evaluator: <u>Sgt. Ross Batson, A.H.R.</u>		DRE No. <u>2189</u>	Rolling Log No. <u>04-07-15</u>	Session X #1	
Recorder/Witness: <u>Pam Mays, C.J.I.</u>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property	Case # <u>04-67740</u>		
Arrestee's Name (Last, First MI): <u>Hedlund, James R.</u>		DOB: <u>7-10-63</u>	Sex: <u>M</u>	Race: <u>W.</u>	Arresting Officer (Name, ID No.): <u>Tfc. Jeff Hust, A.S.P.</u>
Date Examined/Time/Location: <u>7/08/04, 2230, County Jail</u>		Breath Results: <input type="checkbox"/> Refused Instrument # <u>012888A</u> <u>0.00 %</u>	Chemical Test: <input type="checkbox"/> Refused <input type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood		
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? <u>Candy Bar</u>	When? <u>Aroundnoon</u>	What have you been drinking? How much? <u>Nothing</u>	Time of last drink? <u>N/A</u>
By: <u>Tfc. Hust 2235</u>		How long? <u>3 hours</u>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Time now? <u>8 o'clock</u>		When did you last sleep? <u>Last night</u>	Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <u>Cooperative</u>		Coordination: <u>Poor, Stumbling</u>	
Breath: <u>Normal</u>		Face: <u>Normal</u>			
Speech: <u>Rapid, Nervous</u>		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery	Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)	Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy
Pulse and time 1. <u>112, 2240</u> 2. <u>108, 12253</u> 3. <u>100, 12305</u>	HGN Lack of smooth pursuit Maximum deviation Angle of onset		Left Eye <u>No</u> <u>No</u> <u>None</u>	Right Eye <u>No</u> <u>No</u> <u>None</u>	Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Convergence  Right eye      Left eye
Romberg Balance 	Walk and Turn test  <u>Had difficulty standing still during instructions</u>		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon: <input checked="" type="checkbox"/>		One Leg Stand <u>45/30</u> 
Internal clock <u>15</u> Est. as 30 seconds	Describe Turn <u>Turned quickly (swivel)</u>		Cannot do test (explain) <u>N/A</u>		L R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms to balance <input checked="" type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down
Draw lines to spots touched  <u>Quick, jerky movements</u>		Pupil Size Left <u>6.0</u> Right <u>6.0</u>	Room Light <u>6.0</u>	Darkness <u>8.5</u>	Direct <u>6.0</u>
Blood pressure <u>142/96</u>		Temperature <u>99.9 °f</u>		Reaction to Light: <u>S/ow</u>	
Muscle tone: <input type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Comments:		RIGHT ARM  <u>None visible</u>		LEFT ARM 	
What medication or drug have you been using? How much? <u>Nothing. "I won't answer that."</u>		Time of use? <u>N/A</u>	Where were the drugs used? (location) <u>Refused</u>		
Date/Time of Arrest: <u>07/08/04, 2200</u>	Time DRE Notified: <u>2220</u>	Evaluation Start Time: <u>2230</u>	Time Completed: <u>2310</u>		
DRE signature (Include rank): <u>Ross Batson, Sgt.</u>		ID # <u>515</u>	Reviewed by: <u>[Signature]</u>		
Opinion of evaluator: <input type="checkbox"/> Rule Out <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant	<input checked="" type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant	<input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Hedlund, James R.

1. **LOCATION:** The evaluation of James Hedlund was conducted at the Pulaski County Jail.
2. **WITNESSES:** Arresting Officer, TPC Jeff Hust, Arkansas State Police and Pam Mays of the Arkansas Criminal Justice Institute.
3. **BREATH ALCOHOL TEST:** Trooper Hust administered a breath test to Hedlund with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** The writer was contacted by Trooper Hust requesting a drug evaluation. Writer contacted Trooper Hust at the County Jail where it was determined that he had stopped the suspect for driving 100 mph and for driving without headlights on I-30 East. The suspect was excited, talkative and very restless. He performed poorly on the roadside SFST's and was arrested for DUI.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the interview room with Trooper Hust. The suspect was rocking back in forth in his chair and could not remain still. His speech was fast and his reflexes were quick and exaggerated.
6. **MEDICAL PROBLEMS AND TREATMENT:** None observed and none stated.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect swayed approximately 3" front to back and estimated 30 seconds in 15 seconds. Walk & Turn: Suspect started too soon, lost his balance during the instructions, raised his arms and made an abrupt swivel turn. One Leg Stand: Suspect swayed, raised his arms, hopped and put his foot down. Finger to Nose: Suspect missed the tip of his nose on four of the six attempts.
8. **CLINICAL INDICATORS:** The suspect's pulse, blood pressure and temperature were above the normal ranges. His pupils were dilated and reacted slowly to light.
9. **SIGNS OF INGESTION:** A white powder residue was located in the suspect's nose.
10. **SUSPECT'S STATEMENTS:** The suspect denied using any drugs.
11. **DRE'S OPINION:** In my opinion Hedlund is under the influence of a CNS Stimulant and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a blood sample.
13. **MISCELLANEOUS:**

## DRUG INFLUENCE EVALUATION

Evaluator <b>Sgt. Frank Barnes</b>		DRE No. <b>1894</b>	Rolling Log No. <b>04-10</b>		Session X #2	
Reporter/Witness <b>Sgt. Charlie Phillips</b>		Crash: <input type="checkbox"/> Fatal <input checked="" type="checkbox"/> None <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>04-22876</b>		
Arrestee's Name (Last, First MI) <b>Kohlhepp, Kim J.</b>		DOB <b>8/24/73</b>	Sex <b>F</b>	Race <b>W</b>	Arresting Officer (Name, ID No.) <b>Off. David Steiner OKC PD</b>	
Date Examined/Time/Location <b>10/10/04, 2315 OKLAHOMA Co. Jail</b>		Breath Results: Instrument # <b>1501</b> <b>0.00%</b>		Chemical Test: <input type="checkbox"/> Refused <input type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood		
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? When? <b>Hot dog 1 pm</b>		What have you been drinking? How much? <b>"Nothing"</b>		Time of last drink? <b>N/A</b>
By: <b>F. BARNES 2317</b>		When did you last sleep? How long? <b>Yesterday 4 hrs.</b>		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"I don't do drugs"</b>		Attitude: <b>Cooperative, Restless</b>		Coordination: <b>Poor, Jittery, Stumbling</b>		
Speech: <b>Very talkative, Rapid</b>		Breath: <b>Normal</b>		Face: <b>Normal</b>		
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal
Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy		
Pulse and time 1. <b>100, 2320</b> 2. <b>108, 2331</b> 3. <b>104, 2343</b>		HGN Lack of smooth pursuit Maximum deviation Angle of onset		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		One Leg Stand 
Romberg Balance  <b>Leg Tremors</b> <b>Eyelid Tremors</b>		Walk and Turn test 		Cannot keep balance Starts too soon: 1 <sup>st</sup> Nine    2 <sup>nd</sup> Nine		L    R <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> Uses arms to balance <input checked="" type="checkbox"/> Hopping <input checked="" type="checkbox"/> Puts foot down
Internal clock <b>12</b> Est. as 30 seconds		Describe Turn <b>Swivel Turn,</b> <b>One quick motion</b>		Cannot do test (explain) <b>N/A</b>		Type of footwear: <b>Heels (Removed)</b> Nasal area: <b>Red, ulcerated</b>
Draw lines to spots touched  <b>Eye lid Tremors</b>		Pupil Size	Room Light	Darkness	Direct	Oral cavity: <b>Clear</b>
Blood pressure <b>144/104</b>		Temperature <b>99.8 °f</b>		Reaction to Light: <b>Slow</b>		
Muscle tone: <input checked="" type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Comments:		RIGHT ARM 		LEFT ARM 		
What medication or drug have you been using? How much? <b>"I don't use drugs anymore"</b>		Time of use? <b>Refused</b>		Where were the drugs used? (location) <b>Refused</b>		
Date/Time of Arrest <b>10/10/04 2240</b>		Time DRE Notified <b>2305</b>		Evaluation Start Time <b>2315</b>		Time Completed <b>2345</b>
DRE signature (include rank) <b>[Signature]</b>		ID # <b>1894</b>		Reviewed by: <b>[Signature] 16397</b>		
Opinion of evaluator:		<input type="checkbox"/> Rule Out <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant		<input checked="" type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen
		<input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic		<input type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis		

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Kohlhepp, Kim J.

1. **LOCATION:** The evaluation of Kim Kohlhepp was conducted in the booking room at the Oklahoma County Jail.
2. **WITNESSES:** The evaluation was witnessed by the arresting officer; Officer David Steiner and by Sergeant Charlie Phillips of the Oklahoma City P.D.
3. **BREATH ALCOHOL TEST:** Officer Steiner administered a breath test to Kohlhepp with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** The writer was contacted by Officer Steiner requesting a drug evaluation. After arriving at the County Jail, Officer Steiner reported that he had stopped the suspect for driving 65 mph in a 30 mph zone and for failing to stop at a traffic signal. The suspect was very talkative and restless. She was unable to perform the SFST's as directed and was arrested for DUI.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the interview room standing next to Officer Steiner. She was very fidgety and could not stand still. When told to sit down she would sit for a few seconds and then quickly get back up.
6. **MEDICAL PROBLEMS AND TREATMENT:** None observed and none stated.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect swayed approximately 2" side to side and estimated 30 seconds in 12 seconds. Walk & Turn: Suspect stepped off the line, raised her arms for balance and turned using an abrupt swivel-like movement. One Leg Stand: Suspect swayed, raised her arms, hopped and put her foot down. Finger to Nose: Suspect missed the tip of her nose on each attempt and had eyelid and leg tremors.
8. **CLINICAL INDICATORS:** The suspect's pulse, blood pressure and temperature were above the normal ranges. Her pupils were dilated in all three lighting conditions.
9. **SIGNS OF INGESTION:** The suspect's nostrils were red and ulcerated.
10. **SUSPECT'S STATEMENTS:** She denied using drugs, stating "I don't use drugs anymore."
11. **DRE'S OPINION:** In my opinion Kohlhepp is under the influence of a CNS Stimulant and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a blood sample.
13. **MISCELLANEOUS:** There was an outstanding warrant for the suspect for failure to appear on a charge of possession of methamphetamine.

**SESSION XI**  
**PRACTICE: EYE EXAMINATIONS**

**SESSION XI      PRACTICE: EYE EXAMINATIONS**

Upon successfully completing this session the student will be able to:

- o Conduct examinations of pupil size and reaction to light under both lighted and darkened room conditions.
- o Describe the eye examination procedures.
- o Document the results of the eye examinations.

**Content Segments****Learning Activities**

- |                                |                                |
|--------------------------------|--------------------------------|
| A. Procedures For This Session | o Instructor Led Presentations |
| B. Room Light Examinations     | o Students' Hands On Practice  |
| C. Dark Room Examinations      | o Instructor Led Coaching      |
| D. Session Wrap Up             | o Student Led Coaching         |

Aids	Lesson Plan	Instructor Notes
 <p><b>10 Minutes</b></p>  <p><b>XI-1 (Title)</b></p>  <p><b>XI-2 (Objectives)</b></p>	<p><b>PRACTICE: EYE EXAMINATIONS</b></p> <p><b>A. Procedures For This Session</b></p> <ol style="list-style-type: none"> <li>1. Participants will work in three or four member teams. <ol style="list-style-type: none"> <li>a. At any given time, one member of the team will be engaged in conducting and recording eye examinations of another member.</li> <li>b. The remaining member(s) will help coach and critique the student who is conducting the examinations.</li> </ol> </li> <li>2. Participants will take turns serving as test administrator, test subject and coach.</li> </ol>	<p>Total Lesson Time: Approximately 60 Minutes</p> <p>Display Session Title</p> <p>Point out "Practice Sessions" wall chart.</p> <p>Briefly review the objectives, content and activities of this session.</p> <p><u>Make</u> team assignments.</p> <p><u>Emphasize</u> that students can help each other learn by pointing out errors of omission or commission.</p>

Aids	Lesson Plan	Instructor Notes
 <b>20 Minutes</b>	<ol style="list-style-type: none"> <li>3. Teams initially will practice under lighted room conditions.               <ol style="list-style-type: none"> <li>a. Check pupil size under normal room light.</li> <li>b. Check reaction to light and pupil size using a pen light in a lighted room.</li> </ol> </li> <li>4. Teams subsequently will practice under darkened room conditions.               <ol style="list-style-type: none"> <li>a. Check pupil size in near total darkness.</li> <li>b. Check reaction to light and pupil size under direct light.</li> </ol> </li> <li>5. Students will record their estimations using Eye Examinations Data Sheet.</li> </ol> <p><b>B. Room Light Examinations</b></p> <ol style="list-style-type: none"> <li>1. Pupil size estimation, under room light.</li> <li>2. Pupil reaction and size estimation, under direct light.</li> </ol>	<p><u>Clarification:</u> students will shine a pen light directly into the subject's eye. <u>Demonstrate</u> this, using a student subject.</p> <p><u>Point out</u> the copies of the Eye Examination Data Sheet in the Student's Manual.</p> <p>Solicit students' questions concerning procedures for this practice session.</p> <p><u>Monitor</u> teams and coach students as necessary and appropriate.</p> <p>When the first student completes the two estimations, have the team members exchange roles. Continue this process.</p> <p>Sequence of roles should be as follows:</p>

Aids	Lesson Plan	Instructor Notes
 <b>25 Minutes</b>	<p><b>C. Dark Room Examinations</b></p> <ol style="list-style-type: none"> <li>1. Pupil size estimation, under near total darkness.</li> <li>2. Pupil reaction and size estimation, under direct light.</li> </ol>	<ol style="list-style-type: none"> <li>1. Test administrator</li> <li>2. Test subject</li> <li>3. Coach</li> <li>4. Test administrator (continue cycle)</li> </ol> <p>Terminate this segment after 20 minutes, or after each student has twice served as a test administrator (whichever comes first).</p> <p><u>Allow</u> students approximately 90 seconds for their eyes to adapt to the darkened conditions.</p> <p><u>Monitor</u> teams and coach students as necessary and appropriate.</p> <p>When the first student completes the two checks, have the team members exchange roles. Continue this process.</p> <p>Sequence of roles should be as follows:</p> <ol style="list-style-type: none"> <li>1. Test administrator</li> <li>2. Test subject</li> <li>3. Coach</li> <li>4. Test administrator (continue cycle)</li> </ol> <p>Terminate this segment after 25 minutes, or after each student has twice served as a test administrator (whichever comes first).</p>
 <b>5 Minutes</b>	<p><b>D. Session Wrap Up</b></p>	<p><u>Offer</u> appropriate comments and observations about the students' performance.</p> <p><u>Solicit</u> students' comments concerning the practice session.</p>

# Session XI

## Practice: Eye Examinations



XI-1

## Practice: Eye Examinations

Upon successfully completing this session the student will be able to:

- Conduct examinations of pupil size and reaction to light, under both lighted and darkened room conditions
- Describe the eye examination procedures
- Document the results of the eye examinations

Drug Evaluation & Classification Training

XI-2

# QUESTIONS?

Drug Evaluation & Classification Training

One Hour and Forty-Five Minutes

**SESSION XII**  
**ALCOHOL WORKSHOP**

**SESSION XII     ALCOHOL WORKSHOP**

Upon successfully completing this session the student will be able to:

- o     Correctly administer the preliminary clinical examinations and psychophysical tests used in the drug influence evaluation procedure.
- o     Observe and record the subject's performance on the preliminary clinical examinations and psychophysical tests.
- o     Determine the level of impairment based on the results of the subject's preliminary clinical examinations and psychophysical tests.

**Content Segments**

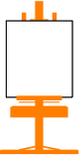
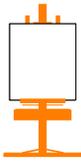
- A.     Procedures
- B.     Hands-On Practice
- C.     Session Wrap Up

**Learning Activities**

- o     Instructor Led Presentations
- o     Student Led Practice
- o     Instructor Led Discussion



Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>o Finger to Nose</li> <li>o Pulse</li> </ul> <p>b. Results/observations of all tests will be recorded on the standard Drug Evaluation Report Form.</p> <p>3. For each volunteer, team members should perform the following duties:</p> <ul style="list-style-type: none"> <li>a. One team member will administer the tests to the volunteer.</li> <li>b. One team member will record the results on the report form.</li> <li>c. The other team member(s) will assist the test administrator in observing the volunteer's performance on the tests.</li> </ul> <p>4. Some volunteers will have BACs above 0.10, others will have lower BACs.</p> <p>5. The following safety precautions will be strictly enforced:</p> <ul style="list-style-type: none"> <li>a. <u>No weapons will be present.</u></li> <li>b. <u>Volunteers will not be left unattended at any time.</u></li> </ul>	<p>Point out that copies of the report form are in the Student's Manual. Each team will need one report form for each volunteer.</p> <p><u>Emphasize</u> that team members will take turns performing the various duties, as they deal with the different volunteers.</p> <p>Solicit students' questions concerning the procedures for the Alcohol Workshop.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>75 Minutes</b></p> 	<p><b>B. Hands On Practice</b></p> <ol style="list-style-type: none"> <li>1. Test administration</li> <li>2. Test recording</li> </ol>	<p><u>Monitor</u> teams as they test the volunteers.</p> <p>Make sure that each student takes at least one turn as a test administrator.</p> <p>Coach students, as necessary, to improve their performance as test administrators.</p> <p>Terminate the hands on practice after 75 minutes, or after each team has tested 5 volunteers (whichever occurs first).</p>
 <p><b>20 Minutes</b></p> 	<p><b>C. Session Wrap Up</b></p> <ol style="list-style-type: none"> <li>1. Feedback of teams' assessments</li> <li>2. Feedback of volunteers' BACs.</li> </ol>	<p><u>Record</u> teams' assessments of each volunteer's probable BAC status on the dry erase board or flip chart (see next page for a sample dry erase board array). If a dry erase board or flip-chart is not available, an overhead has been made.</p> <p>Ask each team <u>briefly</u> to describe the evidence that led the members to their conclusions about a particular volunteer's BAC.</p> <p><u>Record</u> each volunteer's actual BAC on the dry erase board array.</p>

<b>Aids</b>	<b>Lesson Plan</b>	<b>Instructor Notes</b>
	3. Discussion	<p>Make appropriate comments concerning teams' assessment of the volunteers' BACs. These comments should take into account such factors as absorption and elimination rates, differences in tolerance to alcohol, volunteers' medical conditions, etc.</p> <p>Solicit students' comments or questions concerning the alcohol workshop.</p>

**SAMPLE DRY ERASE BOARD ARRAY FOR  
RECORDING TEAMS' ASSESSMENTS.**

**TEAMS' ESTIMATES OF BAC**

Volunteer	.05 or less	.06-.07	.08-.09	.10 - .11	.12 - .13	.14 - .15	.16 or more	Actual BAC

**(TABLE ENTRIES REPRESENT TEAMS' "VOTES")**

## Session XII

### Alcohol Workshop



XII-1

### Alcohol Workshop

Upon successfully completing this session the student will be able to:

- Correctly administer the preliminary clinical examinations and psychophysical tests used in the drug influence evaluation procedure
- Observe and record the subject's performance on the preliminary clinical examinations and psychophysical tests
- Determine the level of impairment based on the results of the subject's preliminary clinical examinations and psychophysical tests

Drug Evaluation &amp; Classification Training

XII-2

### Examinations and Tests Conducted

- Pupil Size (Room Light)
- Horizontal Gaze Nystagmus
- Vertical Gaze Nystagmus
- Lack of Convergence
- Romberg Balance
- Walk and Turn
- One Leg Stand (Both Legs)
- Finger to Nose
- Pulse

Drug Evaluation &amp; Classification Training

XII-3

## QUESTIONS?

Drug Evaluation &amp; Classification Training

Thirty Minutes

**SESSION XIII**  
**PHYSICIAN'S DESK REFERENCE (PDR)**  
**AND OTHER REFERENCE SOURCES**

### **SESSION XIII      **PHYSICIAN'S DESK REFERENCE (PDR) AND OTHER REFERENCE SOURCES****

Upon successfully completing this session the student will be able to:

- o Explain how the various sections of the PDR can provide information that will:
  - Aid in the drug influence evaluation;
  - Aid in courtroom testimony.
- o Use the PDR in a practical exercise when presented with color photographs of typical prescription drugs encountered in law enforcement contacts. The student will correctly identify and classify the drugs and list the signs and symptoms that can be caused by them and observed and documented during a drug influence evaluation.
- o Describe other references available to assist DREs.

#### Content Segments

#### Learning Activities

- |    |  |   |                              |
|----|--|---|------------------------------|
| A. | Physician's Desk Reference as a Resource | o | Instructor Led Presentations |
| B. | Practical Exercise                       | o | Small Group Exercise         |
| C. | Other Resource Material                  |   |                              |

Aids	Lesson Plan	Instructor Notes
 <p><b>10 Minutes</b></p>  <p><b>XIII-1</b> (Title)</p>  <p><b>XIII-2</b> (Objectives)</p>	<p><b>PHYSICIAN'S DESK REFERENCE (PDR)</b></p> <p><b>A. Physician's Desk Reference as a Resource</b></p> <p>1. PDR is published annually.</p> <ul style="list-style-type: none"> <li>a. Many versions are published: <ul style="list-style-type: none"> <li>o PDR for prescription drugs</li> <li>o PDR for non-prescription drugs</li> <li>o PDR for ophthalmology</li> </ul> </li> <li>b. PDR supplements are published periodically as new products are introduced during the year.</li> <li>c. Function of the publisher is compilation, organization and distribution of information.</li> </ul>	<p>Point out that the PDR has been admitted as a "learned treatise" in previous court cases.</p> <p>Point out that we will use the PDR for prescription drugs.</p> <p>Total Lesson Time: Approximately 30 Minutes</p> <p>Display Session Title</p> <p>Briefly review the content, objectives and activities of this session.</p> <p>Instructors Note: Due to the unique nature of this session, instructors teaching this session should strive to develop innovative and interactive creative learning activities.</p> <p>There are other PDR publications in addition to these.</p> <p>Exhibit copy of a PDR.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XIII-3</b> (Sections of PDR)</p>	<ul style="list-style-type: none"> <li>d. Product descriptions are prepared by the manufacturer, and edited and approved by their respective medical directors.</li> <li>e. Additional information on the various drugs can be obtained from the manufacturer.</li> </ul> <p>2. Sections of a PDR.</p> <ul style="list-style-type: none"> <li>a. Manufacturers Index (Section 1)</li> <li>b. Product Name Index and Discontinued Products (Section 2).</li> <li>c. Product Category Index (Section 3).</li> <li>d. Generic and Chemical Name Index (Section 4).</li> <li>e. Product Identification Section (Section 5).</li> <li>f. Product Information Section (Section 6).</li> </ul>	<p>Point out that the sections are color coded for easy use.</p> <p>List of manufacturers (with phone numbers) who have provided prescribing information.</p> <p>Alphabetical listing of products available and a listing of discontinued products.</p> <p>Note: Newer editions of the PDR will have a merging of Sections 2 and 4.</p> <p>Products listed according to appropriate category.</p> <p>Products listed under generic and chemical name headings according to the principal ingredient(s).</p> <p>Point out that this section contains actual size, full color reproductions.</p> <p>Point out that this section describes composition, action, uses, administration, dosage, contraindications, precautions, side effects, the form in which supplied and other information concerning use.</p>

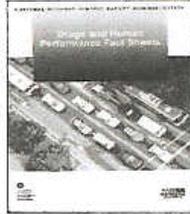
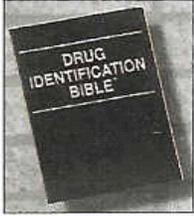
Aids	Lesson Plan	Instructor Notes
 <p><b>XIII-4</b> (Product Example)</p>	<ul style="list-style-type: none"> <li>g. Diagnostic Product Information (Section 7)</li> <li>h. Poison Control Centers</li> <li>i. Guide to Management of Drug Overdose.</li> <li>3. Use of PDR in DEC program <ul style="list-style-type: none"> <li>a. To identify prescription drugs.</li> <li>b. To identify the effects of prescription drugs for comparison with observed effects.</li> </ul> </li> <li>4. How to use the PDR. <ul style="list-style-type: none"> <li>a. Identification of an unknown product.</li> <li>b. Identification of drug pharmacology.</li> </ul> </li> <li>5. Location and acquisition of agency's PDR(s).</li> </ul>	<p>It also includes common names, generic compositions or chemical names.</p> <p>Diagnostic product descriptions.</p> <p>List of centers and emergency telephone numbers.</p> <p>Information concerning drug over dosage.</p> <p>This information is contained in the product identification section.</p> <p>This information is contained in the product information section.</p> <p>Demonstrate how to identify a tablet, capsule, etc. using the product identification section.</p> <p>Demonstrate how to use the product information section.</p> <p>Example: Nembutal sodium capsules (pentobarbital sodium capsules)</p> <p>Point out that PDRs can be obtained from physicians, hospitals, etc. It is not essential to have the current version for typical enforcement uses.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>15 Minutes</b></p>	<p><b>B. Practical Exercise</b></p> <ol style="list-style-type: none"> <li>1. Small group exercise</li> <li>2. Group reports</li> </ol>	<p>Assign students to small groups and provide color slides or photographs of typical prescription drugs encountered during enforcement contacts.</p> <p>Have the group identify the drugs and describe typical "actions" or symptoms that can be observed and documented during a drug influence evaluation.</p> <p>Each group must have a PDR.</p>
 <p><b>5 Minutes</b></p>  <p><b>XIII-5A-C</b> (Information Sources)</p>	<p><b>C. Other Resources</b></p> <ol style="list-style-type: none"> <li>1. National Highway Traffic Safety Administration, Enforcement and Justice Services Division</li> <li>2. State Drug Evaluation and Classification Program Coordinator.</li> <li>3. "The DRE" Newsletter</li> <li>4. The National Traffic Law Center (NTLC)</li> <li>5. Local Poison Control Center</li> <li>6. Medical Dictionaries</li> <li>7. The Pill Book, The Drug Identification Bible, and other consumer's guides to drugs</li> </ol>	<p>Published by the Phoenix City's Prosecutor's Office, Phoenix, Arizona.</p> <p>NTLC is part of the American Prosecutors Research Institute. (APRI)</p>

Aids	Lesson Plan	Instructor Notes
	<p>8. Drugs and Human Performance Fact Sheets</p> <p>9. Newspaper and magazine articles on drugs and drug impaired driving, including counter-culture magazines such as "High Times".</p> <p>10. Software programs such as Pharmacists, Body Works, Mosbey's Medical Dictionary and other programs are available on disks and CDs.</p> <p>11. Various resources are available through Online services and the Internet.</p> <p>12. Other texts</p>	<p>Produced by U.S. DOT - NHTSA, Report No. DOT HS 809 725, March 2004</p> <p><u>Point out</u> that the IACP Drug Evaluation and Classification Program website is <a href="http://www.decp.org">www.decp.org</a></p> <p>Instructor: Discuss some other useful and reliable texts known to you.</p>

## Session XIII

### Physician's Desk Reference (PDR) and Other Reference Sources



XIII-1

### Physician's Desk Reference (PDR) and Other Reference Sources

Upon successfully completing this session the student will be able to:

- Explain how the various sections of the PDR can provide information that will:
  - aid in the drug influence evaluation
  - aid in courtroom testimony
- Use the PDR in a practical exercise when presented with color photographs of typical prescriptions drugs encountered in law enforcement contacts
- Learn about other resources available to assist DREs

Drug Evaluation &amp; Classification Training

XIII-2

### Sections of a Physician's Desk Reference

- **Manufacturers' index**
- **Product name index and discontinued products**
- **Product category index**
- **Generic and chemical name index**
- **Product identification section**
- **Product information section**
- **Diagnostic product information**
- **Poison control centers**
- **Guide to management of drug overdose**

Drug Evaluation &amp; Classification Training

XIII-3

### Product Information Section Example

#### Nembutal sodium capsules (pentobarbital sodium capsules)

- Description
- Clinical pharmacology
- Indications and usage
- Warnings
- Precautions
- Dosage and administration
- Drug abuse and dependence
- How supplied

Drug Evaluation &amp; Classification Training

XIII-4

### Continuing Information Sources

- **National Highway Traffic Safety Administration, Enforcement and Justice Services Division**
- **State DEC Program Coordinator**
- **DRE Newsletter**  
Phoenix City Prosecutor's Office  
455 North 5th Street  
Suite 400  
Phoenix, AZ 85004



Drug Evaluation &amp; Classification Training

XIII-5A

### Other Information Sources

- **The National Traffic Law Center (NTLC)**
  - [www.ndaa-apri.org](http://www.ndaa-apri.org)
- **Local poison control center**
- **Medical dictionary**

Drug Evaluation &amp; Classification Training

XIII-5B

## **Other Information Sources (Continued)**

- **The Pill Book**
- **Drug Information Handbook**
- **Drug Identification Bible**
- **Drugs and Human Performance Fact Sheets**
- **Various textbooks, newspaper and magazine articles**

Drug Evaluation & Classification Training

XIII-5C

## **QUESTIONS?**

Drug Evaluation & Classification Training

One Hour and Forty-Five Minutes

**SESSION XIV**  
**HALLUCINOGENS**

## SESSION XIV    **HALLUCINOGENS**

Upon successfully completing this session the student will be able to:

- o Explain a brief history of the Hallucinogen category of drugs.
- o Identify common drug names and terms associated with this category.
- o Identify common methods of administration for this category.
- o Describe the symptoms, observable signs and other effects associated with this category.
- o Describe the typical time parameters, i.e. onset and duration of effects, associated with this category.
- o List the clues that are likely to emerge when the drug influence evaluation is conducted for a person under the influence of this category of drugs.
- o Correctly answer the "topics for study" questions at the end of this session.

### Content Segments

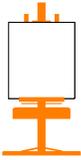
### Learning Activities

- |    |                                    |   |  |
|----|------------------------------------|---|--|
| A. | Overview of the Category           | o | Instructor Led Presentations                           |
| B. | Possible Effects                   | o | Review of Drug Evaluation and Classification Exemplars |
| C. | Onset and Duration of Effects      | o | Reading Assignments                                    |
| D. | Overdose Signs and Symptoms        | o | Video Presentations (If Available)                     |
| E. | Expected Results of the Evaluation | o | Slide Presentations                                    |



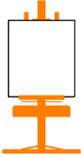
Aids	Lesson Plan	Instructor Notes
 <p><b>XIV-3</b> (Synesthesia)</p>	<p>c. Hallucinogenic drugs usually produce what are called <u>pseudo-hallucinations</u>: i.e. the user typically is aware that what he or she is seeing, hearing, smelling, etc. isn't real, but is a product of the drug.</p> <p>d. One common type of hallucination produced by these drugs is called <u>Synesthesia</u>, which means a transposing of sensory modes.</p> <ul style="list-style-type: none"> <li>o Sounds for example, may be transposed into sights.</li> <li>o Sights may be transposed into odors.</li> </ul> <p>e. The illusions and distorted perceptions produced by hallucinogenic drugs may be very alarming, even terrifying.</p> <ul style="list-style-type: none"> <li>o They may produce panic and uncontrolled excitement.</li> <li>o The user may be unable to cope with the terror, and may attempt to flee wildly.</li> <li>o A user who is emotionally or mentally unstable may become psychotic in response to</li> </ul>	<p>But <u>emphasize</u> that the fact that the user knows the hallucinations aren't real doesn't make those hallucinations any less dangerous if they occur while driving.</p> <p>Note: Synesthesia may occur naturally in an insignificant percentage of the population.</p> <p><u>Examples</u>: The user may "see" a flash of color, or some other sight, when the telephone rings.</p> <p>The user may "smell" a particular fragrance when he or she looks at something painted red.</p> <p><u>Point out</u> that the expression "bad trip" refers principally to these panic filled reactions to Hallucinogens.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XIV-4A</b> (Flashback)</p>	<p>this frightening experience.</p> <p>f. A terrifying "bad trip" sometimes may be re-experienced as a <u>flashback</u>.</p> <ul style="list-style-type: none"> <li>o In simple terms, a flashback is a vivid recollection of a portion of an hallucinogenic experience.</li> <li>o A flashback does <u>not</u> occur because of a residual quantity of drug in the user's body.</li> <li>o Instead, a flashback essentially is a very intense daydream.</li> </ul>	<p><u>But point out</u> that subsequent use of the drug may precipitate a flashback, by causing the user to re-experience the frightening illusions of the previous "bad trip".</p>
 <p><b>XIV-4B</b> (Types of Flashback)</p>	<p>g. There are three types of flashback:</p> <ul style="list-style-type: none"> <li>o Emotional: Feelings of panic, fear, etc; the sensations of a "bad trip".</li> <li>o Somatic: Altered body sensations, tremors, weakness, dizziness, crawly, tingly feelings on the skin.</li> <li>o Perceptual: Distortions of vision, hearing, smell and/ or other senses.</li> </ul> <p>These distortions are "re-runs" of the original "trip".</p>	

Aids	Lesson Plan	Instructor Notes
 <p><b>XIV-5</b> (Illusions and Delusions)</p> 	<p>h. Remember that hallucinogens produce <u>illusions</u>, <u>delusions</u> or both.</p> <ul style="list-style-type: none"> <li>o An illusion is a false perception, i.e. a misrepresentation of what the senses are receiving.</li> <li>o A delusion is a false belief.</li> </ul> <p>i. Because they often make the user appear to be insane, Hallucinogens sometimes are called psychotomimetic drugs.</p>	<p>Example of an illusion: "I see an Elephant".</p> <p>Example of a delusion: "I am an Elephant".</p> <p>Write: "PSYCHOTOMIMETIC" on the dry erase board or flip-chart.</p> <p>"Psychotomimetic" means "something that mimics psychosis". A psychosis is a major mental disorder. It implies a loss of touch with reality.</p>
 <p><b>XIV-6A</b> (Common Hallucinogens)</p>	<p>2. Some Hallucinogens come from natural sources, while others are synthetically manufactured.</p> <p>a. Peyote and Psilocybin are examples of naturally occurring Hallucinogens.</p>	<p><u>Instructor, for your information:</u> Other naturally occurring Hallucinogens include nutmeg; jimson weed; morning glory seeds; salvia divinorum; and, bufotenine, a substance found in the glands of certain toads.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XIV-6B</b> (Synthetic)</p>	<p>b. LSD, MDA, MDMA, DMT, STP, TMA and 2CB are examples of synthetically manufactured Hallucinogens.</p> <p>c. MDMA is an abbreviation for 3,4-Methylenedioxy-methamphetamine and is commonly referred to as “Ecstasy”. It is an hallucinogen that also acts as a stimulant. It produces and energizing effect, as well as distortions in time and perception and enhanced enjoyment from tactile experiences.</p> <p>d. MDA is an abbreviation for 3,4-Methylenedioxy-amphetamine. It is normally produced as a clear liquid, or as a white powder in capsule or tablet form.</p> <p>3. Peyote is a small, spineless cactus.</p> <p>a. The active, hallucinogenic ingredient in peyote is <u>mescaline</u>.</p> <p>b. Peyote use by certain Indian tribes for religious rituals pre-dates Columbus' discovery of America by many centuries.</p>	<p>Note: Some regional or local Hallucinogens may be discussed in more detail.</p> <p>LSD: Lysergic Acid Diethylamide</p> <p><u>Point out</u> that STP is also known as DOM (Dimethoxylamphetamine). STP is an abbreviation for “Serenity, Tranquility and Peace”.</p> <p>TMA: Trimethoxyamphetamine</p> <p>DMT: Dimethyltryptamine</p> <p><u>Instructor, for your information:</u> Drugs such as MDA, MDMA, STP and TMA all contain amphetamine based compounds. They are for this reason sometimes called "<u>psychedelic amphetamines</u>". In essence, they are high powered CNS Stimulants that cause hallucinations.</p> <p><u>If available</u>, show slides of the peyote cactus and/or other peyote examples.</p> <p>Mescaline is a chemical relative of adrenalin. Effects may be similar to those that would result from a massive rush of adrenalin.</p>

Aids	Lesson Plan	Instructor Notes
	<p>c. Peyote is used legally in religious ceremonies of the Native American Church.</p> <p>4. Psilocybin is a drug found in a number of different species of mushrooms of the genus Psilocybe.</p> <p>a. These mushrooms also have been used in Indian religious ceremonies for thousands of years.</p> <p>b. An unstable derivative of Psilocybin, called <u>Psilocin</u>, is also found in these mushrooms and also has hallucinogenic properties.</p> <p>5. LSD is perhaps the most famous of the synthetically manufactured Hallucinogens.</p> <p>a. "LSD" is an abbreviation of Lysergic Acid Diethylamide.</p> <p>b. It was first produced in 1938, although its hallucinogenic properties were not discovered until 1943.</p> <p>c. LSD was used in psychotherapy during the 1940's and early '50's.</p>	<p>Mescaline was first isolated from Peyote in 1856. It was named after the Mescalero Apaches.</p> <p>Persons who are not American Indians cannot be members of the Native American Church.</p> <p>There are over 100 known species of mushrooms that contain psilocybin and psilocin. <u>Source:</u> Drug Identification Bible, 2004/2005 Edition</p> <p><u>If available</u>, show slides of Psilocybin Mushrooms.</p> <p>Psilocybin is chemically very similar to serotonin, a neurotransmitter that is found in the brain.</p> <p>The effects of Psilocybin may be similar to what would happen if the brain were suddenly flooded with Serotonin.</p> <p><u>Example:</u> It was occasionally used in the treatment of alcoholism.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>d. Although LSD is a synthetic drug, it was first derived from Ergot, a fungus that grows on rye and other grains.</li> <li>e. In the Middle Ages, when people accidentally ate this fungus, their resulting bizarre behavior was thought to stem from possession by the Devil.</li> <li>f. The trials and subsequent burning of "witches" in Salem, Massachusetts in 1692 probably was due to accidental Ergot consumption by those women.</li> <li>g. Ergot is still used medically to treat migraine headaches.</li> </ul> <p>6. 2CB (4-Bromo-2, 5-dimethoxyphenethylamine) is a popular drug first synthesized in 1974.</p> <ul style="list-style-type: none"> <li>a. 2CB is considered both a psychedelic and an entactogen.</li> <li>b. 2CB is a white powder usually found in pressed tablets or gel caps.</li> <li>c. 2CB is sometimes referred to as "Venus", "Nexus", and "bromo-mescaline".</li> </ul>	<p><u>If available</u>, show slides of various forms of LSD.</p> <p>Write "LSD derived from Ergot, a fungus" on the dry erase board or flip-chart.</p> <p>Sandoz Laboratories markets a combination of caffeine and Ergot called Cafergot.</p> <p>Note: "Entactogen" is a term used by psychiatrists to classify Ecstasy (MDMA). It literally means "touching within".</p>

Aids	Lesson Plan	Instructor Notes
	<p>7. MDA, STP and TMA are synthetically manufactured Hallucinogens that sometimes are called "Psychedelic Amphetamines".</p> <ul style="list-style-type: none"> <li>a. They are chemically related to Amphetamines and produce many effects similar to those of CNS Stimulants.</li> <li>b. They are also chemically related to Mescaline.</li> <li>c. MDA is an abbreviation for 3, 4-Methylenedioxy-amphetamine</li> <li>d. Among users, MDA sometimes is referred to as the "Mellow Drug of America".</li> <li>e. STP is also called DOM, an abbreviation of 2 Methyl-2,5 Dimethoxyamphetamine.</li> <li>f. Users have popularized the abbreviation STP, representing "Serenity, Tranquility and Peace".</li> <li>g. TMA is an abbreviation for 3,4,5-Trimethoxyamphetamine.</li> </ul> <p>7. An important fact about Hallucinogens is that they are <u>not</u> addictive, in the sense that cessation of use does not produce withdrawal signs or symptoms; however, regular users do develop tolerance to these drugs.</p>	<p><u>Point out</u> the ironic fact that drugs popularly associated with soothing concepts like "mellowness and tranquility" actually often produce the extreme panic of a "bad trip".</p> <p><u>Point out</u> that there are additional Hallucinogens beyond those listed on Visual XIV-3.</p> <p><u>But point out</u> that many people repeatedly abuse these non-addictive drugs because they enjoy the hallucinogenic effects they produce.</p>

Aids	Lesson Plan	Instructor Notes
	<p>8. Methods of ingestion of Hallucinogens.</p> <ul style="list-style-type: none"> <li>a. The most common method of ingesting Hallucinogens is <u>orally</u>. <ul style="list-style-type: none"> <li>o LSD is placed on bits of paper, gelatin squares, or sugar cubes and eaten.</li> <li>o The small "buttons" or crowns of the Peyote Cactus are dried and eaten, or may be brewed into a beverage for drinking.</li> <li>o Similarly, the Psilocybin Mushrooms are dried and eaten, or may be brewed into a beverage for drinking.</li> </ul> </li> <li>b. Some Hallucinogens can also be <u>smoked</u> (example: LSD impregnated on Marijuana or tobacco cigarettes).</li> <li>c. Some users <u>inject</u> LSD.</li> <li>d. MDA can also be <u>insufflated</u>, or "snorted".</li> </ul>	<p>Point out that some Hallucinogens such as LSD can be absorbed through the skin. Officers should make it a practice to wear latex gloves when handling any suspected drugs.</p> <p>Solicit students' comments or questions on this overview of Hallucinogens.</p>

## Aids

## Lesson Plan

## Instructor Notes



5 Minutes

**B. Possible Effects**

1. The effects of Hallucinogens vary widely, and are affected by the user's personality, mood and expectations, and by the surroundings in which the drug is taken.
  - a. Generally, Hallucinogens intensify whatever mood the user is in at the time the drug is taken.
    - o If the user is depressed, the drug will deepen the depression.
    - o If the user is feeling pleasant, the drug will heighten that feeling.
  - b. If the user expects that the drug will help him or her achieve new insights or an expanded consciousness, the "trip" will seem to have that effect.
2. However, Hallucinogens also often uncover mental or emotional flaws that the user was unaware of possessing.
3. Therefore, many users who expect a positive experience with the drug will encounter instead the panic of a "bad trip".
4. The most common effect of the Hallucinogen is hallucination: the distorted perception of

Aids	Lesson Plan	Instructor Notes
 <p><b>15 Minutes</b></p>  <p><b>XIV-7A&amp;B</b> (Time Factors of Peyote)</p>	<p>reality, often with a mixing of senses that makes it virtually impossible for the drug influenced user to function in the real world.</p> <p><b>C. Onset and Duration of Effects</b></p> <ol style="list-style-type: none"> <li>1. The time parameters associated with Hallucinogens vary from drug to drug.</li> <li>2. The effects of Peyote (Mescaline) begin to be felt within approximately one-half hour after eating the cactus "buttons". <ol style="list-style-type: none"> <li>a. <u>30 minutes</u>: nausea, possibly leading to vomiting; mild rise in blood pressure, pulse, temperature and heart rate; pupils dilate.</li> <li>b. <u>One hour</u>: sensory changes begin; visual distortions accompanied by rich colors; objects take on new forms and begin to move; shapes "come alive".</li> <li>c. <u>3-4 hours</u>: sensory changes reach their peak; synesthesia (mixing of senses) commonly occurs.</li> <li>d. <u>10 hours</u>: gradual decline in effects.</li> <li>e. <u>12 hours</u>: nearly total recovery from effects.</li> </ol> </li> </ol>	<p>Solicit students' comments or questions on this overview of Hallucinogens.</p>

## Aids

## Lesson Plan

## Instructor Notes



**XIV-8A&B**  
(Time Factors  
of Psilocybin)

- f. 24 hours: approximately 87% of the Mescaline has been excreted from the body.
3. Psilocybin also begins to exert its effects within one-half hour.
- a. 1-30 minutes: dizziness, light headed feeling, giddiness; the extremities (hands, feet, etc.) may feel very light or very heavy.
- b. 30-60 minutes: vision blurs; colors become brighter, leave longer lasting after images; objects take on sharp visual definition; hearing becomes more acute.
- c. 60-90 minutes: color patterns and shapes start to develop; the surfaces of objects appear to develop waves and wave-like patterns; distance perception becomes impaired; feelings of euphoria develop.
- d. 90-100 minutes: body sensations increase, along with mental perceptions; user commonly becomes introspective.
- e. 120-180 minutes: effects start to diminish.

## Aids

## Lesson Plan

## Instructor Notes



**XIV-9** (Time  
Factors of  
LSD)

4. LSD's effects begin to be felt within 30-45 minutes.
  - a. 30-45 minutes: blood pressure, pulse and temperature rise; pupils dilate; hair starts to stand on end (Piloerection); nausea, dizziness and headache develop.
  - b. 4-6 hours: effects reach their peak.
  - c. 7-9 hours: effects diminish.
  - d. 10-12 hours: user feels normal.
5. MDMA's effects usually begin within several minutes to a half hour if taken orally.
  - a. Psychological effects include confusion, depression, anxiety and paranoia.
  - b. The duration effects can last from 1-12 hours depending on dosage.
6. 2CB's effects are dose related.
  - a. Lower doses (5-15 mg) produces enhanced sensual sensations and feelings of being "in one's body".
  - b. At higher doses (15-30 mg) it produces intense visual effects that includes moving objects with "trails" behind them and colors appearing from nowhere.

## Aids

## Lesson Plan

## Instructor Notes



5 Minutes

7. Onset and duration of effects of other Hallucinogens vary widely from about two hours to about 24 hours.

**D. Overdose Signs and Symptoms**

1. Death from overdose of LSD or Mescaline is not common.
  - a. It is unlikely that other Hallucinogens would directly result in death from overdoses.
  - b. However, an overdose can be extremely dangerous and indirectly result in death.
    - o The extreme panic and agitation of a "bad trip" have been known to result in suicide, or in accidental death as the user attempts to flee the hallucinations.
    - o Sometimes Hallucinogens induce a perception of invulnerability in the user, leading to bizarre and very dangerous behavior, and death.
2. The most common danger of an overdose of Hallucinogen is an intense "bad trip", which can result in severe and sometimes permanent psychosis.

Example: At least one LSD user was killed when he attempted to stop a train. Others have died from jumping off buildings believing they can fly.

Aids	Lesson Plan	Instructor Notes
<p></p> <p><b>60 Minutes</b></p> <p></p> <p><b>XIV-10A</b> (Evaluation Results)</p>	<p>3. Some evidence also suggests that prolonged use of LSD may produce organic brain damage, leading to impaired memory, reduced attention span, mental confusion and impaired ability to deal with abstract concepts.</p> <p><b>E. Expected Results of the Evaluation</b></p> <p>1. Observable evidence of impairment.</p> <ul style="list-style-type: none"> <li>o Neither Horizontal nor Vertical Gaze Nystagmus will be present.</li> <li>o Lack of Convergence will not be evident.</li> <li>o Performance on the Romberg balance test will be impaired, particularly in the subject's estimation of the passage of 30 seconds.</li> <li>o Performance on the Walk and Turn, One Leg Stand and Finger to Nose tests will be markedly impaired due to the subject's severe visual distortion, impaired perception of distance and decreased muscle coordination.</li> </ul>	<p>Solicit students' comments and questions concerning time factors.</p> <p><u>Point out</u> that some subjects under the influence of Hallucinogens may not be able to understand or complete the tests, especially if the subject is hallucinating.</p> <p>Emphasize that DRE officers conducting evaluations on subjects under the influence of hallucinogens should be especially careful due to the bizarre and unpredictable behavior of these subjects.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XIV-10B</b> (Vital Signs)</p>  <p><b>XIV-10C</b> (Darkroom)</p>	<p>a. Vital Signs</p> <ul style="list-style-type: none"> <li>o pulse generally will be up.</li> <li>o blood pressure generally will be elevated.</li> <li>o body temperature generally will be up.</li> <li>o pupils generally will be dilated.</li> <li>o Reaction to light will usually be normal. Certain Psychedelic Amphetamines usually will slow the pupils' reaction to light</li> </ul>	
 <p><b>XIV-10D</b> (General Indicators)</p>	<p>b. General indicators</p> <ul style="list-style-type: none"> <li>o body tremors</li> <li>o dazed appearance</li> <li>o difficulty with speech</li> <li>o disoriented</li> <li>o flashbacks</li> <li>o hallucinations</li> <li>o memory loss</li> <li>o nausea</li> <li>o paranoia</li> <li>o perspiring</li> <li>o poor perception of time and distance</li> <li>o rigid muscle tone</li> <li>o synesthesia</li> <li>o uncoordinated</li> </ul>	

Aids	Lesson Plan	Instructor Notes
 <p><b>XIV-11</b> (Symptomatology Chart)</p> 	<ol style="list-style-type: none"> <li>3. Summary</li> <li>4. Demonstrations <ol style="list-style-type: none"> <li>a. Video demonstrations (if available)</li> <li>b. Drug Evaluations and Classification exemplar demonstrations</li> </ol> </li> </ol>	<p>Show video of subject(s) under the influence of Hallucinogens. Relate behavior and observations to the Symptomology Chart.</p> <p>Refer students to the exemplars found at the end of Section XIV of their student manuals</p> <p>Relate the items noted on the exemplars to the Symptomatology Chart.</p> <p>Solicit students' questions or comments concerning expected results of the evaluation of subjects under the influence of</p> <p>Hallucinogens.</p>

## Topics for Study

1. What does "synesthesia" mean?

**A sensory perception disorder, in which an input via one sense is perceived by the brain as another sense. "Hearing" a phone ring and "seeing" the sound as a flash of light. Synesthesia sometimes occurs with persons under the influence of Hallucinogens.**

2. What is a "flashback"? What are the three types of "flashback"?

**A flashback is a vivid recollection of a portion of an hallucinogenic experience. Essentially, it is a very intense daydream. There are three types: (1) emotional - feelings of panic, fear, etc.; (2) Somatic - altered body sensations, tremors, dizziness, etc.; (3) Perceptual - distortions of vision, hearing, smell, etc.**

3. Name two naturally occurring Hallucinogens.

**Peyote, Psilocybin, Nutmeg, Jimson Weed, Morning Glory seeds, Bufotenine**

4. What is a "bad trip"?

**An hallucination where the user becomes panic-stricken by what he/she is seeing or hearing, and may become uncontrollably excited, or even try to flee from the terror.**

5. What does "psychotomimetic" mean?

**Literally "mimicking psychosis," or "impersonating insanity." A drug is considered psychotomimetic if persons who are under the influence of the drug look and act insane while they are under the influence of that drug.**

6. What is an "illusion"? What is a "delusion"?

**An "illusion" is a false perception, i.e. a misrepresentation of what the senses are receiving. A "delusion" is a false belief.**

7. What is the difference between "hallucinations" and "pseudo-hallucinations"?

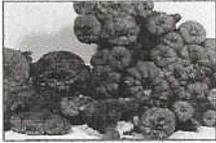
**The difference is that the user typically knows that what he/she is seeing, hearing, smelling, etc. is not real, but is a product of the drug with a "pseudo-hallucination.**

8. What is "piloerection"?

**Literally, "hair standing up," or goose bumps. This condition of the skin is often observed in persons who are under the influence of LSD.**

## Session XIV

### Hallucinogens



XIV-1

## Hallucinogens

Upon successfully completing this session the student will be able to:

- Explain a brief history of the Hallucinogen category of drugs
- Identify common drug names and terms associated with this category
- Identify common methods of administration for this category
- Describe the symptoms, observable signs and other effects associated with this category

Drug Evaluation &amp; Classification Training

XIV-2A

## Hallucinogens (Continued)

- Describe the typical time parameters, i.e. on-set and duration of effects associated with this category
- List the clues that are likely to emerge when the drug influence evaluation is conducted for a person under the influence of this category of drugs
- Correctly answer the "topics for study" questions at the end of this session

Drug Evaluation &amp; Classification Training

XIV-2B

## Synesthesia:

A transposition of senses

- "Seeing sounds"
- "Hearing colors"



Drug Evaluation &amp; Classification Training

XIV-3

## "Flashback"

A vivid recollection of a hallucinogenic experience

Drug Evaluation &amp; Classification Training

XIV-4A

## Types of Flashbacks

- **Emotional**  
Most dangerous, feelings of panic, fear, etc., sensation of "bad trip"
- **Somatic**  
Altered bodily sensations, tremors, weakness, dizziness, crawly, tingly feeling on the skin
- **Perceptual**  
Distortions of vision, hearing, smell, taste and touch (associated with original "trip" least harmful, unless driving a motor vehicle)

Drug Evaluation &amp; Classification Training

XIV-4B

## Illusion:

A false perception

## Delusion:

A false belief

Drug Evaluation & Classification Training

XIV-5

## Common Hallucinogens



Peyote (Mescaline)



Psilocybin

(Both are grown naturally)

Drug Evaluation & Classification Training

XIV-6A

## Common Hallucinogens (Continued)

- Synthetically manufactured
  - LSD (Lysergic Acid Diethylamide)
  - MDMA "Ecstasy" (3, 4 Methylenedioxyamphetamine)
  - MDA (3,4-Methylenedioxyamphetamine)
  - 2CB (4 bromo-2, 5-dimethoxyphenethylamine)



Drug Evaluation & Classification Training

XIV-6B

## Time Factors of Peyote

- 30 minutes: Onset  
Nausea, elevated blood pressure, pulse and temperature and dilated pupils
- 60 minutes: Development of hallucinogenic effects  
Visual distortions, rich colors, changing forms and moving shapes
- 3-4 hours: Peak effects  
"Synesthesia"



Drug Evaluation & Classification Training

XIV-7A

## Time Factors of Peyote

- 10 hours: Gradual decline of effects
- 12 hours: Nearly total recovery
- 24 hours: Elimination nearly completed



Drug Evaluation & Classification Training

XIV-7B

## Time Factors of Psilocybin

- 1-30 minutes – Onset:  
Dizziness; giddiness;  
lightness or heaviness  
of extremities
- 30-60 minutes - Beginning  
of sensory effects:  
Blurred vision; sharpness  
of color; increased acuity  
of hearing



Drug Evaluation & Classification Training

XIV-8A

## Time Factors of Psilocybin

- 60-90 minutes - Sensory effects intensify: Patterns and shapes develop and move; distance perception is impaired; euphoria develops
- 90-100 minutes - Peak effects Subject becomes introspective
- 120-180 minutes - Effects begin to diminish



Drug Evaluation &amp; Classification Training

XIV-88

## Time Factors of LSD

- 30 - 45 minutes: Onset
- 4 - 6 hours: Peak effects
- 7 - 9 hours: Effects diminish
- 10 - 12 hours: Subject feels normal



Drug Evaluation &amp; Classification Training

XIV-9

## Evaluation of Subjects Under the Influence of Hallucinogens

- HGN and VGN - None
- Lack of Convergence - No
- Impaired performance will be evident on Romberg, Walk and Turn, One Leg Stand and Finger to Nose

Drug Evaluation &amp; Classification Training

XIV-10A

## Evaluation of Subjects Under the Influence of Hallucinogens

### Vital Signs:

- Blood pressure - up
- Pulse - up
- Body temperature - up

Drug Evaluation &amp; Classification Training

XIV-10B

## Evaluation of Subjects Under the Influence of Hallucinogens

### Dark Room Examinations:

- Pupils - dilated (Mydriasis)
- Reaction to light - normal\*

\*Certain psychedelic amphetamines may cause slowing

Drug Evaluation &amp; Classification Training

XIV-10C

## Evaluation of Subjects Under the Influence of Hallucinogens

### General Indicators:

- Body tremors
- Dazed appearance
- Difficulty with speech
- Disoriented
- Flashbacks
- Hallucinations
- Nausea
- Paranoia
- Perspiring
- Poor Perception of time
- Rigid muscle tone
- Synesthesia
- Uncoordinated movements

Drug Evaluation &amp; Classification Training

XIV-10D

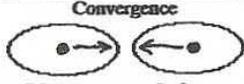
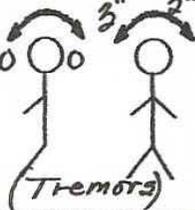
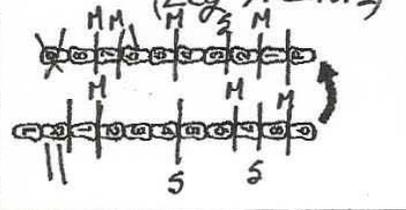
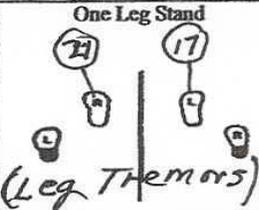
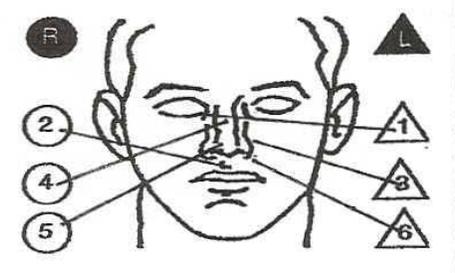
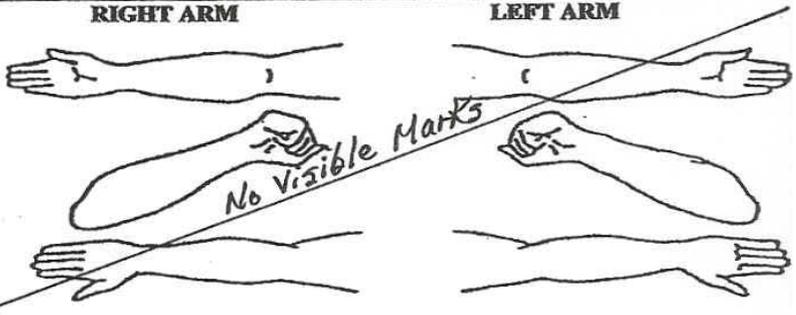
## Hallucinogen Symptomatology Chart

HGN	None
VGN	None
Lack of Convergence	None
Pupil Size	Dilated (mydriasis)
Reaction to Light	Normal*
Pulse Rate	Up
Blood Pressure	Up
Temperature	Up
Muscle Tone	Normal/Rigid

\* Certain psychedelic amphetamines may cause slowing

# QUESTIONS?

## DRUG INFLUENCE EVALUATION

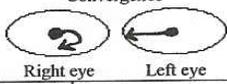
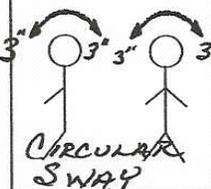
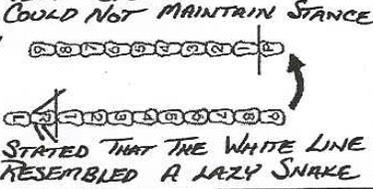
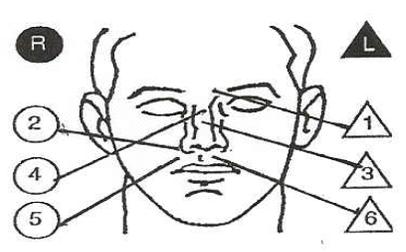
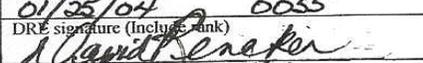
Evaluators <i>Sgt. Kyle Clark, Naples PD</i>		DRE No. <i>7401</i>	Rolling Log No. <i>04-09</i>	Session XIV #2	
Recorder/Witness <i>Cpt. Allan Kolak, C.C.P.O.</i>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <i>04-DRE-0123</i>	
Arrestee's Name (Last, First MI) <i>Warburton, Cindy T.</i>		DOB <i>7/18/82</i>	Sex <i>F</i>	Race <i>W</i>	Arresting Officer (Name, ID No.) <i>Dpty. Darrel Kehne, Collier Co.</i>
Date Examined/Time/Location <i>04/10/04, 2300 hrs, Naples J.C.</i>		Breath Results: Instrument # <i>13465</i> <i>0.00%</i>	Chemical Test <input type="checkbox"/> Refused <input type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood		
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <i>Spaghetti Lunch</i>	When? <i>Lunch</i>	What have you been drinking? How much? <i>Nothing</i>	Time of last drink? <i>N/A</i>	
By: <i>Dpty. Kehne</i>					
Time now? <i>7 p.m.</i>	When did you last sleep? <i>yesterday</i>	How long? <i>6 hrs.</i>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>"I feel hot"</i>	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <i>Distracted, Paranoid</i>	Coordination: <i>Poor, staggering</i>		
		Breath: <i>Normal</i>	Face: <i>Perspiring</i>		
Speech: <i>Rambling, incoherent at times</i>		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery	Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)	Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy
Pulse and time <i>1. 112   2. 310 2. 116   2. 325 3. 116   2. 340</i>	HGN Lack of smooth pursuit Maximum deviation Angle of onset		Left Eye <i>No</i>	Right Eye <i>No</i>	Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
			<i>No</i>	<i>No</i>	Convergence 
			<i>None</i>	<i>None</i>	Right eye      Left eye
Romberg Balance 	Walk and Turn test <i>(Leg Tremors)</i> 		Cannot keep balance <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		One Leg Stand 
			Starts too soon: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
			1 <sup>st</sup> Nine      2 <sup>nd</sup> Nine		L      R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms to balance <input type="checkbox"/> <input checked="" type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down
			Stops walking <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Misses heel to toe <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Steps off line <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Raises arms <i>Constant</i> → Actual # steps <i>9</i> <i>8</i>		
Internal clock <i>10</i> Est. as 30 seconds	Describe Turn <i>Lost balance, stumbled, nearly fell</i>		Cannot do test (explain) <i>N/A</i>		Type of footwear: <i>Sandals</i>
Draw lines to spots touched 		Pupil Size	Room Light	Darkness	Direct
		Left	<i>6.0</i>	<i>8.5</i>	<i>5.5</i>
		Right	<i>6.0</i>	<i>8.5</i>	<i>5.5</i>
		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Rebound dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Nasal area: <i>clear</i>
		RIGHT ARM      LEFT ARM 			Oral cavity: <i>clear</i>
Blood pressure <i>150 / 102</i>	Temperature <i>99.8 °f</i>		Reaction to Light: <i>Normal</i>		
Muscle tone: <input type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid	Comments:				
What medication or drug have you been using? <i>Nothing</i>		How much? <i>N/A</i>	Time of use? <i>N/A</i>	Where were the drugs used? (location) <i>No answer</i>	
Date/Time of Arrest <i>04/10/04, 2230 hrs.</i>	Time DRE Notified <i>2240 hrs.</i>	Evaluation Start Time <i>2300 hrs.</i>	Time Completed <i>2355 hrs.</i>		
DRE signature (include rank) <i>Kyle J. Clark</i>		ID # <i>7401</i>	Reviewed by <i>[Signature]</i> <i>16397</i>		
Opinion of evaluator:		<input type="checkbox"/> Rule Out	<input type="checkbox"/> Alcohol	<input type="checkbox"/> CNS Stimulant	<input type="checkbox"/> Dissociative Anesthetic
		<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input checked="" type="checkbox"/> Hallucinogen	<input type="checkbox"/> Inhalant
				<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Warburton, Cindy T.

1. **LOCATION:** The evaluation was conducted at the Naples Jail Center.
2. **WITNESSES:** Cpl. Allan Kolak of the Cape Coral Police Department witnessed and recorded the evaluation.
3. **BREATH ALCOHOL TEST:** The arresting officer, Deputy Darrel Kehne of the Collier County S.O. administered a breath test to Warburton with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** The writer was on-duty when informed by dispatch that Deputy Kehne was requesting a drug evaluation. Writer contacted Deputy Kehne at the Jail Center where he advised the suspect had been arrested after driving along the gravel shoulder of Beach Road passing other vehicles. According to Deputy Kehne, the suspect pointed to his baton and shouted "Look out, there's a big snake hanging from your belt!" She was very paranoid acting and also claimed that the overhead lights on the police cruiser were bleeding into her eyes and skin.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect sitting in the interview room. She appeared paranoid and disoriented. At one point she pointed to the clock on the wall and shouted, "Keep that off me, keep it away me!"
6. **MEDICAL PROBLEMS AND TREATMENT:** None observed and none stated.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect swayed approximately 3" side to side and estimated 30 seconds in 10 seconds. Walk & Turn: Suspect started walking too soon, lost her balance during the instructions, missed heel to toe, stopped walking, stepped off the line, raised her arms, staggered while turning and only took eight steps on the return. One Leg Stand: Suspect swayed, raised her arms, hopped and put her foot down. Finger to Nose: Suspect missed the tip of her nose on each attempt. She also opened her eyes and shouted, "I can't feel my face!" "My face is missing!"
8. **CLINICAL INDICATORS:** The suspect's pulse, blood pressure and temperature were above the normal ranges. The suspect's pupils were dilated.
9. **SIGNS OF INGESTION:** None were evident.
10. **SUSPECT'S STATEMENTS:** The suspect stated that she felt hot and denied drug use.
11. **DRE'S OPINION:** In my opinion Warburton is under the influence of a Hallucinogen and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a blood sample.
13. **MISCELLANEOUS:** The suspect was wearing an "XTC" tee-shirt.

## DRUG INFLUENCE EVALUATION

Evaluators: <b>TUCSON</b> <b>Ofc. David Rencken, P.D.</b>		DRE No. <b>5308</b>	Rolling Log No. <b>2004-04</b>	Session XIV #3	
Recorder/Witness: <b>DOB KOHN, NHTSA</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>04-5463-001428</b>	
Arrestee's Name (Last, First MI): <b>DUCHANAN, LEW B.</b>		DOB: <b>06/19/66</b>	Sex: <b>M</b>	Race: <b>B</b>	Arresting Officer (Name, ID No.): <b>DFC. T. MCCARTHY, T.P.D.</b>
Date Examined/Time/Location: <b>01-25-04 0115 CENTRAL TESTING</b>		Breath Results: <input type="checkbox"/> Refused Instrument # <b>1234</b>	0.05%		Chemical Test: <input type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? When? <b>PIZZA ABOUT 6 PM</b>	What have you been drinking? How much? <b>COUPLE OF BEERS</b>	Time of last drink? <b>8 PM</b>	
By: <b>D. GREGORY 0117</b>		When did you last sleep? <b>LAST NIGHT</b>	How long? <b>3 HRS</b>	Are you sick or injured? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Time now? <b>10 PM</b>		Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <b>WITHDRAWN/COOPERATIVE</b>		Coordination: <b>VERY POOR - STAGGERING</b>	
Speech: <b>DIFFICULTY IN SPEAKING</b> <b>RAMBLING</b>		Breath: <b>NORMAL</b>		Face: <b>DRYZED/PERSPIRING HEAVILY</b>	
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input checked="" type="checkbox"/> Watery	Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy	
Pulse and time 1. <b>116/1030</b> 2. <b>112/1047</b> 3. <b>104/10200</b>	HGN Lack of smooth pursuit Maximum deviation Angle of onset	Left Eye <b>YES</b> <b>NO</b> <b>NONE</b>	Right Eye <b>YES</b> <b>NO</b> <b>NONE</b>	Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	One Leg Stand <b>1 2 3 TEST STOPPED</b>
Romberg Balance	Walk and Turn test <b>TEST STOPPED</b> <b>COULD NOT MAINTAIN STANCE</b>	Cannot keep balance <b>WVW</b>		Convergence 	
		Starts too soon:		1st Nine 2nd Nine	
Internal clock <b>35</b> Est. as 30 seconds	Describe Turn <b>N/A</b>	Cannot do test (explain) <b>STEPPED OFF LINE 3 TIMES DURING INSTRUCTIONS</b>		Type of footwear: <b>RUNNING SHOES</b>	
Draw lines to spots touched		Pupil Size	Room Light	Darkness	Direct
		Left	<b>6.5</b>	<b>9.0</b>	<b>6.0</b>
		Right	<b>6.5</b>	<b>9.0</b>	<b>6.0</b>
		Hippus	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation
				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Blood pressure: <b>146/102</b>		Temperature: <b>100.5° f</b>			
Muscle tone: <input type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		Comments: <b>ARMS, NECK, FACE RIGID</b>			
What medication or drug have you been using? <b>NO ANSWER</b>		Time of use? <b>NO ANSWER</b>	Where were the drugs used? (location) <b>REFUSED</b>		
Date/Time of Arrest: <b>01/25/04 0055</b>	Time DRE Notified: <b>0100</b>	Evaluation Start Time: <b>0115</b>	Time Completed: <b>0205</b>		
DRE signature (Include rank): 		ID #: <b>4183</b>	Reviewed by: 		
Opinion of evaluator:		<input checked="" type="checkbox"/> Alcohol	<input type="checkbox"/> CNS Stimulant	<input type="checkbox"/> Dissociative Anesthetic	<input type="checkbox"/> Inhalant
		<input type="checkbox"/> Rule Out	<input checked="" type="checkbox"/> CNS Depressant	<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis
		<input type="checkbox"/> Medical	<input checked="" type="checkbox"/> Hallucinogen		

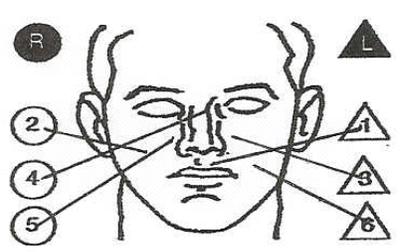
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## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Buchanan, Lew B.

1. **LOCATION:** The evaluation of Lew Buchanan was conducted in the Central Testing Room at the Tucson Police Department.
2. **WITNESSES:** The evaluation was witnessed by the arresting officer; Officer Terry McCarthy of the Tucson Police Department and by Bob Hohn, NHTSA.
3. **BREATH ALCOHOL TEST:** Officer McCarthy administered a breath test to Buchanan with a 0.05% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** The writer was dispatched to Central Testing to conduct a drug evaluation for Officer McCarthy. Officer McCarthy stated that he had observed the suspect driving 20 miles under the posted speed limit on E. Broadway. He also observed the suspect's vehicle drifting from lane to lane. The suspect performed poorly on the SFST's and was arrested for DUI.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the breath testing room. He was swaying slightly as he stood and appeared dazed and disoriented. He responded slowly to my greeting, but was generally cooperative and responsive to my questions. He was perspiring heavily and had rambling speech.
6. **MEDICAL PROBLEMS AND TREATMENT:** Suspect stated he felt nauseous.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect swayed approximately 3" in a circular motion and estimated 30 seconds in 35 seconds. Walk & Turn and One Leg Stand: Suspect was unable to perform the tests. Both were terminated for safety reasons. Finger to Nose: Suspect missed the tip of his nose on each attempt.
8. **CLINICAL INDICATORS:** Suspect exhibited a lack of smooth pursuit, a lack of convergence and had dilated pupils in all three lighting conditions. The suspect's pulse, blood pressure and temperature were above the normal ranges.
9. **SIGNS OF INGESTION:** None were evident.
10. **SUSPECT'S STATEMENTS:** The suspect admitted drinking "a couple of beers" but denied any other drug use.
11. **DRE'S OPINION:** In my opinion Buchanan is under the influence of Alcohol and a Hallucinogen and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a blood sample.
13. **MISCELLANEOUS:**

## DRUG INFLUENCE EVALUATION

Evaluators <i>Sgt. Barry Dixon, Chaves Co.</i>		DRE No. <i>8744</i>	Rolling Log No. <i>05-220</i>	Session XIV #1	
Recorder/Witness <i>Tpr. Michael Champion</i>		Crash: <input type="checkbox"/> Fatal <input checked="" type="checkbox"/> None <input type="checkbox"/> Injury <input type="checkbox"/> Property	Case # <i>05-15153</i>		
Arrestee's Name (Last, First MI) <i>Hoackle, Rebecca S.</i>		DOB <i>9-23-62</i>	Sex <i>F</i>	Race <i>I</i>	Arresting Officer (Name, ID No.) <i>Tpr. Michael Champion, NMSA</i>
Date Examined/Time/Location <i>7/28/05 2030 hrs Chaves Co. Jail</i>		Breath Results: Instrument # <i>13340</i> 0.00 %	Chemical Test <input type="checkbox"/> Refused <input checked="" type="checkbox"/> Urine <input type="checkbox"/> Blood		
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? By: <i>Tpr. Champion</i> <i>"Nothing, Im fasting"</i>	When? <i>"I don't drink"</i>	What have you been drinking? How much?	Time of last drink? <i>N/A</i>
Time, now? <i>About 7pm</i>	When did you last sleep? <i>Last night</i>	How long? <i>6-7 hrs</i>	Are you sick or injured? <i>Upset Stomach</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <i>Withdrawn, Distracted</i>	Coordination: <i>Very poor, barely stand</i>		
Speech: <i>Rapid, stuttering</i>		Breath: <i>Sour, rancid</i>	Face: <i>Flushed</i>		
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery	Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy	
Pulse and time <i>1. 104/204 2. 112/205 3. 104/212</i>	HGN Lack of smooth pursuit Maximum deviation Angle of onset		Left Eye <i>No</i>	Right Eye <i>No</i>	Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Romberg Balance <i>Test stopped</i>	Walk and Turn test <i>Test stopped</i>		Cannot keep balance: <i>VVV</i>		One Leg Stand <i>Test stopped</i>
Starts too soon:	1 <sup>st</sup> Nine		2 <sup>nd</sup> Nine		L R
Stops walking					<input type="checkbox"/> Sways while balancing
Misses heel to toe					<input type="checkbox"/> Uses arms to balance
Steps off line					<input type="checkbox"/> Hopping
Raises arms					<input checked="" type="checkbox"/> Puts foot down
Actual # steps					Type of footwear: <i>Moccasins</i>
Interim clock <i>N/A</i> Est. as 30 seconds	Describe Turn <i>N/A</i>		Cannot do test (explain) <i>Test stopped for safety reasons</i>		Nasal area: <i>Clear</i>
Draw lines to spots touched		Pupil Size	Room Light	Darkness	Direct
		Left	<i>7.0</i>	<i>8.5</i>	<i>8.0</i>
		Right	<i>7.0</i>	<i>8.5</i>	<i>8.0</i>
Blood pressure <i>148/104</i>		Temperature <i>100.0 °f</i>		Reaction to Light: <i>Normal</i>	
Muscle tone: <input type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Comments: <i>Rigidity in arms</i>		RIGHT ARM		LEFT ARM	
What medication or drug have you been using? How much? <i>"My medium doesn't permit drugs."</i>		Time of use? <i>N/A</i>		Where were the drugs used? (location) <i>N/A</i>	
Date/Time of Arrest <i>7/28/05 1930 hrs.</i>	Time DRE Notified <i>2010 hrs.</i>	Evaluation Start Time <i>2030 hrs.</i>	Time Completed <i>2135 hrs.</i>		
DRE signature (include rank) <i>[Signature]</i>		ID #	Reviewed by: <i>[Signature]</i>		
Opinion of evaluator: <input type="checkbox"/> Rule Out <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant	<input type="checkbox"/> CNS Stimulant <input checked="" type="checkbox"/> Hallucinogen	<input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Hoeckle, Rebecca S.

1. **LOCATION:** The evaluation of Rebecca Hoeckle took place at the Chaves County Jail.
2. **WITNESSES:** The arresting officer, Trooper Michael Champion of New Mexico State Police witnessed and recorded the evaluation.
3. **BREATH ALCOHOL TEST:** Trooper Champion administered a breath test to Hoeckle with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was contacted by Trooper Champion and requested to conduct a drug evaluation on Hoeckle. Writer contacted Trooper Champion at the jail where he advised that he had found the suspect stopped at a green light in downtown Roswell. When contacted, the suspect appeared dazed and disoriented. She pointed to the traffic light and told Trooper Champion that "God is light and the light is God." She was unable to perform the roadside SFST's and was arrested for DUI.
5. **INITIAL OBSERVATION OF SUSPECT:** The suspect was seated next to Intoxilyzer and was staring straight ahead. She slowly turned and asked "Are you God?" Writer replied by giving her my name and asking for consent to conduct a drug evaluation on her. She replied, "The gods sent you therefore you must be good." Her speech was rapid and she stuttered slightly.
6. **MEDICAL PROBLEMS AND TREATMENT:** The suspect indicated that she had an upset stomach and was not feeling good.
7. **PSYCHOPHYSICAL TESTS:** The suspect was unable to stand without assistance. It was necessary to terminate the Romberg Balance, Walk and Turn and One Leg Stand tests for her safety. The Finger to Nose test was conducted while she was seated. She missed the tip of her nose on all six attempts.
8. **CLINICAL INDICATORS:** The suspect's pupils were dilated in all three lighting conditions. Her pulse, blood pressure and temperature were above the normal ranges.
9. **SIGNS OF INGESTION:** The suspect's breath was sour smelling and was rancid.
10. **SUSPECT'S STATEMENTS:** The suspect stated she was fasting for religious reasons and that her medium forbids the use of alcohol and drugs. She further stated that her religious leader is a man "whose body is of fire and air and whose spirit is of light." She also indicated that she had just attended a service conducted by the medium.
11. **DRE'S OPINION:** In my opinion Hoeckle is under the influence of a Hallucinogen and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a urine sample.
13. **MISCELLANEOUS:**

Forty-Five Minutes

**SESSION XV**

**PRACTICE: TEST INTERPRETATION**

**SESSION XV      PRACTICE: TEST INTERPRETATION**

Upon successfully completing this session the student will be able to:

- o Analyze the results of a complete drug influence evaluation and identify the category or categories of drugs affecting the individual examined.
  
- o Articulate the basis for the drug category identification.

Content Segments

- A. Interpretation Demonstrations
- B. Interpretation Practice

Learning Activities

- o Instructor Led Demonstrations
- o Small Group Practice
- o Participant Led Presentations

Aids	Lesson Plan	Instructor Notes
 <p><b>20 Minutes</b></p>  <p><b>XV-1 (Title)</b></p>  <p><b>XV-2 (Objectives)</b></p>	<p><b>PRACTICE: TEST INTERPRETATION</b></p> <p><b>A. Interpretation Demonstrations</b></p> <ol style="list-style-type: none"> <li>1. Case #1: "Subject Adams" <ol style="list-style-type: none"> <li>a. Preliminary examination.</li> <li>b. Eye examinations.</li> </ol> </li> </ol>	<p>Total Lesson Time: Approximately 45 Minutes</p> <p>Display Session Title</p> <p>Point out the "Test Interpretation" wall chart.</p> <p>Briefly review the objectives, content and activities of this session.</p> <p>Direct students to review to the "Subject Adams" exemplar in Section XV of their manuals.</p> <p>Review the results of the Preliminary Examination of Subject Adams.</p> <p><u>Ask</u> students: "What category or categories of drugs would produce preliminary examination results consistent with this exemplar?" <u>Probe</u> to draw out the bases for students' responses.</p> <p>Review the results of the Eye Examinations of Subject Adams.</p>

Aids	Lesson Plan	Instructor Notes
	<p>c. Psychophysical tests.</p> <p>d. Vital Signs examinations.</p> <p>e. Dark room examinations.</p> <p>f. Other evidence and additional observations.</p> <p>g. Narrative report.</p>	<p><u>Ask</u> students to discuss the category or categories of drugs that would cause these eye examination results.</p> <p>Review the results of the Psychophysical Tests of Subject Adams.</p> <p>Ask students to discuss the category or categories of drugs that would produce these psychophysical test results.</p> <p>Review the results of the Vital Signs Examinations of Subject Adams.</p> <p>Ask students to discuss the category or categories of drugs that would produce these results.</p> <p>Review the results of the Dark Room Examinations of Subject Adams.</p> <p>Ask students to discuss the category or categories of drugs that would produce these results.</p> <p>Review the results of the examinations for injection sites and muscle rigidity, and of the final interview of Subject Adams.</p> <p>Briefly review the narrative report on the reverse side of the "Adams" exemplar. Point out that the DRE's opinion is missing from this sample report.</p>

Aids	Lesson Plan	Instructor Notes
	<p>h. Opinions of evaluator.</p> <p>2. Case #2: "Subject Baker".</p> <p>a. Preliminary examination.</p> <p>b. Eye examinations.</p> <p>c. Psychophysical tests.</p>	<p>Ask students to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.</p> <p><u>Point out</u> that the evidence indicates that Subject Adams is under the influence of CNS Depressants.</p> <p>Solicit students' questions concerning this demonstration.</p> <p>Direct students to review to the "Subject Baker" exemplar.</p> <p>Review the results of the Preliminary Examination of Subject Baker.</p> <p><u>Ask</u> students: "What category or categories of drugs would produce preliminary examination results consistent with this exemplar?" Probe to draw out the bases for students' responses.</p> <p>Review the results of the Eye Examinations of Subject Baker.</p> <p><u>Ask</u> students to discuss the category or categories of drugs that would cause these eye examination results.</p> <p>Review the results of the Psychophysical Tests of Subject Baker.</p>

Aids	Lesson Plan	Instructor Notes
	<p>d. Vital signs examinations.</p> <p>e. Dark room examinations.</p> <p>f. Other evidence and additional observations</p> <p>g. Narrative report.</p>	<p>Ask students to discuss the category or categories of drugs that would produce these psychophysical test results.</p> <p>Review the results of the Vital Signs Examinations of Subject Baker.</p> <p>Ask students to discuss the category or categories of drugs that would produce these results.</p> <p>Review the results of the Dark Room Examinations of Subject Baker.</p> <p>Ask students to discuss the category or categories of drugs that would produce these results.</p> <p>Review the results of the examinations for injection sites and muscle rigidity, and of the final interview of Subject Baker.</p> <p>Briefly review the narrative report on the reverse side of the "Baker" exemplar. Point out that the DRE's opinion is missing from this sample report.</p> <p>Ask students to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.</p>

Aids	Lesson Plan	Instructor Notes
<p></p> <p><b>25 Minutes</b></p>	<p>h. Opinions of evaluator.</p> <p><b>B. Interpretation Practice</b></p> <p>1. Team practice.</p> <p>a. Review and discussion of exemplars by teams.</p> <p>b. Feedback of results.</p> <ul style="list-style-type: none"> <li>o Subject Charles</li> <li>o Subject Dodge</li> </ul>	<p><u>Point out</u> that the evidence indicates that Subject Baker is under the influence of CNS Stimulants.</p> <p>Solicit students' questions concerning this demonstration.</p> <p>Assign students to work in teams of three or four members.</p> <p>Tell teams that they are to review three exemplars (Subjects Charles, Dodge and Edwards). Team members are to discuss the evidence among themselves and reach a conclusion concerning the category or categories of drugs, <u>if any</u>.</p> <p>Teams will present their conclusions to the entire class.</p> <p>Allow teams approximately 15 minutes to review the three exemplars and reach their conclusions.</p> <p>Poll the teams to determine their conclusions concerning the category or categories of drugs present in each subject.</p>

<b>Aids</b>	<b>Lesson Plan</b>	<b>Instructor Notes</b>
	<ul style="list-style-type: none"><li>o Subject Edwards</li></ul> <p>2. Session wrap-up.</p>	<p>Offer appropriate comments concerning the teams performance.</p> <p>Solicit students' comments and questions concerning this practice session.</p>

## Session XV

### Practice: Test Interpretation



XV-1

### Practice: Test Interpretation

Upon successfully completing this session the student will be able to:

- Analyze the results of a complete drug influence evaluation and identify the category or categories of drugs affecting the individual examined
- Articulate the basis for the drug category identification

Drug Evaluation & Classification Training

XV-2

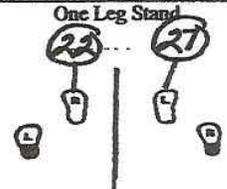
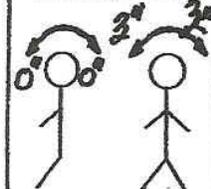
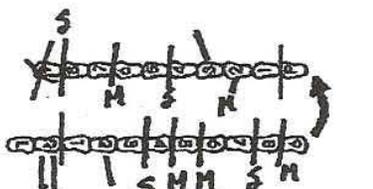
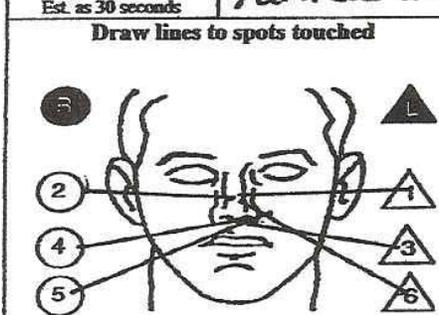
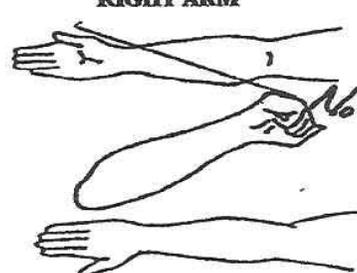
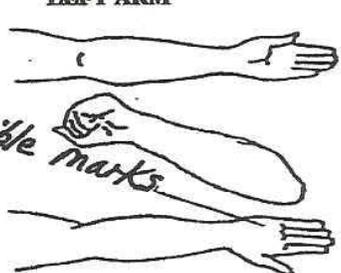
# QUESTIONS?

Drug Evaluation & Classification Training

**DRUG CATEGORIES FOR INTERPRETATION PRACTICE**

<b><u>SUBJECT</u></b>	<b><u>CATEGORY(IES)</u></b>
Adams	CNS Depressant
Baker	CNS Stimulant
Charles	Alcohol only (CNS Depressant)
Dodge	CNS Stimulant
Edwards	Hallucinogen

## DRUG INFLUENCE EVALUATION

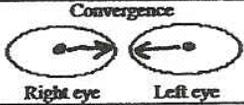
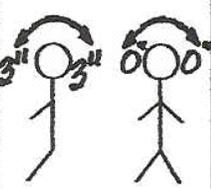
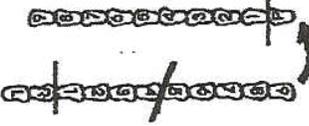
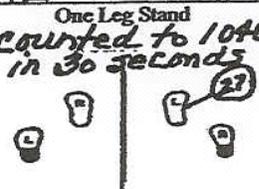
Evaluator <b>Dpty. Josh Warner</b>		DRE No. <b>7359</b>		Rolling Log No. <b>04-035</b>		Session XV - I - #1	
Records/Witness <b>Dpty. Mark George</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>04-1005</b>			
Arrested's Name (Last, First MI) <b>Adams, Frances A.</b>			DOB <b>01-01-65</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID No.) <b>Dpty. Mark George, BCSO</b>	
Date Examined/Time/Location <b>10/06/04 10:30 PM, Co. Jail</b>			Breath Results: <input type="checkbox"/> Refused Instrument # <b>1235</b> <b>0.00%</b>		Chemical Test <input type="checkbox"/> Refused <input type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood		
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? By: <b>Dpty. George</b> <b>Hamburger</b> <b>Noon</b>		What have you been drinking? How much? <b>Water</b>		Time of last drink? <b>N/A</b>	
Time now? <b>9:30 PM</b>		When did you last sleep? <b>Last Night</b>		How long? <b>5 hrs.</b>		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <b>Cooperative</b>		Coordination: <b>Poor, Stumbling, Staggering</b>			
		Breath: <b>Normal</b>		Face: <b>Normal</b>			
Speech: <b>Slow, Slurred, thick</b>		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy	
Pulse and time 1. <b>60, 10:35 PM</b> 2. <b>56, 10:52 PM</b> 3. <b>60, 11:05 PM</b>		HGN <b>Lack of smooth pursuit</b> Maximum deviation Angle of onset		Left Eye <b>Yes</b> <b>Yes</b> <b>35</b>		Right Eye <b>Yes</b> <b>Yes</b> <b>35</b>	
				Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		One Leg Stand 	
Romberg Balance 		Walk and Turn test 		Cannot keep balance Starts too soon: <input checked="" type="checkbox"/>		L R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms to balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down	
				1 <sup>st</sup> Nine    2 <sup>nd</sup> Nine		Type of footwear: <b>Work boots</b>	
				Stops walking <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Nasal area: <b>Clear</b>	
				Misses heel to toe <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Oral cavity: <b>Clear</b>	
				Steps off line <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Reaction to Light: <b>Slow</b>	
				Raises arms <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>			
				Actual # steps <b>9</b> <b>8</b>			
Internal clock <b>50</b> Est. as 30 seconds		Describe Turn <b>Turned backwards</b>		Cannot do test (explain) <b>N/A</b>			
Draw lines to spots touched 		Pupil Size		Room Light		Darkness	
		Left: <b>4.0</b>		<b>4.0</b>		<b>3.0</b>	
		Right: <b>4.0</b>		<b>4.0</b>		<b>3.0</b>	
		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
				RIGHT ARM		LEFT ARM	
							
Blood pressure <b>104/64</b>		Temperature <b>97.6° F</b>		Muscle tone: <input type="checkbox"/> Near normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments: <b>Very relaxed</b>	
What medication or drug have you been using? How much? <b>"None"</b>		Time of use? <b>Refused</b>		Where were the drugs used? (location) <b>Refused</b>			
Date/Time of Arrest <b>10/06/04 9:50 PM</b>		Time DRE Notified <b>10:10 PM</b>		Evaluation Start Time <b>10:30 PM</b>		Time Completed <b>11:30 PM</b>	
DRE signature (include rank) <b>Josh Warner, Mesa Co. S.A. 290</b>		ID # <b>290</b>		Reviewed by <b>Dean Davis, State Coordinator</b>			
Opinion of evaluator:		<input type="checkbox"/> Rule Out		<input type="checkbox"/> Alcohol		<input type="checkbox"/> CNS Stimulant	
		<input checked="" type="checkbox"/> Medical		<input checked="" type="checkbox"/> CNS Depressant		<input type="checkbox"/> Hallucinogen	
				<input type="checkbox"/> Dissociative Anesthetic		<input type="checkbox"/> Inhalant	
				<input type="checkbox"/> Narcotic Analgesic		<input type="checkbox"/> Cannabis	

**DRUG INFLUENCE EVALUATION NARRATIVE**

**Suspect:** Adams, Frances A.

1. **LOCATION:** The evaluation of Frances Adams took place in the interview room at the Boulder County Jail.
2. **WITNESSES:** The evaluation was witnessed and recorded by Deputy Mark George of the Boulder County S.O.
3. **BREATH ALCOHOL TEST:** Deputy George administered a breath test to Adams with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was contacted by radio and advised to contact Deputy George at the Boulder Co. Jail for a drug evaluation. Deputy George advised that he arrested Adams for DUI after observing him commit numerous traffic violations and performing poorly on the SFST's.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the interview room at the jail. His head was tilted forward, his eyes were closed and his breathing was deep and slow. He responded slowly to questions and his speech was slow, slurred and thick.
6. **MEDICAL PROBLEMS AND TREATMENT:** None noted or stated.
7. **PSYCHOPHYSICAL TESTS:** The suspect had difficulty performing the psychophysical tests. Romberg Balance: Suspect had an approximate 3" side to side sway and estimated 30 seconds in 55 seconds. Walk & Turn: Suspect lost his balance during the instructions, missed heel to toe, stopped while walking, turned improperly, stepped off the line and used his arms for balance. One Leg Stand: Suspect lost his balance, used his arms for balance and put his foot down. Finger to Nose: Suspect missed the tip of his nose on five of the six attempts.
8. **CLINICAL INDICATORS:** Suspect had six clues of HGN and a Lack of Convergence. His pulse and blood pressure were below the normal ranges.
9. **SIGNS OF INGESTION:** None evident.
10. **SUSPECT'S STATEMENTS:** Suspect stated he was very sleepy and denied using drugs.
11. **DRE'S OPINION:** In my opinion Adams is under the influence of a CNS Depressant and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a blood sample.
13. **MISCELLANEOUS:**

## DRUG INFLUENCE EVALUATION

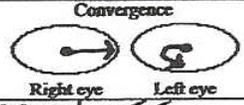
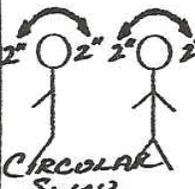
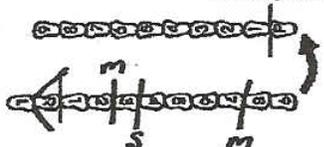
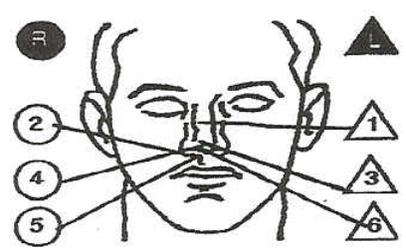
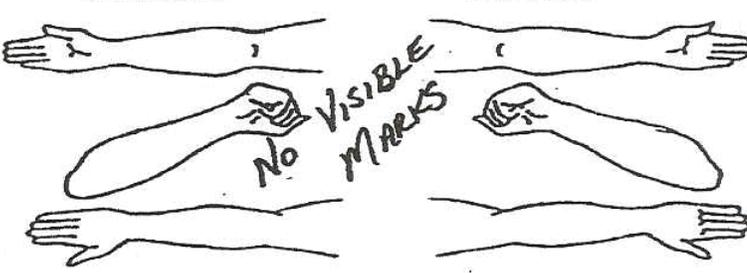
Evaluating Officer: <b>Tr. Jim Klock</b>		DRE No: <b>10716</b>	Rolling Log No: <b>4-036</b>	Session XV-I-#2	
Reporter/Witness: <b>Sgt. Doug Paquette</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case #: <b>04-232</b>	
Arrestee's Name (Last, First MI): <b>Baker, Sam B.</b>		DOB: <b>10/15/72</b>	Sex: <b>M</b>	Race: <b>B</b>	Arresting Officer (Name, ID No.): <b>Tr. Jim Guerriere, NYS</b>
Date Examined/Time/Location: <b>07/19/04, 2230, Cooperstown PD</b>		Breath Results: <input type="checkbox"/> Refused Instrument #: <b>3201</b>	0.00 %		Chemical Test: <input checked="" type="checkbox"/> Urine <input type="checkbox"/> Blood
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? <b>Milkshake, 3 hrs ago</b>	When? <b>3 hrs ago</b>	What have you been drinking? <b>No, nothing</b>	How much? <b>N/A</b>
By: <b>Tr. Guerriere</b>		Time of last drink? <b>N/A</b>		Time now? <b>About 8:30pm</b>	
When did you last sleep? <b>This morning</b>		How long? <b>2 hrs.</b>		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <b>Cooperative</b>		Coordination: <b>Poor, stumbling</b>	
		Breath: <b>Rancid</b>		Face: <b>Normal, sweaty</b>	
Speech: <b>Rapid started at times</b>		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy			
Pulse and time: 1. <b>108/2235</b> 2. <b>112/2246</b> 3. <b>100/2253</b>		HGN Lack of smooth pursuit Maximum deviation Angle of onset		Vertical Nystagmus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
		Left Eye: <b>No</b> Right Eye: <b>No</b> None: <b>None</b>		Convergence: 	
Romberg Balance: 		Walk and Turn test: <b>Walked Rapidly</b> 		One Leg Stand: <b>counted to 1040 in 30 seconds</b> 	
		Cannot keep balance: <b>-</b>		Starts too soon: <b>-</b>	
		Stops walking: <input checked="" type="checkbox"/>		1 <sup>st</sup> Nine: <input checked="" type="checkbox"/> 2 <sup>nd</sup> Nine: <input checked="" type="checkbox"/>	
		Misses heel to toe: <input type="checkbox"/>		L R: <input checked="" type="checkbox"/> Sways while balancing	
		Steps off line: <input type="checkbox"/>		<input checked="" type="checkbox"/> Uses arms to balance	
		Raises arms: <input checked="" type="checkbox"/>		<input type="checkbox"/> Hopping	
		Actual # steps: <b>9</b>		<input checked="" type="checkbox"/> Puts foot down	
Internal clock: <b>15</b> Est. as 30 seconds		Describe Turn: <b>As instructed</b>		Cannot do test (explain): <b>N/A</b>	
Draw lines to spots touched: 		Pupil Size: <b>6.5</b>		Room Light: <b>6.0</b>	
		Darkness: <b>6.0</b>		Direct: <b>6.0</b>	
		Right: <b>6.5</b>		Rebound dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: <b>5/6w</b>	
Blood pressure: <b>142/102</b>		Temperature: <b>99.7 °f</b>		Type of footwear: <b>Athletic Shoes</b>	
Muscle tone: <input checked="" type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:		Nasal area: <b>Redness, Running nose</b>	
What medication or drug have you been using? <b>None</b>		How much? <b>No answer</b>		Time of use? <b>N/A</b>	
Where were the drugs used? (location) <b>No answer</b>		Date/Time of Arrest: <b>07/19/04 2130</b>		Time DRE Notified: <b>2200</b>	
Time Completed: <b>2310</b>		Evaluation Start Time: <b>2230</b>			
DRE Signature (Include rank): <b>Jim Klock</b>		ID #: <b>1509</b>		Reviewed by: <b>[Signature]</b> <b>7/22/04</b>	
Opinion of evaluator: <input type="checkbox"/> Rule Out <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant		<input checked="" type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen	
		<input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant		<input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis	

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Baker, Sam B.

1. **LOCATION:** The evaluation of Sam Baker was conducted in the breath testing room at the Cooperstown Police Department.
2. **WITNESSES:** The evaluation was witnessed and recorded by Sgt. Doug Paquette of the New York State Police.
3. **BREATH ALCOHOL TEST:** The arresting officer, Trooper Jim Guerriere of the N.Y.S.P. administered a breath test to Baker with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was contacted by radio and advised to meet Trooper Guerriere at the Cooperstown Police Department for a drug evaluation. Upon contacting Trooper Guerriere it was determined he had arrested Baker for DUI after his vehicle crossed the center line and nearly struck Trooper Guerriere's patrol vehicle.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect standing in the breath testing room with Trooper Guerriere. The suspect was repeatedly shifting his weight from foot to foot. He was scratching his head and was perspiring heavily. He appeared nervous, anxious and was very restless. His speech was fast and slurred at times.
6. **MEDICAL PROBLEMS AND TREATMENT:** None noted or stated.
7. **PSYCHOPHYSICAL TESTS:** The suspect had difficulty performing the psychophysical tests. Romberg Balance: Suspect had an approximate 3" front to back sway and estimated 30 seconds in 15 seconds. Walk & Turn: Suspect performed the test very quickly, used his arms for balance and stopped while walking. One Leg Stand: Suspect swayed while balancing, used his arms for balance and put his foot down once. He also counted fast counting to 1000-40 in 30 seconds. Finger to Nose: Suspect missed the tip of his nose on all six attempts using quick jerky movements.
8. **CLINICAL INDICATORS:** The suspect's pulse, blood pressure and temperature were above the normal ranges. His pupils were dilated in room light and in direct light.
9. **SIGNS OF INGESTION:** The suspect had a reddened nasal area and his nose was runny.
10. **SUSPECT'S STATEMENTS:** Suspect denied using any drugs.
11. **DRE'S OPINION:** In my opinion Baker is under the influence of a CNS Stimulant and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a urine sample.

## DRUG INFLUENCE EVALUATION

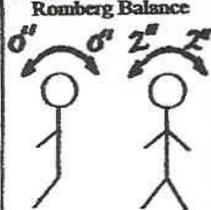
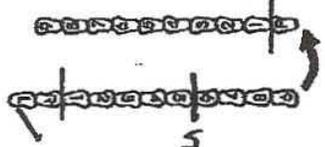
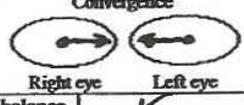
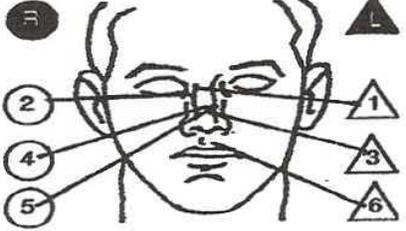
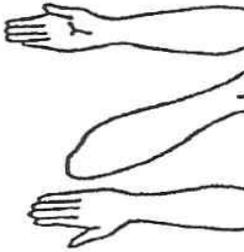
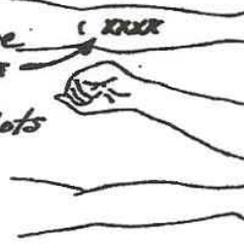
Evaluators <b>Sgt. Steve Johnson</b>		DRE No. <b>2876</b>	Rolling Log No. <b>04-021</b>	Session XV-I-#3	
Recorder/Witness <b>TRP. H. JACKSON, WSP</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>04-10127</b>	
Appreciate's Name (Last, First MI) <b>CHARLES MARY C.</b>		DOB <b>06/13/72</b>	Sex <b>F</b>	Race <b>W</b>	Arresting Officer (Name, ID No.) <b>TRP. H. JACKSON, WSP</b>
Date Examined/Time/Location <b>03/17/04 0045 OLYMPIA OFFICE</b>		Breath Results: <input type="checkbox"/> Refused <input checked="" type="checkbox"/> Intox Instrument # <b>212005</b> <b>0.07%</b>		Chemical Test: <input type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood	
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? When? <b>PIZZA, LAST NIGHT</b>		What have you been drinking? How much? Time of last drink? <b>"COUPLE OF BEERS" 9 PM</b>	
By: <b>H. JACKSON 0046</b>		When did you last sleep? <b>LAST NIGHT</b>		How long? <b>7 HRS.</b>	
Time now? <b>11:30 P.M.</b>		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>"BIRTH CONTROL PILLS"</b>		Attitude: <b>COOPERATIVE</b>		Coordination: <b>POOR, STAGGERING</b>	
Speech: <b>SLURRED</b>		Breath: <b>MODERATE ODOR OF ALCOHOLIC BEVERAGE</b>		Face: <b>FLUSHED</b>	
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Binocularity: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	
Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pulse and time 1. <b>68 10050</b> 2. <b>64 10105</b> 3. <b>72 10117</b>		HGN Lack of smooth pursuit Maximum deviation Angle of onset <b>YES YES 40°</b>		Vertical Nystagmus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Convergence 	
Romberg Balance  <b>CIRCULAR SWAY</b>		Walk and Turn test <b>APPEARED "ROBBED LEGGED"</b> 		Cannot keep balance: <input checked="" type="checkbox"/> Starts too soon: 1 <sup>st</sup> Nine 2 <sup>nd</sup> Nine Stops walking <input checked="" type="checkbox"/> <input type="checkbox"/> Misses heel to toe <input checked="" type="checkbox"/> <input type="checkbox"/> Steps off line <input checked="" type="checkbox"/> <input type="checkbox"/> Raises arms <b>CONSTANT 9</b> Actual # steps <b>9 9</b>	
Internal clock <b>90</b> Est. as 30 seconds		Describe Turn <b>LOST BALANCE / STAGGERED</b>		Cannot do test (explain) <b>N/A</b>	
Draw lines to spots touched 		Pupil Size Left <b>4.5</b> Right <b>4.5</b>		Room Light <b>6.5</b> Darkness <b>3.5</b> Direct <b>3.5</b>	
Blood pressure <b>110/76</b> Temperature <b>98.0 °F</b>		Hippos: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Muscle tone: <input type="checkbox"/> Near normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		RIGHT ARM		LEFT ARM	
Comments:					
What medication or drug have you been using? How much? <b>"NONE, JUST MY PILL" NO ANSWER</b>		Time of use? <b>N/A</b>		Where were the drugs used? (location) <b>NO ANSWER</b>	
Date/Time of Arrest <b>03/17/04 6010</b>		Time DRE Notified <b>0035</b>		Evaluation Start Time <b>0045</b>	
Time Completed <b>0125</b>		DRE's Signature (include rank) <b>Sgt. Steve Johnson</b>		Reviewed by: <b>Carlos Rodriguez, Sgt.</b>	
Opinion of evaluator: <input type="checkbox"/> Rule Out <input checked="" type="checkbox"/> Medical		<input checked="" type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant		<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen	
		<input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant		<input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis	

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Charles, Mary C.

1. **LOCATION:** The evaluation of Mary Charles was conducted in the interview room at the Washington State Patrol Office in Olympia.
2. **WITNESSES:** The evaluation was recorded and witnessed by the arresting officer, Trooper Harlan Jackson of the Washington State Patrol.
3. **BREATH ALCOHOL TEST:** Trooper Jackson administered a breath test to Charles with a 0.07% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Trooper Jackson contacted the writer at the Olympia Patrol Office requesting a drug evaluation on suspect Charles. Trooper Jackson advised the suspect had been reported by several motorists as a possible impaired driver. He located the suspect traveling SB on I-5 near MP 108. The suspect was unable to maintain a single lane of travel and had traffic backed up behind her. When contacted, the suspect had slow, sluggish reactions and slurred speech. She performed poorly on the SFST's and was arrested for DUI.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the interview room with Trooper Jackson. She was swaying as she stood and was very unstable on her feet. She repeatedly blinked her eyes and her speech was slow, thick and slurred.
6. **MEDICAL PROBLEMS AND TREATMENT:** None noted or stated.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect had an approximate 2" circular sway and estimated 30 seconds in 40 seconds. Walk & Turn: Suspect lost her balance during the instructions, missed heel to toe, stepped off the line and used her arms for balance. One Leg Stand: Suspect swayed while balancing, used her arms for balance and put her foot down three times. Finger to Nose: Suspect missed the tip of her nose on three of the six attempts.
8. **CLINICAL INDICATORS:** The suspect exhibited six clues of HGN and a Lack of Convergence.
9. **SIGNS OF INGESTION:** The suspect had an odor of an alcoholic beverage on her breath.
10. **SUSPECT'S STATEMENTS:** Suspect admitted drinking a "couple of beers" earlier in the evening. She denied using any drugs other than her birth control pills.
11. **DRE'S OPINION:** In my opinion Charles is under the influence of Alcohol (ETOH) and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a blood sample.

### DRUG INFLUENCE EVALUATION

Evaluator <b>Dave Anderson, NLET</b>		DRE No. <b>1957</b>	Rolling Log No. <b>04-102</b>	Session XV-I-#4	
Recorder/Witness <b>Darrell Fisher, NSP</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>04-2313</b>	
Arrestee's Name (Last, First MI) <b>Dodge, Fred D.</b>		DOB <b>10/13/75</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID No.) <b>Sgt. Dale Hilderbrand, G.I.P.D.</b>
Date Examined/Time/Location <b>02/22/04, 10:15 PM, G.Z.P.D.</b>		Breath Results: Instrument # <b>F3121</b>	<b>0.00%</b>	Chemical Test <input type="checkbox"/> Refused <input type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood	
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? <b>2 Tacos</b>	When? <b>2 hrs ago</b>	What have you been drinking? How much? <b>Nothing N/A</b>	Time of last drink? <b>N/A</b>
Time now? <b>11:00 PM</b>	When did you last sleep? <b>Yesterday</b>	How long? <b>4-5 hrs.</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <b>Carefree, Cooperative</b>		Coordination: <b>Poor, Jittery, stumbling</b>	
Breath: <b>Normal</b>		Face: <b>Normal</b>			
Speech: <b>Rapid</b>		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery	Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)	Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy	
Pulse and time 1. <b>100, 10:15 PM</b> 2. <b>104, 10:30 PM</b> 3. <b>100, 10:42 PM</b>		HGN Lack of smooth pursuit Maximum deviation Angle of onset		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Romborg Balance 		Walk and Turn test <b>Walked rapidly</b> 		Convergence 	
Internal clock <b>10</b> Est. as 30 seconds		Describe Turn <b>As instructed</b>		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon: <input checked="" type="checkbox"/>	
Draw lines to spots touched 		Pupil Size		One Leg Stand 	
Blood pressure <b>140/96</b>		Room Light <b>6.0</b>		Type of footwear: <b>Street shoes</b>	
Temperature <b>99.5°f</b>		Darkness <b>8.5</b>		Nasal area: <b>Redness</b>	
Muscle tone: <input checked="" type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Direct <b>6.0</b>		Oral cavity: <b>Clear</b>	
Comments:		Right <b>6.5</b>		Reaction to Light: <b>3/low</b>	
What medication or drug have you been using? How much? <b>None N/A</b>		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Time of use? <b>No answer</b>		RIGHT ARM 		LEFT ARM 	
Where were the drugs used? (location) <b>No answer</b>		Pupils: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Date/Time of Arrest <b>2/22/04, 9:25 pm</b>	Time DRE Notified <b>10:00 pm</b>	Evaluation Start Time <b>10:15 pm</b>	Time Completed <b>11:20 pm</b>		
DRE Signature (include rank) <b>Dave Anderson</b>	ID # <b>303</b>	Reviewed by <b>[Signature]</b>			
Opinion of evaluator: <input type="checkbox"/> Rule Out <input type="checkbox"/> Medical <input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant <input checked="" type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis					

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Dodge, Fred D.

1. **LOCATION:** The evaluation of Fred Dodge was conducted in the interview room at the Grand Island Police Department.
2. **WITNESSES:** The evaluation was recorded by the arresting officer, Sgt. Dale Hilderbrand of the Grand Island Police Department and witnessed by Captain Darrell Fisher of the Nebraska State Patrol.
3. **BREATH ALCOHOL TEST:** Sgt. Hilderbrand administered a breath test to Dodge with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Sgt. Hilderbrand contacted the writer and requested a drug evaluation on suspect Dodge. Writer contacted Sgt. Hilderbrand at the G.I. P.D. where it was determined that the suspect had been involved in an attempted elude and was apprehended at E. Bismark Road and S. Oak. The suspect was very restless and had exaggerated reflexes. He was very talkative and his speech was rapid. He performed poorly on SFST's and was arrested for DUI.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the interview room. He was smiling and joking with Sgt. Hilderbrand. His speech was rapid and loud. He seemed boisterous and unconcerned about being under arrest.
6. **MEDICAL PROBLEMS AND TREATMENT:** None noted or stated.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect had an approximate 2" side to side sway and estimated 30 seconds in 15 seconds. Walk & Turn: Suspect twice started the test too soon, stopped walking on his fifth step, raised his arms for balance and performed the test quickly. One Leg Stand: Suspect swayed while balancing and put his foot down once. Finger to Nose: Suspect missed the tip of his nose on all six attempts.
8. **CLINICAL INDICATORS:** The suspect's pulse and blood pressure were above the normal ranges. His pupils were dilated in all three lighting levels.
9. **SIGNS OF INGESTION:** The suspect had four fresh puncture marks on the inside of his left forearm.
10. **SUSPECT'S STATEMENTS:** Suspect denied any drug use.
11. **DRE'S OPINION:** In my opinion Dodge is under the influence of a CNS Stimulant and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a blood sample.



**DRUG INFLUENCE EVALUATION NARRATIVE**

Suspect: Edwards, Joan E.

1. **LOCATION:** The evaluation of Joan Edwards was conducted in the interview room at the Lakeland Police Department.
2. **WITNESSES:** The evaluation was recorded by DRE Regional Coordinator, Lt. Teri Dioquino of the Pinellas County Sheriff's Office.
3. **BREATH ALCOHOL TEST:** The arresting officer, Officer Ray Floyd of the Lakeland Police Department administered a breath test to Edwards with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was contacted by dispatch and advised to contact Officer Floyd at L.P.D. for a drug evaluation. After contacting Officer Floyd it was determined he had found the suspect standing on the hood of her vehicle in the intersection of S. Florida Ave and Alamo Drive. She was waving her arms and screaming at cars as they passed by. It was determined that she had driven her vehicle to the location, which led to her arrest.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the interview room. She appeared dazed, disoriented and had difficulty standing.
6. **MEDICAL PROBLEMS AND TREATMENT:** Suspect stated she felt sick to her stomach and felt like "throwing-up."
7. **PSYCHOPHYSICAL TESTS:** The suspect performed very poorly on the psychophysical tests. Romberg Balance: Suspect had an approximate 3" front to back sway and estimated 30 seconds in 90 seconds. Walk & Turn: Suspect missed heel to toe on each step, stopped walking twice and made an improper turn. One Leg Stand: The test had to be stopped for safety reasons. Finger to Nose: Suspect missed the tip of her nose on all six attempts.
8. **CLINICAL INDICATORS:** The suspect's pulse, blood pressure and temperature were above the normal ranges. Her pupils were dilated in all three lighting levels.
9. **SIGNS OF INGESTION:** None were evident.
10. **SUSPECT'S STATEMENTS:** Suspect denied any medicine or drug use.
11. **DRE'S OPINION:** In my opinion Edwards is under the influence of a Hallucinogen and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a blood sample.
13. **MISCELLANEOUS:** After completing the evaluation the suspect was transported to the local psychiatric ward for continued monitoring.

One Hour and Forty Minutes

**SESSION XVI**  
**DISSOCIATIVE ANESTHETICS**

## SESSION XVI     **DISSOCIATIVE ANESTHETICS**

Upon successfully completing this session the student will be able to:

- o Explain a brief history of Dissociative Anesthetics and specifically PCP and its analogs.
- o Identify common drug names and terms associated with this drug category.
- o Identify common methods of administration for this drug category.
- o Describe the symptoms, observable signs and other effects associated with this drug category.
- o Explain the typical time parameters, i.e. onset and duration of effects, associated with this drug category.
- o List the clues that are likely to emerge when the drug influence evaluation is conducted for a person under the influence of this drug category.
- o Correctly answer the "topics for study" questions at the end of this session.

### Content Segments

### Learning Activities

- |    |   |   |                              |
|----|---|---|------------------------------|
| A. | Overview of Dissociative Anesthetics                    | o | Instructor Led Presentations |
| B. | Possible Effects of Dissociative Anesthetics            | o | Review of DEC Exemplars      |
| C. | Onset and Duration of Effects                           | o | Reading Assignments          |
| D. | Signs and Symptoms of Dissociative Anesthetics Overdose | o | Video Presentations          |
| E. | Expected Results of the Evaluation                      | o | Slide Presentations          |

Aids	Lesson Plan	Instructor Notes
 <p><b>25 Minutes</b></p>  <p><b>XVI-1 (Title)</b></p>  <p><b>XVI-2A-C (Objectives)</b></p>  <p><b>XVI-3 (Overview of Dissociative Anesthetics)</b></p>	<p align="center"><b>DISSOCIATIVE ANESTHETICS</b></p> <p><b>A. Overview of the Category</b></p> <ol style="list-style-type: none"> <li>1. Dissociative Anesthetics include drugs that inhibit pain by cutting off or disassociating the brain's perception of pain. The drugs within this category normally will induce a state of sedation, immobility, amnesia and marked analgesia.</li>   <li>2. Phencyclidine or PCP, is a drug that, along with its <u>analogs</u>, are examples of this distinct drug category.</li> </ol>	<p>Total Lesson Time: Approximately 100 Minutes</p> <p>Display Session Title</p> <p>Briefly review the objectives, content and activities of this session.</p> <p><u>Point out</u> that this category was changed from PCP to Dissociative Anesthetics by the IACP DRE Technical Advisory Panel in September 2005.</p> <p><u>Point out</u> that the term "Dissociative Anesthesia" is derived from the strong feeling of dissociation from the environment that is expected by the user. PCP was the first drug used for this purpose.</p> <p>The chemical name for PCP is <u>Phenyl Cyclohexyl Piperidine</u>.</p>



Aids	Lesson Plan	Instructor Notes
	<ol style="list-style-type: none"> <li>(1) The developers were searching for a drug that would serve as an efficient intravenous anesthetic.</li> <li>(2) PCP proved to be a very effective anesthetic.</li> <li>(3) It was patented and marketed in 1963 under the trade name <u>Sernyl</u>.</li> <li>(4) It was used in the treatment of mental and psychological disorders, including schizophrenia and alcoholism.</li> <li>(5) Many adverse side effects were experienced by persons who had been treated with PCP.</li> <li>(6) In 1967, use of Phencyclidine as an anesthetic for humans was discontinued.</li> <li>(7) In 1968, Parke-Davis re-patented PCP under the trade name <u>Sernylan</u>, which was restricted to use as a veterinary anesthetic.</li> <li>(8) However, Sernylan was often illicitly diverted to "street" use, so most legitimate manufacturing of PCP was stopped in 1978.</li> </ol>	<p>An <u>anesthetic</u> is an agent that reduces or abolishes <u>sensation</u>.</p> <p><u>Sernyl</u> derives from the word <u>serene</u>, the apparent mood induced by PCP. However, the PCP user often is very far from "serene".</p> <p><u>Point out</u> that some of these side effects will be discussed later.</p> <p><u>Sernyl</u> for <u>animals</u> = Sernylan.</p> <p><u>Point out</u> that this is why PCP sometimes goes by the "street" names "Monkey Dust"; "Elephant Tranquilizer"; "Horse Tranquilizer"; etc.</p>

Aids	Lesson Plan	Instructor Notes
	<p>c. PCP is relatively easy to manufacture.</p> <p>(1) The chemicals required to produce it are readily available commercially.</p> <p>(2) The formula for producing PCP has been widely publicized.</p> <p>(3) The hardware needed to combine the chemicals is very basic.</p>	<p><u>Emphasize</u>, however, that there is some danger present in the manufacturing process. Illicit PCP laboratories frequently explode and burn.</p> <p><u>Note</u> that PCP labs commonly contain potassium cyanide and hydrochloric acid. If combined, those two chemicals produce the same lethal gas used in gas chambers designed for executions.</p> <p><u>Emphasize</u> that officers should exercise great caution when they discover an illicit PCP lab.</p> <p><u>Review</u> the policy and procedures of the students' department for dealing with PCP labs and materials.</p>
 <p><b>XVI-5A&amp;B</b> (PCP Street Names)</p>	<p>d. Street names for PCP - "angel dust", "crystal", "sherm", "elephant tranquilizer", and "water"</p>	
 <p><b>XVI-6</b> (PCP Ingestion)</p>	<p>e. Methods of ingestion</p> <p>(1) Many users ingest PCP by smoking.</p>	<p><u>If available</u>, display slides of the various PCP ingestion paraphernalia.</p>

Aids	Lesson Plan	Instructor Notes
	<p>(a) PCP can be applied in either powder or liquid form to a variety of vegetable or leafy substances, which can then be smoked in a pipe or home made cigarette.</p> <p>(b) Popular substances include mint leaves, parsley, oregano, tobacco or Marijuana.</p> <p>(c) Commercially prepared cigarettes can also be dipped in liquid PCP, allowed to dry and then smoked.</p> <p>(d) Some users prefer to dip a string in liquid PCP, and then insert the string into a tobacco cigarette.</p> <p>(2) PCP can also be <u>insufflated</u> or "snorted".</p> <p>(3) It can also be taken <u>orally</u>, in capsule or tablet form.</p> <p>(4) Some users <u>inject</u> liquid PCP, either directly into a vein, under the skin or into a muscle.</p>	<p><u>NOTE:</u> Liquid PCP is especially dangerous because it can be absorbed through the skin. Hence, it could be used as a weapon.</p> <p><u>Point out</u> that PCP smoke is very hot and can irritate the mouth and tongue. Mint leaves and similar material help to cool the smoke.</p> <p><u>NOTE:</u> PCP adulterated cigarettes usually will be wrapped in metal foil to be preserved.</p> <p><u>Point out</u> that "Kool" and "Sherman" brand cigarettes are popular for this, because they are mentholated. PCP-adulterated cigarettes are sometimes called "Super Kools" or "Sherms".</p> <p><u>NOTE:</u> White cigarette paper will be stained brown if adulterated with PCP. Brown cigarette paper will show white crystals, when adulterated.</p>

Aids	Lesson Plan	Instructor Notes
	<p>(5) Some users have administered PCP to themselves by dropping liquid PCP onto their eyes, using an eyedropper.</p> <p>(6) Transdermal absorption of PCP has also been reported (i.e. when applied to the skin, especially as a liquid, PCP can penetrate directly into the body and bloodstream).</p>	<p>Re-emphasize the danger to officers handling suspected drugs without proper protective gloves. Solicit students' questions and comments about the overview of PCP.</p>
 <p><b>XVI-7A</b> (Ketamine)</p>	<p>3. Another drug in this category is called Ketamine. It continues to be manufactured and sold legitimately.</p>	<p>Write Ketamine on the dry erase board or flip-chart.</p> <p>Ketamine is a white, crystalline powder or clear liquid.</p>
 <p><b>XVI-7B</b> (Ketamine Street Names)</p>	<p>a. Ketamine is used as a rapid surgical anesthetic, both for animals and humans, especially children.</p> <p>b. Ketamine is also used for burn victims.</p>	<p>Some brand names of Ketamine: Ketalar, Ketaject, Ketaset, and Vetalar.</p>
 <p><b>XVI-7C</b> (Ketamine Ingestion)</p>	<p>c. Street names include "K", "Special K", "Vitamin K", "Jet" and "Super acid".</p> <p>d. Methods of ingestion</p> <p>(1) Many users ingest Ketamine by smoking.</p> <p>(a) Ketamine can be applied in either powder or liquid form to a variety of vegetable or leafy substances, which can</p>	

Aids	Lesson Plan	Instructor Notes
 <p><b>XVI-8A</b> (DXM)</p>	<p>then be smoked in a pipe or home made cigarette.</p> <p>(b) Popular substances include mint leaves, parsley, oregano, tobacco or Marijuana.</p> <p>c) Commercially prepared cigarettes can also be dipped in liquid Ketamine, allowed to dry and then smoked.</p> <p>(d) Some users prefer to dip a string in liquid Ketamine, and then insert the string into a tobacco cigarette.</p> <p>4. Another drug in this category is Dextromethorphan. It is sometimes referred to “DXM” and is an ingredient found in numerous over-the-counter cough and cold remedies.</p> <p>a. DXM is a synthetically produced substance that is chemically related to Codeine, although it is not an opiate.</p> <p>b. When ingested in recommended dosage levels, DXM generally is a safe and highly effective cough suppressant; however, when ingested in large amounts, it produces negative physiological effects.</p>	<p><u>Point out</u> that DREs frequently encounter persons abusing DXM due to its availability in so many over-the-counter products.</p> <p><u>Point out</u> In some respects, DXM’s effects can be similar to a CNS Depressant, CNS Stimulant, and Hallucinogens. It has been classified as a CNS Depressant in some medical texts and scientific/research reports.</p> <p><u>Point out</u> that DXM is often in other over-the-counter substances containing Acetaminophen, Chlorpheniramine and Guaifenesin.</p>

Aids	Lesson Plan	Instructor Notes
 <b>XVI-8B</b> (DXM Street Names)	c. Street names for Dextromethorphan include: “DXM”, “robo tripping”, “Skittles”, “Triple C”, “Robo dosing”, “DM”, “robo”	
 <b>XVI-8C</b> (DXM Ingestion)	d. DXM abusers normally ingest the drug orally, although some snort the pure powdered form of the drug.  (1) Some abusers ingest 250 to 1,500 milligrams in a single dosage.	
 <b>XVI-9A (PCP Side Effects)</b>	<b>B. Possible Effects</b>  1. Continuing research demonstrated that PCP consistently produced adverse side effects: <ul style="list-style-type: none"> <li>a. delirium</li> <li>b. agitation, anxiety</li> <li>c. rigid muscle tone</li> <li>d. elevated blood pressure</li> <li>e. convulsions</li> <li>f. difficulty in speech</li> <li>g. hallucinations</li> <li>h. violent reactions</li> </ul>	Delirium: confusion, incoherent speech, excitement, illusions, hallucinations, and disorientation.  Convulsion: involuntary contortion of the muscles, producing contortion of the body and limbs.

Aids	Lesson Plan	Instructor Notes
	<ol style="list-style-type: none"> <li>2. Some lingering and long term effects were also noted.               <ol style="list-style-type: none"> <li>a. Some patients complained of dizziness for several hours after their attention and consciousness appeared to be cleared of PCP's effects.</li> <li>b. Some patients reported memory disorders and other psychological disorders resembling schizophrenia for several months and even years afterwards.</li> </ol> </li> <li>3. PCP is classified as a Dissociative Anesthetic, because it cuts off the brain's perceptions of the senses.               <ol style="list-style-type: none"> <li>a. PCP users often feel that their heads are physically separated from their bodies.</li> <li>b. They sometimes report feeling they are dead, and that their heads are floating away.</li> </ol> </li> <li>4. Cases of terribly bizarre, self destructive behavior have been reported with persons under the influence of PCP.</li> </ol>	<p>PCP has sometimes been called a <u>psychotomimetic</u> drug; i.e. it produces effects that mimic psychosis, or "craziness". When the craziness remains long after the drug has dissipated, we say that its effects were <u>psychotogenic</u>, i.e. it didn't simply mimic craziness, it caused craziness.</p>

Aids	Lesson Plan	Instructor Notes
	<p>a. One young man methodically pulled his own teeth out, using a pair of pliers.</p> <p>b. Another individual suffered hallucinations of unbelievably grotesque monsters, and gouged out his own eyes to avoid seeing the monsters.</p> <p>c. Another young man drank rat poison, attempting to kill rats that he imagined were inhabiting his body.</p> <p>d. A nude woman plunged a butcher knife into her own eye, chest, groin and abdomen. She then threatened a police officer with the knife and was shot to death.</p> <p>5. Abusers will also ingest various amounts of DXM depending on their body weight and the effect or “plateau” that they are attempting to achieve. Plateau’s include:</p> <p>a. 1<sup>st</sup> Plateau: Mild inebriation.</p> <p>b. 2<sup>nd</sup> Plateau: An effect similar to alcohol intoxication with mild hallucinations.</p>	<p><u>Point out</u> that PCP can render the user impervious to pain. It anesthetizes the central nervous system to the extent that surgery could be performed on the user while he or she is wide awake.</p> <p><u>NOTE:</u> Instructors should feel free to replace or supplement these examples with others known personally to them.</p> <p>Source: Washington Post, March 7, 1988.</p> <p><u>Point out</u> that the normal recommended therapeutic dosages of DXM are 10 to 20 milligrams for every four hours or 30 milligrams every 6 to 8 hours.</p> <p><u>Point out</u> that speech at the 2<sup>nd</sup> plateau can become slurred, and short term memory may be temporarily impaired.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XVI-9B</b> (On-set and Duration)</p>	<p>           c. 3<sup>rd</sup> Plateau: An altered state of consciousness where the abuser's senses, particularly vision, can become impaired.             d. 4<sup>th</sup> Plateau: Mind and body dissociation or an "out of body" experience.             e. other effects include: blurred vision, body itching, rash, sweating, fever, hypertension, shallow respiration, diarrhea, toxic psychosis, and an increased heart rate and blood pressure.         </p> <p><b>C. On-set and Duration of Effects</b></p> <p>1. PCP</p> <p>           a. When PCP is smoked or injected, onset occurs within 1-5 minutes.             b. When inhaled ("snorted") onset occurs in 2-3 minutes.             c. Onset is considerably slower when PCP is taken orally: 30-60 minutes.             d. The effects reach their peak in about 15-30 minutes, assuming the PCP was smoked, injected or snorted.             e. The effects generally last 4-6 hours, but they can go somewhat longer.         </p>	<p><u>Point out</u> that abusers at the 4<sup>th</sup> plateau can lose some or all contact with his or her senses. The effects at this level are comparable to PCP.</p> <p>Acute dose between 250-1500 mg.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XVI-10A</b> (DXM On-set)</p>	<p>f. The user usually, but not always returns to normal within 24-48 hours.</p> <p>2. Ketamine</p> <p>a. Within seconds if smoked; duration varies</p> <p>b. 1-5 minutes if injected; lasting 30-45 minutes</p> <p>c. 5-10 minutes if snorted; lasting 45-60 minutes</p> <p>d. 15-20 minutes if orally; lasting 1-2 hours</p> <p>3. Dextromethorphan (DXM)</p> <p>a. Rapidly absorbed from the gastrointestinal tract and peak plasma concentrations are reached in approximately 2.5 hours.</p> <p>b. DXM is widely distributed, and is rapidly and extensively metabolized by the liver.</p> <p>c. DXM exerts its antitussive effects within 15-30 minutes of oral administration. The duration of action is approximately 3-6 hours with conventional dosage forms.</p>	<p><u>Point out</u> that Ketamine abusers will often “re-administer” the drug due to its relatively short duration of action.</p> <p><u>Point out</u> that Dextromethorphan is demethylated to dextrophan, an active metabolite.</p> <p>Solicit students' questions and comments concerning onset and duration factors.</p>

## Aids

## Lesson Plan

## Instructor Notes



5 Minutes



XVI-11A-C  
(Expected  
Results)

### D. Signs and Symptoms of Dissociative Anesthetic Overdose

1. In addition to the bizarre, violent and self destructive behavior discussed previously, persons severely intoxicated by Dissociative Anesthetics may exhibit definite and extreme symptoms signifying a medically dangerous condition.
  - a. A deep coma, lasting up to 12 hours.
  - b. Seizures and convulsions.
  - c. A danger associated with severe PCP intoxication is that the person may die due to respiratory depression.
  - d. There is also some evidence that PCP may trigger a heart attack, if the user had some pre-existing condition disposing him or her to possible cardiac problems.
  - e. Eyes generally open with a blank stare.
2. There is also some evidence that prolonged use of PCP can lead to psychosis, which can be permanent.

### E. Expected Results of the Evaluation

1. Horizontal Gaze Nystagmus generally will be present with a very early angle of onset.

Solicit students questions and comments concerning signs and symptoms of PCP overdose.

Aids	Lesson Plan	Instructor Notes
 <p><b>XVI-12A</b> (General Indicators)</p>	<ol style="list-style-type: none"> <li>2. Vertical Gaze Nystagmus usually will be present.</li> <li>3. Lack of convergence will generally be present</li> <li>4. Performance on Romberg will be impaired: Internal clock may be slowed.</li> <li>5. Performance on Walk and Turn, One Leg Stand, and Finger to Nose will be impaired: muscle tone will usually be rigid.</li> <li>6. Blood pressure will generally be elevated</li> <li>7. Pulse rate will generally be elevated</li> <li>8. Body temperature will generally be up.</li> <li>9. Pupil size will be normal</li> <li>10. Reaction to light will be normal</li> <li>11. General indicators <ul style="list-style-type: none"> <li>o Blank stare</li> <li>o Confused</li> <li>o Chemical odor (PCP)</li> <li>o Cyclic behavior (PCP)</li> <li>o Difficulty with speech</li> <li>o Disoriented</li> <li>o Early HGN angle of onset</li> <li>o Hallucinations</li> <li>o Increased pain threshold (PCP)</li> </ul> </li> </ol>	<p><u>NOTE:</u> So-called "Resting Nystagmus" may be evident, especially with high doses.</p> <p>That is a distinct jerking of the eyeballs even as the suspect stares straight ahead.</p> <p>With PCP, the subject may exhibit a "high gait ataxia" or "moon walking", i.e. taking abnormally high and slow steps, as though he or she were trying to step over obstacles in his or her path.</p> <p><u>Note:</u> Especially auditory hallucinations</p>

Aids	Lesson Plans	Instructor Notes
 <p><b>XVI12B</b> (Symptomology Chart)</p> 	<ul style="list-style-type: none"> <li>o Incomplete verbal responses</li> <li>o Loss of memory</li> <li>o “Moonwalking” (PCP)</li> <li>o Non-communicative</li> <li>o Rigid muscle tone (PCP)</li> <li>o Perspiring (PCP)</li> <li>o Possibly violent (PCP)</li> <li>o Sensory distortions</li> </ul> <p><b>F. Summary</b></p> <ol style="list-style-type: none"> <li>1. Expected Results of the Evaluation</li> <li>2. When a DRE concludes that a subject is impaired by a Dissociate Anesthetic, such as PCP or DXM, the report should state that “the subject is under the influence of a Dissociative Anesthetic.”</li> <li>3. Demonstrations <ul style="list-style-type: none"> <li>a. Video demonstrations</li> <li>b. Drug Evaluation and Classification exemplars demonstrations.</li> </ul> </li> </ol>	<p><u>NOTE:</u> PCP abusers may display "Cyclic behaviors" which mean that the signs and symptoms tend to increase and decrease cyclically.</p> <p><u>Point out</u> that as with other drug categories, DREs should not specify the exact drug such as PCP, Ketamine or DXM.</p> <p><u>Point out</u> that tolerance may reduce some PCP symptoms.</p> <p>Show video of subject(s) under the influence of PCP. Relate behavior and observations to the drug Symptomatology Chart.</p> <p>Refer students to the exemplars found at the end of Section XVI of their student manuals.</p> <p>Relate the items noted related to the Symptomatology Chart.</p> <p>Solicit questions or comments concerning expected results of the drug evaluation of Dissociative Anesthetic subjects.</p>

## **Topics for Study**

1. What was the original purpose for which PCP was first patented and marketed?

**It was developed in the 1950's as an intravenous anesthetic**

2. Why do many PCP smokers prefer to adulterate mentholated cigarettes with PCP?

**PCP smoke is very hot, so users will cool it through the use of mentholated cigarettes**

3. What is Ketamine?

**An analog of PCP used as a surgical anesthetic, both for animals and humans, especially children.**

4. What does the term "dissociative anesthetic" mean?

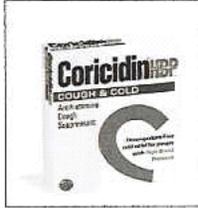
**A dissociative anesthetic inhibits pain by cutting off (or dissociating) the brain's perception of the pain. PCP and its analogs are considered dissociative anesthetics.**

5. "Phencyclidine" is a contraction of what chemical name?

**Phenyl Cyclohexyl Piperidine**

## Session XVI

### Dissociative Anesthetics



XVI-1

### Dissociative Anesthetics

Upon successfully completing this session the student will be able to:

- Explain a brief history of Dissociative Anesthetics and specifically PCP and its analogs
- Identify common drug names and terms associated with this drug category
- Identify common methods of administration for this drug category

Drug Evaluation &amp; Classification Training

XVI-2A

### Dissociative Anesthetics (Continued)

- Describe the symptoms, observable signs and other effects associated with this drug category
- Explain the typical time parameters, i.e. onset and duration of effects associated with this drug category

Drug Evaluation &amp; Classification Training

XVI-2B

### Dissociative Anesthetics (Continued)

- List the clues that are likely to emerge when the drug influence evaluation is conducted for a person under the influence of this drug category
- Correctly answer the "topics for study" questions at the end of this session

Drug Evaluation &amp; Classification Training

XVI-2C

### Overview of Dissociative Anesthetics

- Drugs that inhibit pain by cutting off or dissociating the brain's perception of pain
- Induce a state of sedation, immobility, amnesia and analgesia

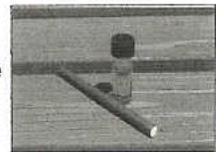


Drug Evaluation &amp; Classification Training

XVI-3

### Brief History of PCP

- Developed in the late 1950's
- An effective intravenous anesthetic
- Patented in 1963 under trade name of "Sernyl"
- Used in treating mental and psychological disorders



Drug Evaluation &amp; Classification Training

XVI-4A

### Brief History of PCP (Continued)

- Produced undesirable side effects
- Use as an anesthetic for humans was discontinued in 1967
- Re-patented in 1968 as an animal tranquilizer under the trade name of "Sernylan"

Drug Evaluation &amp; Classification Training

XVI-4B

### Common "Street Names" for PCP

- Ace
- Amoeba
- Trank
- Jet Fuel
- Juice
- Dust
- Magic Dust
- Monkey Dust
- Crystal Joints
- Krystal
- KJ (Or CJ)
- Devil Dust
- KJ Krystal
- Angel Dust
- Krystal Joints
- Embalming Fluid
- Monkey Tranquilizer
- Lovely

Drug Evaluation &amp; Classification Training

XVI-5A

### More "Street Names" for PCP

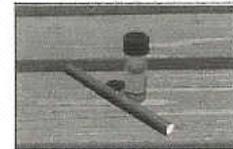
- Peace
- Peace Pill
- Paz
- Green
- Elephant Tranquilizer
- Horse Tranquilizer
- Animal Tranquilizer
- Green Leaves
- Tic Tac
- Kools
- Super Kools
- Super Grass
- Super Weed
- Zombie Weed
- Peace Weed
- Mint Weed
- Killer Weed
- Sherms

Drug Evaluation &amp; Classification Training

XVI-5B

### Methods of Ingestion for PCP and its Analogs

- Smoking
- Orally
- Injection
- Eyedropper
- Insufflation (inhaling; snorting)



Drug Evaluation &amp; Classification Training

XVI-6

### Ketamine

- Used as a rapid surgical anesthetic in both animals and humans
- Also used for burn victims

Drug Evaluation &amp; Classification Training

XVI-7A

### "Street Names" for Ketamine

- "K"
- "Special K"
- "Vitamin K"
- "Jet"
- "Super acid"
- "Kit Kat"
- "Lady K"
- "Kitty"
- "Cat Valium"
- "Super K"

Drug Evaluation &amp; Classification Training

XVI-7B

## Methods of Ingesting Ketamine

- Smoking
- Orally
- Injection
- Eyedropper
- Insufflation (inhaling; snorting)

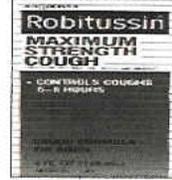


Drug Evaluation &amp; Classification Training

XVI-7C

## Dextromethorphan (DXM)

- Synthetically produced
- Found in numerous over the counter cough and cold products



Drug Evaluation &amp; Classification Training

XVI-8A

## "Street Names" for DXM

- "Triple C"
- "Robo"
- "Robo-Tripping"
- "Skittles"
- "Robo-dosing"
- "Robo-fire"
- "Rojo"
- "Candy"
- "Velvet"
- "DM"

Drug Evaluation &amp; Classification Training

XVI-8B

## Methods of Ingesting Dextromethorphan

- Orally
- Injection
- Insufflation (inhaling; snorting)

Drug Evaluation &amp; Classification Training

XVI-8C

## Some Adverse Side Effects of PCP

- Delirium
- Agitation, anxiety
- Rigid muscle tone
- Elevated blood pressure
- Convulsions
- Difficulty in speech
- Hallucinations
- Violent reactions

Drug Evaluation &amp; Classification Training

XVI-9A

## On-set and Duration of PCP and its Analogs Effects

### On-set

- Smoked: 1-5 minutes
- Injected: 1-5 minutes
- Snorted: 2-3 minutes
- Orally: 30-60 minutes

### Peak effects

Generally in 15-30 minutes

Duration  
4-6 hours

Drug Evaluation &amp; Classification Training

XVI-9B

### Onset and Duration of Effects for Dextromethorphan (DXM)

- Rapidly absorbed from the gastrointestinal tract
- Plasma concentration is reached in approximately 2.5 hours
- Expect antitussive effects in 15 – 30 minutes
- Duration of effects is approximately 3 – 6 hours

Drug Evaluation & Classification Training XVI-10A

### Evaluation of Subjects Under the Influence of PCP and its Analogs

- Horizontal Gaze Nystagmus - present with a very early angle of onset (maybe “immediate” or even “Resting” Nystagmus)
- Vertical Gaze Nystagmus - present
- Lack of Convergence - present
- Impaired performance will be evident on Romberg, Walk and Turn, One Leg Stand and Finger to Nose tests

Drug Evaluation & Classification Training XVI-11A

### Evaluation of Subjects Under the Influence of PCP and its Analogs

**Vital Signs:**

- Blood pressure - up
- Pulse - up
- Body temperature – up

Drug Evaluation & Classification Training XVI-11B

### Evaluation of Subjects Under the Influence of PCP and its Analogs

**Dark Room:**

- Pupil size - normal
- Pupillary reaction to light - normal

Drug Evaluation & Classification Training XVI-11C

### Evaluation of Subjects Under the Influence of Dissociative Anesthetics

**General Indicators:**

- Blank stare
- Confused
- Chemical odor (PCP)
- Disorientated
- Incomplete verbal responses
- Loss of memory
- Non-communicative
- Perspiring (PCP)
- Rigid muscle tone (PCP)
- Self-reported hallucinations
- Sensory distortions
- Slurred and repetitive speech

Drug Evaluation & Classification Training XVI-12A

### Dissociative Anesthetics Symptomatology Chart

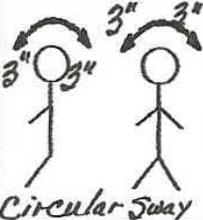
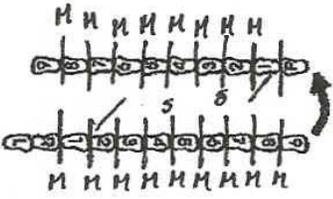
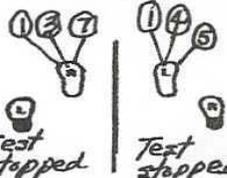
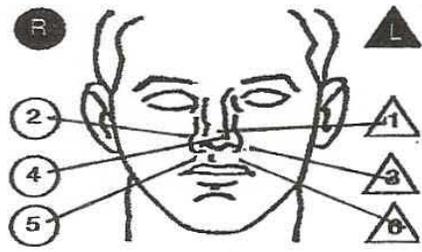
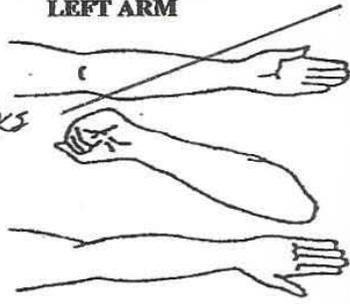
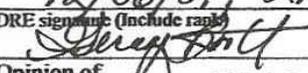
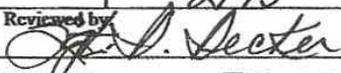
HGN	Present
VGN	Present
Lack of Convergence	Present
Pupil Size	Normal
Reaction to Light	Normal
Pulse Rate	Up
Blood Pressure	Up
Temperature	Up
Muscle Tone	Rigid (PCP)

Drug Evaluation & Classification Training XVI-12B

**QUESTIONS?**

Drug Evaluation & Classification Training

## DRUG INFLUENCE EVALUATION

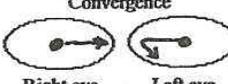
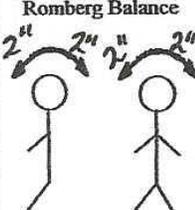
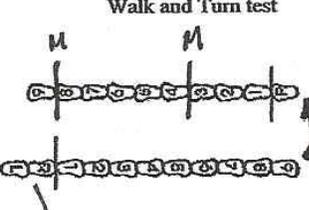
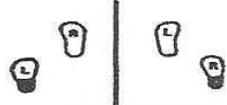
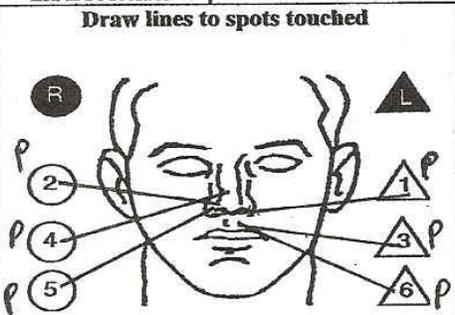
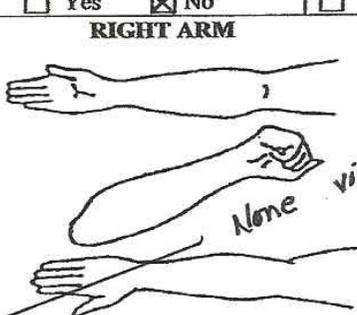
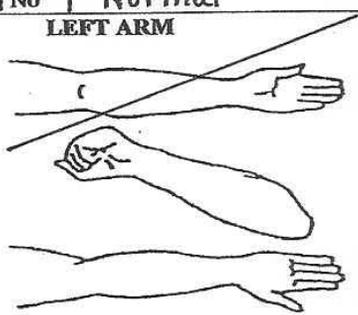
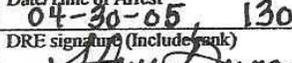
Evaluator <b>Sgt. Gerry Britt, Yarmouth P.D.</b>		DRE No. <b>5479</b>	Rolling Log No. <b>05-12-002</b>	Session XVI - #1	
Recorder/Witness <b>Dr. Jack Richman</b>		Crash: <input type="checkbox"/> Fatal <input checked="" type="checkbox"/> None <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>388661</b>	
Arrestee's Name (Last, First MI) <b>Ross Robert H.</b>		DOB <b>9-06-79</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID No.) <b>Sgt. Deb Batista, Middleboro PD</b>
Date Examined/Time/Location <b>12/08/04, 2145 hrs, Middleboro P.D.</b>		Breath Results: Instrument # <b>12838 0.00 %</b>	<input type="checkbox"/> Refused	Chemical Test <input type="checkbox"/> Refused <input type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood	
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? <b>Chicken</b>	When? <b>6 am</b>	What have you been drinking? How much? <b>Nothing</b>	Time of last drink? <b>N/A</b>
Time now? <b>8 o'clock</b>	When did you last sleep? <b>Yesterday</b>	How long? <b>6 hrs.</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <b>Passive, cooperative</b>		Coordination: <b>Poor, staggering</b>	
		Breath: <b>Chemical odor</b>		Face: <b>Flushed &amp; sweaty</b>	
Speech: <b>Slurred, slow &amp; low</b>		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery	Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)	Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy
Pulse and time 1. <b>100 12150</b> 2. <b>108 12204</b> 3. <b>106 12217</b>	HGN Lack of smooth pursuit Maximum deviation Angle of onset <b>yes yes immediate immediate</b>		Left Eye <b>yes</b>	Right Eye <b>yes</b>	Vertical Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Romberg Balance  <b>Circular Sway</b>	Walk and Turn test 		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon: <input checked="" type="checkbox"/>		One Leg Stand  <b>Test stopped Test stopped</b>
Internal clock <b>45</b> Est. as 30 seconds	Describe Turn <b>Swiveled in one abrupt motion.</b>		Cannot do test (explain) <b>N/A</b>		Type of footwear: <b>Athletic shoes</b>
Draw lines to spots touched 		Pupil Size Left <b>4.0</b> Right <b>4.0</b>	Room Light <b>6.0</b> Darkness <b>6.0</b>	Direct <b>3.5</b> Rebound dilation <b>2.5</b>	Nasal area: <b>Clear</b>
Blood pressure <b>146/100</b> Temperature <b>99.8 °f</b>		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: <b>Normal</b>	
Muscle tone: <input type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid Comments: <b>Very rigid arms</b>		RIGHT ARM 		LEFT ARM 	
What medication or drug have you been using? <b>Nothing</b>		How much? <b>N/A</b>	Time of use? <b>No answer</b>	Where were the drugs used? (location) <b>No answer</b>	
Date/Time of Arrest <b>12/08/04, 2100 hrs.</b>		Time DRE Notified <b>2120</b>	Evaluation Start Time <b>2145</b>	Time Completed <b>2220</b>	
DRE signature (include rank) 		ID # <b>5479</b>	Reviewed by 		
Opinion of evaluator: <input type="checkbox"/> Rule Out <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant	<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen	<input checked="" type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Ross, Robert H.

1. **LOCATION:** The evaluation of Robert Ross took place in the interview room at the Middleboro Police Department.
2. **WITNESSES:** Arresting officer; Sgt. Deb Batista of the Middleboro Police Department and Dr. Jack Richman of New England College of Optometry.
3. **BREATH ALCOHOL TEST:** Sgt. Batista administered a breath test to Ross at 2120 hours with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was contacted by radio and advised to contact Sgt. Batista at the Middleboro P.D. for a drug evaluation. Sgt. Batista advised that she had observed the suspect driving on N. Main Street at approximately 10 mph drifting within his lane and nearly hitting other vehicles. When stopped, the suspect appeared dazed and could not state where he was or where he came from. He had a blank stare and appeared very confused.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the interview room at M.P.D. He appeared dazed and disoriented, had a fixed stare and responded very slowly (approx. 5-10 seconds delay) to all my questions. He was perspiring heavily and had rambling speech.
6. **MEDICAL PROBLEMS AND TREATMENT:** None noted or stated.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect swayed approximately 3" in a circular motion and estimated 30 seconds in 45 seconds. Walk & Turn: Suspect started walking immediately and lost his balance during the instructions, stepped off the line, stopped walking, repeatedly used his arms for balance and missed heel to toe. One Leg Stand: Suspect was unable to complete the test on either foot. Finger to Nose: Suspect missed the tip of his nose on each attempt and his arm movements were very rigid.
8. **CLINICAL INDICATORS:** Suspect exhibited an immediate onset of HGN. Vertical Gaze Nystagmus and Lack of Convergence were also present. The suspect's pulse, blood pressure and temperature were above the normal ranges.
9. **SIGNS OF INGESTION:** There was a strong chemical odor on the suspect's breath.
10. **SUSPECT'S STATEMENTS:** The suspect stated that he did not use any drugs.
11. **DRE'S OPINION:** In my opinion Ross is under the influence of a Dissociative Anesthetic and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a blood sample.

## DRUG INFLUENCE EVALUATION

Evaluators <b>Ofc. Steve Dunn, Anchorage PD</b>		DRE No. <b>11281</b>	Rolling Log No. <b>05-5-33</b>	Session XVI-#2	
Recorder/Witness <b>Ofc. D. Pollock, A.P.D.</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>05-18430</b>	
Arrestee's Name (Last, First MI) <b>Albright, Jeremy J.</b>		DOB <b>4-10-86</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID No.) <b>Ofc. Pollock, A.P.D., 1374</b>
Date Examined/Time/Location <b>04-30-05, 1420 hrs, 4th Ave. Sub.</b>		Breath Results: <input type="checkbox"/> Refused Instrument # <b>75470</b> <b>0.00%</b>		Chemical Test <input type="checkbox"/> Refused <input type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood	
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? When? <b>Cheese Burger &amp; Fries, 11am</b>		What have you been drinking? How much? Time of last drink? <b>Water N/A N/A</b>	
By: <b>Ofc. Pollock</b>		How long? <b>1-2 hrs</b>		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Time now? <b>1:30 pm (1427)</b>		When did you last sleep? <b>"Night before last"</b>		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <b>Cooperative</b>		Coordination: <b>Slow &amp; Deliberate</b>	
		Breath: <b>Normal</b>		Face: <b>Flushed</b>	
Speech: <b>Slurred</b>		Eyes: <input checked="" type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
HGN		Vertical Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		One Leg Stand	
Pulse and time 1. <b>110 / 1430</b> 2. <b>120 / 1446</b> 3. <b>110 / 1501</b>		Lack of smooth pursuit Maximum deviation Angle of onset <b>Immediate</b>		Convergence 	
Romberg Balance 		Walk and Turn test 		Cannot keep balance Starts too soon: <input checked="" type="checkbox"/>	
		Stops walking		1st Nine	
		Misses heel to toe		2nd Nine	
		Steps off line			
		Raises arms			
		Actual # steps		9 9	
				Leg Tremors 	
Internal clock <b>29</b> Est. as 30 seconds		Describe Turn <b>Shuffled feet</b>		Cannot do test (explain) <b>N/A</b>	
Draw lines to spots touched 		Pupil Size		Oral cavity: <b>Clear</b>	
		Left <b>7.0</b>		Darkness <b>8.5</b>	
		Right <b>7.0</b>		Direct <b>5.0</b>	
		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
		Reaction to Light: <b>Normal</b>			
Blood pressure <b>152/100</b>		Temperature <b>99.7°f</b>		RIGHT ARM 	
Muscle tone: <input checked="" type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:		LEFT ARM 	
What medication or drug have you been using? How much? <b>Coricidin 24 pills</b>		Time of use? <b>Last night</b>		Where were the drugs used? (location) <b>Friend's House</b>	
Date/Time of Arrest <b>04-30-05, 1300 hrs.</b>		Time DRE Notified <b>1350</b>		Evaluation Start Time <b>1420 hrs.</b>	
DRE signature (Include rank) 		ID # <b>1361</b>		Time Completed <b>1515 hrs.</b>	
Opinion of evaluator:		<input type="checkbox"/> Rule Out <input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Stimulant <input checked="" type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant		<input type="checkbox"/> Medical <input type="checkbox"/> CNS Depressant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis	

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Albright, Jeremy J.

1. **LOCATION:** The evaluation of Jeremy Albright took place in the DUI processing room at the 4<sup>th</sup> Avenue substation of the Anchorage Police Department.
2. **WITNESSES:** Arresting officer; D. Pollock, Anchorage P.D. witnessed the evaluation.
3. **BREATH ALCOHOL TEST:** Albright provided a breath sample to Officer Pollock on the Datamaster with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was contacted by dispatch and requested to contact Officer Pollock regarding a drug evaluation. Officer Pollock advised he had stopped the suspect for speeding on Minnesota Ave. The suspect had bloodshot eyes and slurred speech. He appeared impaired however, there was no odor of alcoholic beverage on his breath. He had six clues of HGN and performed poorly on the SFST's. He admitted taking some "Dex" the night before.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the interview room at the 4<sup>th</sup> Avenue substation. His face was flushed and his speech slurred. His movements were slow and deliberate.
6. **MEDICAL PROBLEMS AND TREATMENT:** None noted or stated.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect swayed approximately 2" side to side and approximately 2" front to back. Walk & Turn: Suspect lost his balance during the instructions, turned by shuffling his feet and missed heel to toe twice. One Leg Stand: Suspect had leg tremors with no clues observed. Finger to Nose: Suspect missed the tip of his nose on four of the six attempts. He used the pad of his finger on each attempt.
8. **CLINICAL INDICATORS:** HGN was present with an immediate onset. Vertical Gaze Nystagmus and Lack of Convergence were also present. His pulse, blood pressure and temperature were above the normal ranges.
9. **SIGNS OF INGESTION:** None were evident.
10. **SUSPECT'S STATEMENTS:** Suspect admitted taking about 24 Coricidin pills.
11. **DRE'S OPINION:** In my opinion Albright is under the influence of a Dissociative Anesthetic and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a blood sample.
13. **MISCELLANEOUS:** The suspect stated he had been transported to the hospital several months ago when he overdosed by taking 32 Coricidin pills.

**SESSION XVII**  
**NARCOTIC ANALGESICS**

## SESSION XVII    **NARCOTIC ANALGESICS**

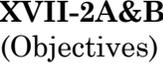
Upon successfully completing this session the student will be able to:

- o Explain a brief history of the Narcotic Analgesic category of drugs.
- o Identify common drug names and terms associated with this category.
- o Identify common methods of administration for this category.
- o Describe the symptoms, observable signs and other effects associated with this category.
- o Describe the typical time parameters, i.e. onset and duration of effects associated with this category.
- o List the clues that are likely to emerge when the drug influence evaluation is conducted for a person under the influence of this drug category.
- o Describe the procedures for examining and determining the ages of injection sites.
- o Correctly answer the "topics for study" questions at the end of this session.

### Content Segments

### Learning Activities

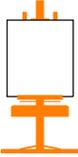
A. Overview of the Category	o Instructor Led Presentations
B. Possible Effects	o Review of Drug Evaluation and Classification Exemplars
C. On-Set and Duration of Effects	o Reading Assignments
D. Overdose Signs and Symptoms	o Video Presentations
E. Expected Results of the Evaluation	o Slide Presentations
F. Injection Site Examination	
G. Expected Location of Injection Marks	
H. Conclusion	

Aids	Lesson Plan	Instructor Notes
 <b>25 Minutes</b>	<p><b>NARCOTIC ANALGESICS</b></p>	<p>Total Lesson Time: Approximately 180 Minutes</p> <p>Display Session Title</p>
 <b>XVII-1 (Title)</b>	<p><b>A. Overview of the Category</b></p>	<p>Briefly review the objectives, content and activities of this session.</p>
 <b>XVII-2A&amp;B (Objectives)</b>		<p>Point out that this category sometimes is called "The Opioids"; the drugs it contains either are found in Opium, or derive chemically from Opium, or produce effects similar to those of the Opium Derivatives.</p>
 <b>XVII-3 (Narcotic Analgesics Defined)</b>	<p>1. Narcotic Analgesic defined</p> <ol style="list-style-type: none"> <li>a. A medical term, not a legal or police term.</li> <li>b. An "Analgesic" is a drug that relieves pain. It differs from an anesthetic, in that it lowers one's perception of pain, rather than stopping nerve transmission.</li> <li>c. Non-Narcotic Analgesics, such as Aspirin, Tylenol, and Motrin, relieve pain, but do <u>NOT</u> produce narcosis, which means numbness or sedation.</li> </ol>	<p>The term "Opioid," however, most correctly refers to the synthetic subcategory of Narcotic Analgesics.</p>
		<p>Clarification: Non-Narcotic Analgesics relieve pain, but do not alter mood. Therefore, they, in small amounts, are not psychoactive, and are not abused for their mind or mood altering actions.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XVII-4</b> (Types of Narcotic Analgesics)</p>	<p>d. A Narcotic is a drug derived from Opium, or produced synthetically that relieves pain, but also induces euphoria, alters mood, and produces sedation.</p> <p>2. There are two subcategories of Narcotic Analgesics.</p> <p>a. Opiates: drugs that either contain or are derived from Opium.</p> <p>(1) Natural alkaloids of Opium</p> <p>(2) Opium derivatives.</p> <p>(a) The natural alkaloids and the Opium Derivatives all come from <u>Opium</u>, which is sap from the seed pods of a particular type of poppy.</p>	<p>Point out that a "natural alkaloid" is a substance that is found in another substance, and that can be isolated from it. Morphine, for example, is a natural alkaloid of Opium. Codeine is another example of a natural alkaloid.</p> <p>The term "main ingredient" can be used as a synonym for "alkaloid."</p> <p>Opium derivatives are obtained by chemically treating the Opium alkaloid. Opium Derivatives are therefore derived from Opium.</p> <p><u>NOTE:</u> The Opium poppy, or papaver somniferum (somniferum, Latin for the "carrier of sleep").</p> <p>An analogy to help students understand the difference between an alkaloid and a derivative would be to compare opium to wheat. The "alkaloid" of the wheat would be whole wheat flour--a derivative of the wheat would be white flour</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XVII-5</b> (Characteristics of Narcotic Analgesics)</p>	<p>b. Synthetics, which do not derive from Opium at all, but have similar or identical effects as Opium alkaloids and derivatives.</p> <p>3. Narcotic Analgesics all share three characteristics.</p> <p>a. They will relieve pain.</p> <p>b. They will produce withdrawal signs and symptoms when the user is physically dependent, and drug use is stopped.</p> <p>c. They will suppress the withdrawal signs and symptoms of chronic morphine administration.</p>	<p>(wheat flour which has been chemically treated)</p> <p>Point out that the synthetic Narcotic Analgesics are produced from a variety of non-opiate substances. Again, these are sometimes called "Opioids".</p> <p>Clarification: They produce analgesia.</p> <p><u>Clarification:</u> Physical dependence results from "chronic administration." This means that the drug has been taken at fairly regular intervals for a period of time.</p> <p>Morphine is typically used as the standard for comparison with other Narcotic Analgesics.</p> <p><u>Clarification:</u> This means that the various Narcotic Analgesics can be substituted for each other to relieve withdrawal symptoms.</p>
 <p><b>XVII-6</b> (Commonly Abused Opiates)</p>	<p>4. Some commonly abused <u>Opiates</u>.</p> <p>a. Powdered Opium (also known as smoking Opium)</p> <p>o a simple refinement of raw Opium.</p>	<p><u>Point out</u> the chart is located on page XVII-2 of the student manual.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>o used medically to treat diarrhea (administered orally)</li> <li>o remains popular as a drug of abuse (smoked) among some Asian-American communities.</li> </ul> <p>b. <u>Hydrocodone</u> is derived from Codeine but is more closely related to Morphine in its pharmacological profile. Examples include:</p> <ul style="list-style-type: none"> <li>o Hycodan</li> <li>o Vicodin</li> <li>o Lortab</li> </ul> <p>c. <u>Morphine</u>, the principal natural alkaloid of Opium.</p> <ul style="list-style-type: none"> <li>o Morphine was first isolated from Opium in 1805.</li> <li>o used medically to suppress severe pain (e.g., with terminal cancer patients).</li> <li>o highly addictive</li> <li>o at one time, Morphine was the most commonly abused Narcotic Analgesic.</li> </ul> <p>d. <u>Codeine</u> is another natural alkaloid of Opium.</p> <ul style="list-style-type: none"> <li>o first isolated in 1832.</li> </ul>	<p>The development of more effective opiates and synthetics has virtually eliminated its use medically. In recent years, there have been little street use of Opium. It is important to realize, however, that drug use trends can and do change.</p> <p>Point out that Hydrocodone products are the most frequently prescribed pharmaceutical opiate (Narcotic Analgesic) with over 111 million prescriptions dispensed in 2003. (DEA)</p> <p>Note: Vicodin is a commonly prescribed pain reliever containing Hydrocodone and Acetaminophen.</p> <p>Instructor, FYI: Named after Morpheus, the Greek God of dreams.</p> <p>Morphine was widely used during the Civil War. Morphine addiction was termed "Soldier's disease."</p> <p>Its technical name is Methyldorphine.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>o Codeine's pain killing ability is much weaker than Morphine's.</li> <li>o used medically to suppress coughing or minor pain.</li> <li>o Codeine is definitely an addictive drug.</li> <li>e. <u>Heroin</u> is the most commonly abused illicit Narcotic Analgesic. <ul style="list-style-type: none"> <li>o derived from Morphine in 1874.</li> <li>o Heroin was first thought to be a non-addictive substitute for Morphine.</li> <li>o it was approved for general use by the American Medical Association in 1906.</li> <li>o by the 1920's it was evident that Heroin was much more addictive than Morphine.</li> <li>o importation and manufacture of Heroin have been illegal in this country since 1925.</li> </ul> </li> <li>f. <u>Dilaudid</u> is another derivative of Morphine <ul style="list-style-type: none"> <li>o first produced in 1923.</li> </ul> </li> </ul>	<p><u>Clarification:</u> Narcotic Analgesic addicts often turn to Codeine when they cannot get more popular drugs.</p> <p>Point out that the generic, or technical name for heroin is "Diacetyl Morphine".</p> <p>Write "Diacetyl Morphine" on the dry erase board or flip-chart.</p> <p>Heroin is a Schedule I drug, which means it has no legitimate medical uses in the United States.</p> <p>Technical Name: Hydromorphone Hydrochloride.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>o sometimes called "drug store Heroin", since it is commercially available from medical and pharmaceutical sources.</li> <li>o Dilaudid has the same addictive liabilities as does Heroin or Morphine.</li> <li>o used medically for short term relief of moderate to severe pain, and to suppress severe, persistent coughs.</li> <li>o can be ingested via injection, orally or in suppositories.</li> <li>o used medically to treat coughs.</li> <li>o sometimes abused by addicts who are unable to obtain Morphine or Heroin.</li> </ul> <p>g. <u>Numorphan</u></p> <ul style="list-style-type: none"> <li>o Used medically for the relief of chronic pain.</li> <li>o sold in ampules (injection) and in suppositories.</li> <li>o previously (pre-1972) it was sold in tablets, and was a favorite substitute for Heroin among addicts; addicts now generally prefer Dilaudid as a Heroin substitute.</li> </ul>	<p>Technical Name: Oxymorphone</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>VII-7</b> (Common Synthetic Opiates)</p>	<p>h. <u>Oxycodone</u> is a semi-synthetic narcotic produced by chemically treating Thebaine. It is somewhat less addictive than Morphine, but more than Codeine. Two examples are:</p> <ul style="list-style-type: none"> <li>o Percodan is one of the most commonly prescribed Narcotic Analgesics.</li> <li>o OxyContin is a controlled-released tablet that contains large amounts of Oxycodone (10 to 160 mg). Abusers learn to circumvent the slow-release mechanism.</li> </ul> <p>5. Some common <u>Synthetic Opiates</u></p> <p>a. <u>Demerol</u> was first produced in 1939.</p> <ul style="list-style-type: none"> <li>o Demerol is one of the most widely used Synthetic Opiates for relief of pain and for sedation.</li> <li>o It is also one of the Narcotic Analgesic that is most frequently abused by medical personnel.</li> </ul>	<p>Technical Name: Oxycodone.</p> <p>It is also produced under the brand name of "Percocet which is Percodan combined with Acetaminophen, such as Tylenol.</p> <p>Street names: "Oxy", "OC", "Killer"</p> <p>Technical Name: Meperidine.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>o Demerol is widely used as an analgesic in childbirth.</li> <li>o One medical advantage of Demerol is that it produces less respiratory depression than do other Narcotic Analgesics; thus, a fatal overdose is less likely with Demerol.</li> <li>o Medical literature sometimes indicates that Demerol does not cause pupillary constriction. Enforcement experience indicates to the contrary.</li> <li>b. <u>Methadone</u> was developed in Germany during World War II and first marketed in America in 1947.</li> <li>o Methadone's effects are similar to Morphine's, although they develop more slowly and last longer than do Morphine's effects.</li> <li>o Methadone's withdrawal symptoms are slower and milder than are Morphine's.</li> <li>o Used extensively in "maintenance programs" as a substitute for Heroin for addicts</li> </ul>	<p>Point out that pupillary constriction ordinarily is one of the most reliable indicators of a Narcotic Analgesic.</p> <p>Methadone was developed in Germany because of wartime shortages of Morphine. Some experts have stated that the brand name for Methadone, "Dolophine," was derived from Adolph Hitler.</p> <p><u>Ask students:</u> "What is one of the most common medical uses of Methadone in this country?"</p> <p><u>Remind</u> students that one characteristic shared by all Narcotic Analgesics is that they suppress withdrawal</p>

Aids	Lesson Plan	Instructor Notes
	<p>undergoing therapy and treatment.</p> <ul style="list-style-type: none"> <li>o <u>In theory</u>, the daily dose of Methadone given to a Heroin addict allows the addict to function normally with no physical need for up to 24 hours.</li> <li>o Methadone is also used medically to relieve moderate to severe pain, and to suppress coughing.</li> </ul> <p>c. The <u>Fentanyl</u>s include several hundred "designer drug" analogs of Morphine.</p> <ul style="list-style-type: none"> <li>o first developed in 1965 as an intravenous anesthetic.</li> <li>o legally produced as a pain killer.</li> <li>o principal abused analog is "Three-Methyl Fentanyl".</li> </ul> <p>d. <u>MPPP</u> is an illegally manufactured analog of Demerol.</p> <ul style="list-style-type: none"> <li>o MPPP is a powerfully addictive synthetic Narcotic Analgesic.</li> <li>o At times, MPPP has been contaminated with <u>MPTP</u>, a chemical producing paralysis similar to Parkinson's Disease.</li> </ul>	<p>symptoms of chronic Morphine administration.</p> <p>Methadone's primary advantages are: it cannot be injected, and it has a much longer duration of effects than Heroin.</p> <p>"Sublimaze" is a brand name for Fentanyl. It is a Schedule II drug. It is frequently found in overdose situations. For example, "Tango and Cash" and "Goodfellas", which contained Fentanyl, were sold in New York City in 1990 as Heroin. Many fatal overdoses occurred as a result.</p> <p>Instructor, FYI: Parkinson's disease is a progressive neurological disorder characterized by resting tremors, shuffling gait, and muscle weakness.</p>

Aids	Lesson Plan	Instructor Notes
	<p>e. <u>Darvon</u> is a synthetic Narcotic of relatively low analgesic potency and relatively low addiction liability.</p> <p>6. Methods of administration of Narcotic Analgesics vary from one drug to another.</p> <p>a. Some are commonly taken orally.</p> <p>b. Some are smoked.</p> <p>c. Some are snorted. (taken intranasally)</p> <p>d. Some are often administered in suppositories.</p> <p>e. Medically, some Narcotic Analgesics may be administered transdermally or through the skin.</p> <p>f. Heroin, and some others, usually are taken by injection.</p>	<p>Technical Name: Propoxyphene.</p> <p>Users have stated that the fear of contracting diseases, such as AIDS, from shared needles, has prompted them to either snort or smoke Heroin.</p> <p><u>If available</u>, show slides of Heroin injection paraphernalia.</p> <p><u>Solicit</u> students' comments and questions concerning this overview of Narcotic Analgesics.</p>

## Aids

## Lesson Plan

## Instructor Notes



5 Minutes



XVII-8  
(Concept of  
Tolerance)

**B. Possible Effects**

1. As with nearly all the drugs of abuse, the effects produced by heroin or other Narcotic Analgesics depend on the tolerance that the user has developed for the drug.
  - a. People develop tolerance for Narcotic Analgesics fairly rapidly.
  - b. "Tolerance" means that the same dose of the drug will produce diminishing effects, or conversely that a steadily larger dose is needed to produce the same effects.
  - c. A Narcotic Analgesic user who has developed tolerance and who is using his or her "normal" dose of the drug may exhibit little or no evidence of intellectual or physical impairment.
  - d. Impairment is more evident with new users, and with tolerant users who exceed their "normal" doses.

Emphasize: Habitual users of drugs may develop tolerance to the drug. As a result, they may exhibit relatively little evidence of impairment on the psychophysical tests. Even tolerant drug users, when impaired, usually exhibit clinical evidence. (i.e. in the vital signs and eye signs)

Clarification: the tolerant addict who has injected his

or her "normal" dose of Heroin may appear to be much less impaired than an inexperienced user who had taken the same dose.

Aids	Lesson Plan	Instructor Notes
 <p><b>XVII-9</b> (On the Nod)</p>	<p>2. Observable effects of Heroin and other Narcotic Analgesics.</p> <ul style="list-style-type: none"> <li>a. Sedation - "On the Nod" <ul style="list-style-type: none"> <li>o the condition known as "on the nod" is a semiconscious state of deep relaxation.</li> <li>o the user's eyelids become very droopy.</li> <li>o their head will slump forward until the chin rests on the chest.</li> <li>o in this condition, the user usually can be aroused easily and will be sufficiently alert to respond to questions.</li> </ul> </li> <li>b. Other effects. <ul style="list-style-type: none"> <li>o slowed reflexes</li> <li>o slow and raspy speech</li> <li>o slow, deliberate movements</li> <li>o inability to concentrate</li> <li>o slowed breathing</li> <li>o skin cool to the touch</li> <li>o possible vomiting</li> <li>o itching of the face, arms or body</li> </ul> </li> </ul>	<p><u>Point out</u> that "on the nod" occurs most often with new users or with users exceeding normal doses.</p> <p><u>Remind</u> students that the technical term for "droopy eyelids" is <u>Ptosis</u>.</p> <p><u>NOTE:</u> These effects may be dose-related, and most often occur with non-tolerant users.</p> <p>Instructor, FYI: Technical terms are Hypopnea or Bradypnea.</p> <p>Solicit students' comments and questions concerning possible effects of Narcotic Analgesics.</p>

## Aids

## Lesson Plan

## Instructor Notes



20 Minutes



**XVII-10A**  
(On-set &  
Duration of  
Effects of  
Heroin)



**XVII-10B**  
(On-set: 5-30  
Minutes)



**XVII-10C**  
(On-set: 4-6  
hours)

**C. Onset and Duration of Effects**

1. The psychological effects of Heroin begin immediately after the injection.
  - a. A feeling of pleasure or euphoria.
  - b. Relief from the symptoms of withdrawal.
  - c. Relief from pain.
2. The observable signs will usually become evident within 5-30 minutes after the user has injected.
3. The effects will usually be observable for up to 4-6 hours.
4. As the drug wears off, withdrawal signs and symptoms start to develop until the addicted user injects again.

Point out that the intensity of the euphoria will depend on a number of factors, one of which is the addict's tolerance. A heavily addicted user who is beginning withdrawal symptoms may experience only mild euphoria.

Remind students that the physical effects may not be observed at all, if the addict is tolerant and has injected a "normal" or "maintenance" dose.

Point out that the development of withdrawal symptoms implies that the Heroin has worn off, so that the addict is no longer under the influence.

As with nearly all drugs, the withdrawal signs and symptoms are essentially the opposite of the "high" or intoxicated state.

Aids	Lesson Plan	Instructor Notes
	<p>a. As the effects of Heroin diminish, withdrawal <u>symptoms</u> begin.</p>	
<p><b>XVII-11A</b> (With- drawal)</p>	<ul style="list-style-type: none"> <li>o aches</li> <li>o chills</li> <li>o insomnia</li> <li>o nausea</li> </ul>	
	<p>b. Withdrawal <u>signs</u> start to become observable 8-12 hours following injection.</p>	
<p><b>XVII-11B</b></p>	<ul style="list-style-type: none"> <li>o goose bumps (Pilo-erection) on the skin</li> <li>o sweating</li> <li>o running nose</li> <li>o tearing</li> <li>o vomiting</li> <li>o yawning</li> </ul>	<p>"Piloerection" means "hair standing up".</p> <p>Point out that "sweating" usually is the first withdrawal sign to appear.</p> <p><u>Point out</u> that yawning, tearing, runny nose and vomiting usually appear only after marked withdrawal of many hours.</p>
	<p>5. Withdrawal signs and symptoms closely resemble those of Influenza or the common cold.</p>	<p>Point out that "withdrawal" signs of Narcotic Analgesics are essentially the opposite of their "under the influence" signs.</p>
<p><b>XVII-11B</b></p>	<p>a. These symptoms begin to intensify from 14-24 hours after injection, and may be accompanied by goose bumps (piloerection), slight tremors, loss of appetite and <u>dilation</u> of the pupils.</p> <p>b. Approximately 24-36 hours after injection, the addicted</p>	

Aids	Lesson Plan	Instructor Notes
XVII-11C	<p>user experiences insomnia, vomiting, diarrhea, weakness, depression and hot and cold flashes.</p>	
	<p>c. Withdrawal symptoms and signs generally reach their peak 2-3 days after injection:</p>	
XVII-11D	<ul style="list-style-type: none"> <li>o muscular and abdominal cramps</li> <li>o elevated temperature</li> <li>o severe tremors and twitching</li> </ul>	<p><u>Point out</u> that the involuntary tremors and twitching of the legs give rise to the expression "kicking the habit".</p>
	<p>d. The addicted user at this point is nauseated, gags, vomits and may lose 10-15 pounds within 24 hours.</p> <p>e. The withdrawal syndrome continues to decrease in intensity over time, and is usually greatly reduced by the fifth day, disappearing in one week to 10 days.</p> <p>f. A common misconception regarding withdrawal from Narcotic Analgesics is that they may be fatal. In reality, however, although Narcotic withdrawal is extremely uncomfortable, it rarely, if ever, proves fatal.</p>	<p>Solicit students' comments and questions concerning onset and duration of the effects of Narcotic Analgesics.</p>
XVII-11E	<p><b>D. Overdose Signs and Symptoms</b></p>	<p><u>Point out</u> that this is an effect that Narcotic Analgesics have in common with CNS Depressants.</p>
	<p>1. Narcotic Analgesics depress respiration.</p>	
5 Minutes	XVII-15	

Aids	Lesson Plan	Instructor Notes
	<ol style="list-style-type: none"> <li>a. In overdoses, the user's breathing will become slow and shallow.</li> <li>b. Death can occur from severe respiratory depression.</li> <li>c. The danger of death is heightened by the fact that the addicted user may not know the strength of the drug he or she is taking.</li> </ol> <ol style="list-style-type: none"> <li>2. Other signs and symptoms of an overdose of a Narcotic Analgesic include clammy skin, convulsions and coma, blue lips and pale or blue body, extremely constricted pupils (unless there is brain damage, in which pupils may be dilated), recent needle marks, or perhaps a needle still in the user's arm.</li> <li>3. Narcotic Analgesic overdoses are sometimes treated by the administration of a Narcotic antagonist such as Narcan. A Narcotic antagonist works at neuron receptor sites, blocking or counteracting the effects of Narcotic Analgesics. In effect, these substances precipitate withdrawal. The short duration of effects produced by Narcotic antagonists, however, require continued medical monitoring of the user.</li> </ol>	<p><u>Clarification:</u> the percentage of pure Heroin in the sample the addict uses may be much higher than what the addict expects and is used to.</p> <p>E.g., "Tango and Cash" and "Goodfellas" were sold on the street as high grade Heroin. Rather, these contained the much more potent Fentanyl, resulting in many fatalities.</p> <p>Point out that a person suffering from Narcotic Analgesic overdose may appear to be in shock.</p> <p>Solicit students' comments and questions concerning signs and symptoms of an overdose of Narcotic Analgesics.</p>

Aids	Lesson Plan	Instructor Notes
<p></p> <p><b>60 Minutes</b></p> <p></p> <p><b>XVII-12A,B,&amp;C</b> (Evaluation Results)</p>	<p><b>E. Expected Results of the Evaluation</b></p> <p>1. Observable evidence of impairment.</p> <ul style="list-style-type: none"> <li>o Neither Horizontal Gaze Nystagmus nor Vertical Gaze Nystagmus will be present.</li> <li>o Eyes will <u>not</u> exhibit a Lack of Convergence.</li> <li>o Performance on Romberg will be impaired. Generally, the subject will appear drowsy, and will have a slow internal clock.</li> <li>o Performance on Walk and Turn and One Leg Stand will be impaired, and will reflect the slow and deliberate movements caused by this category of drugs.</li> <li>o Performance on Finger to Nose will also be impaired. Generally, the subject will appear drowsy, possibly "on the</li> </ul>	<p><u>But</u> remind students that Nystagmus could be present if the user has taken Heroin <u>and</u> PCP, or alcohol or some other CNS Depressant, or an Inhalant.</p> <p><u>Point out</u> that, if the user has injected enough Narcotic Analgesic to exceed his or her level of tolerance, his or her performance of the Standardized Field Sobriety Tests will be uncoordinated and "rubber-legged", similar to that caused by CNS Depressants.</p>

Aids	Lesson Plan	Instructor Notes
	<p>nod," and exhibit slow and deliberate movements.</p> <ul style="list-style-type: none"> <li>o Blood pressure will be down.</li> <li>o Pulse will be down.</li> <li>o Body temperature will be down.</li> <li>o Pupil size generally will be constricted (below 3.0 mm in diameter)</li> <li>o Pupils reaction to light will be little or none visible.</li> <li>o If the effects of the Narcotic Analgesic are wearing off, <u>hippus</u> may be evident.</li> </ul>	<p><u>Remind</u> students that these cardiovascular indicators may <u>not</u> be present if the suspect is a tolerant user who has taken a "normal" dose of the drug.</p> <p><u>Point out</u> that constricted pupils are one of the most reliable indicators of a Narcotic Analgesic. The technical term for "constricted pupils" is "Miosis."</p> <p><u>NOTE:</u> "Hippus" means pulsating pupils, i.e. alternately expanding and contracting in diameter.</p>
<p><b>XVII-12D</b> (General Indicators)</p>	<p>b. General indicators</p> <ul style="list-style-type: none"> <li>o Constricted pupils</li> <li>o Depressed reflexes</li> <li>o Drowsiness</li> <li>o Droopy eyelids (Ptosis)</li> <li>o Dry mouth</li> <li>o Euphoria</li> <li>o Facial itching</li> <li>o Flaccid muscle tone</li> <li>o Nausea</li> <li>o On the nod</li> <li>o Puncture marks</li> <li>o Slowed reflexes</li> <li>o Slow, low, raspy speech</li> <li>o Slowed breathing</li> </ul>	<p>Itching - Caused by the release of Histamines.</p> <p><u>If available</u>, show slides of typical addicts' "track" marks.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XVII-13</b> (Symptomatology Chart)</p>	<p>2. Summary</p> <p>3. Demonstrations</p> <p>a. Video demonstrations.</p> <p>b. Drug Evaluation and Classification exemplars demonstrations.</p>	<p>Show video of subject(s) under the influence of Narcotic Analgesics.</p> <p>Relate behavior/ observations to the Symptomatology Chart.</p> <p>Refer students to the exemplars found at the end of Section XVII of their manual.</p> <p>Solicit students' comments or questions concerning Expected Results of the Evaluation.</p>
	<p><b>F. Injection Site Examination</b></p> <p>1. Examination of suspect's injection sites can give many clues to their drug habits.</p> <p>a. Many drugs can be injected.</p> <p>b. Injection sites are a sign of drug use which may or may not be recent.</p> <p>c. May be evidence of habitual use.</p>	<p>The slang term for an injection site is a "mark".</p> <p>The presence of injection sites doesn't ensure the subject is under the influence of drugs.</p> <p>Examination of ingestion sites is just one of the twelve steps in the evaluation.</p>



**30 Minutes**

Aids	Lesson Plan	Instructor Notes
	<ol style="list-style-type: none"> <li>2. The trauma to the skin, muscles and the blood is the basic concept of injection sites.</li> <li>3. Drugs and medication are injected into the body in three ways.               <ol style="list-style-type: none"> <li>a. Legal injections are usually Intramuscular.</li> <li>b. Subcutaneous, means just under the skin.</li> <li>c. For medically drawing of blood or emergency medical procedures, the injection is made into a blood vessel (Intravenous). Veins are usually used. Arteries are deep, thus not lending themselves to injection.</li> </ol> </li> <li>4. The primary instrument for injection is the hypodermic syringe.               <ol style="list-style-type: none"> <li>a. It consists of a hollow needle, a tube and a plunger.</li> <li>b. Needles vary in size, with the primary variance being the inside diameter of the needle or the gauge.</li> </ol> </li> </ol>	<p>Abbreviated as I/M.</p> <p>“Intramuscular” - defined as administering by entering a muscle.</p> <p>Commonly referred to as "skin popping".</p> <p>Instructor: Insulin injections are “Subcutaneous” (S/C) and are not normally I/M or I/V injections.</p> <p>Insulin is never injected into a blood vessel, because the person would go into a coma.</p> <p>Abbreviated as I/V.</p> <p>“Intravenous” - defined as entering a vein.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>c. The greater the number the larger the gauge, the smaller the inside diameter of the needle.</li> <li>d. Most illegal drug users prefer a larger gauge needle.</li> </ul> <p>5. The user's equipment is commonly referred to as a "hype kit" or "works".</p> <ul style="list-style-type: none"> <li>a. The kit contains a "cooker" which is any device such as a bottle cap, a metal spoon or etc., that is used to heat the drug with water to form an injectable solution.</li> <li>b. A handle to hold the "cooker" over the flame.</li> <li>c. Matches, lighters (primarily disposable, adjustable flame types) used to heat the substance in the "cooker".</li> <li>d. A tourniquet, which can be a rubber tubing, a tie, belt, etc. It is tied around the arm, above the injection site, to cause the vein to bulge or rise, thus making it easier to inject.</li> <li>e. "Cottons" are the cotton balls or cigarette filters used to "purify" the drug. The user places the "cottons" into their cooker and draws the drug up through the cottons.</li> </ul>	<p>A 26 gauge needle is used by a diabetic.</p> <p>The hypodermic marks are smaller and are therefore, less noticeable making it more difficult for the DRE to see them.</p> <p>The cottons are saved for later use since they contain some of the drug.</p>

Aids	Lesson Plan	Instructor Notes
	<p>6. As an expert, you may be asked in court to describe the difference between a legal and an illegal injection site.</p> <p>a. The legal mark is usually intramuscular. Some exceptions would be in an emergency, blood donation or lab tests.</p> <p>b. Usually there will be only one mark and it will be larger than the typical illegal injection.</p> <p>c. Legal injections are made with new, sterile needles.</p> <p>d. The illegal mark is usually over a vein.</p> <p>e. There will usually be multiple marks in various stages of healing. It takes approximately two weeks for a "mark" to totally heal.</p> <p>f. Users frequently use the same needle over and over again. Thus making it become dull or barbed.</p> <p>g. Since the used needles make it more difficult to pierce the skin and vein, the injection sites may be jagged.</p> <p>h. Use of old, dirty and shared needles cause the spread of infections and diseases such as AIDS.</p>	<p>There may be multiple injections, if the technician is unable to find a vein during the first try.</p> <p>Abbreviated as O/V.</p> <p>For example, the Heroin addict will inject approximately four to six times each day (every four to six hours). Therefore, they will inject approximately 2,000 times in one year.</p> <p>Frequently the needles are carried in pockets or socks and the rubbing against clothing causes them to be dull or barbed.</p> <p>A barbed needle may tear the skin on the way in and on the way out.</p> <p><b>ALWAYS WEAR RUBBER GLOVES PRIOR TO CONDUCTING THE EXAMINATION</b></p>

Aids	Lesson Plan	Instructor Notes
	<p>7. Users may frequently use the same spot to inject, as an attempt to reduce their likelihood of detection.</p> <ol style="list-style-type: none"> <li>The veins may become hard and thick from continuous injections and makes them difficult to find.</li> <li>After about 10 to 20 injections, a large sore forms causing the site to enlarge and bruise. Upon close examination, the site reveals there are numerous puncture wounds in the same area, overlapping each other.</li> </ol> <p>8. Basic principles of puncture healing.</p> <ol style="list-style-type: none"> <li>Any needle that punctures the skin leaves a scab. A scab is simply a crust formed by the drying of the discharge from the puncture.</li> <li>These dried remains fill the gap caused by the puncture of the skin. As the fluids dry, they harden (clot and gel).</li> <li>There are no exact timetables for wounds to heal, but there are some general guidelines.</li> </ol>	<p>The technical term is "Thrombosed".</p> <p>Write Thrombosed on the dry erase board or flip-chart.</p> <p>This is referred to as "tunnel" or "corn".</p> <p>Write tunnel and corn on the dry erase board or flip-chart.</p> <p>The healing is greatly retarded.</p> <p>Scab is the dried remains of blood, plasma (a cellular, colorless fluid part of the blood), lymph fluid (a thin fluid that bathes all the tissues of the body) and puss (a thick yellowish/greenish fluid that forms at an injection site).</p> <p>Chronic disease, poor nutrition and etc. retard the puncture healing process.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XVII-14A&amp;B</b> (Puncture Wounds)</p>	<p>d. Scabs develop within about 18 - 24 hours after a puncture.</p> <p>e. After about 14 days a scab usually starts to peel or flake and then falls off. The skin under the scab is shriveled and is lighter in color than the surrounding tissue.</p> <p>9. There is no exact science to classifying the age of puncture wound. Some <u>general guidelines</u> are:</p> <p>a. <u>Fresh</u> puncture wounds are defined as under 12 hours after injection and will be a red dot and have an oozing appearance or blood crater with no scab formation.</p> <p>b. <u>Early</u> puncture wound is 12 - 96 hours (half day to 4 days) after injection. It will have a light scab, light bruise, reddened border and a crater appearance.</p> <p>c. <u>Late</u> puncture wound is 5 - 14 days old and will have a dark scab, dark bruise and the crater will flatten.</p> <p>d. <u>Healing</u> puncture wound is over 14 days. The scab will be flaking and falling off with shriveled light colored skin underneath.</p> <p>10. Other indicators of injection sites:</p>	<p>A general rule: when the scab first forms, it is bright red. With age, the color gets darker and darker.</p> <p>Users sometimes inject under a scab to hide multiple puncture wounds. This is referred to as "trap dooring".</p>

Aids	Lesson Plan	Instructor Notes
<div> </div> <div> <p>20 Minutes</p> </div>	<ul style="list-style-type: none"> <li>a. In an attempt to hide puncture wounds, users may inject into tattoos.</li> <li>b. Tattooing also refers to dark carbon deposits that result from using a flame to "sterilize" a needle. Carbon deposits on the needle are then injected into the skin, causing a tattoo effect.</li> <li>c. A "track" is a hardened part of a vein where numerous injections have been administered. The entire vein becomes scarred and hardened and with time may no longer be able to inject into. The area becomes silvery-blue in color and raised. This is referred to as "silver streaks".</li> </ul> <p><b>G. Expected Location of Injection Marks</b></p> <ul style="list-style-type: none"> <li>1. Prior to conducting the injection site examination, always remember to wear gloves.</li> <li>2. Injection sites may be located <u>anywhere</u> on the subject's body. <ul style="list-style-type: none"> <li>a. The arms are most frequently used because the veins here are large and easily accessible.</li> <li>b. The ankles are frequently used because the marks can be easily covered with socks.</li> </ul> </li> </ul>	<p>Tattoos that are designed to hide puncture wounds are frequently colored and found on the inner arms.</p> <p>AS A GENERAL RULE: one inch of tracks indicates that approximately 50 - 100 separate injections have been administered in this area.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>c. The user may even use their neck because the marks can be hidden by hair or makeup.</li> <li>d. They will basically use any part of their body where there is a vein.</li> </ul> <p>3. Conduct a thorough, slow, methodical examination of the subject's arms beginning with the left.</p> <ul style="list-style-type: none"> <li>a. Using a magnifying light or "ski light", examine the inner arm as it is extended with the palm facing you.</li> <li>b. Beginning at the bicep slowly examine the arm. Document the findings of your examination.</li> <li>c. Ask the subject to contract the arm, grasping their shoulder. Starting at the wrist, slowly examine the arm to the elbow documenting the results.</li> <li>d. Next examine the outer arm as it is extended palm facing downward. Start the examination at the shoulder moving to the wrist.</li> <li>e. Subject should extend and spread his/her fingers when examining the hands. Examine both sides of the hands, with particular attention to the areas between the fingers, under watch bands and rings.</li> </ul>	<p><u>Point out</u> that "ski light" is short for schematic light.</p> <p>An ideal light is a 10 power light.</p> <p>This forces the individual's veins to protrude.</p>

Aids	Lesson Plans	Instructor Notes
 <p><b>15 Minutes</b></p>	<ol style="list-style-type: none"> <li>4. Conduct the entire procedure for the right side.</li> <li>5. Ankles are the next most common injection area. <ol style="list-style-type: none"> <li>a. Subject should be instructed to remove their shoes and socks to allow the DRE to examine them for puncture wounds.</li> <li>b. The most common area is on the back of the foot.</li> </ol> </li> <li>6. On a case by case basis, the DRE may need to examine other parts of the body for marks. <ol style="list-style-type: none"> <li>a. ALWAYS follow your agencies rules, policies and procedures and laws regarding invasive type searches.</li> </ol> </li> </ol> <p><b>H. Conclusion</b></p> <ol style="list-style-type: none"> <li>1. The injection site examination may reveal evidence of recent use.</li> <li>2. The presence of marks however, doesn't mean drug influence or impairment at the time of the evaluation.</li> <li>3. A slow methodical examination, using a magnifying light, is required to obtain evidence.</li> <li>4. Conducting an injection mark examination is a skill. As with all skills, such as taking blood pressure, competency improves with practice.</li> </ol>	<p>Suspects sometimes hide hypodermic needles in their socks, shoes and the heel compartments of their shoes.</p> <p><u>Point out</u> that DREs may want to photograph new or recent injection marks for evidential purposes.</p> <p>Solicit students' comments and questions concerning the injection site examination.</p>

## **Topics for Study**

1. What are the two subcategories of Narcotic Analgesics?

### **Natural Opiates and Synthetic Opiates**

2. What three distinguishing characteristics do all Narcotic Analgesics share?

**They relieve pain, they will produce withdrawal signs and symptoms, and their use will suppress the withdrawal signs and symptoms of chronic morphine administration.**

3. Consider this situation:

A heroin addict injects what is, for him, a "normal" dose of the drug. One hour later a DRE examines the addict and finds that he is not impaired.

What is the most likely explanation for this?

**The addict has developed a tolerance and is using his/her "normal" dose of the drug.**

4. What is another, more common, name for the drug called Diacetyl Morphine?

### **Heroin**

5. What is Thebaine?

### **Natural alkaloid of opium**

6. What is Percodan?

### **Derivative of Thebaine**

7. What is MPPP?

### **Illegally manufactured synthetic analog of demerol**

8. What is Oxycodone?

**A semi-synthetic narcotic prescribed for chronic or long-lasting pain.**

## Session XVII

### Narcotic Analgesics



XVII-1

### Narcotic Analgesics

Upon successfully completing this session the student will be able to:

- Explain a brief history of the Narcotic Analgesic category of drugs
- Identify common drug names and terms associated with this category
- Identify common methods of administration for this category
- Describe the symptoms, observable signs and other effects associated with this category

Drug Evaluation &amp; Classification Training

XVII-2A

### Narcotic Analgesics (Continued)

- Describe the typical time parameters, i.e. onset and duration of effects associated with this category
- List the clues that are likely to emerge when the drug influence evaluation is conducted for a person under the influence of this drug category
- Describe the procedures for examining and determining the ages of injection sites
- Correctly answer the "topics for study" questions at the end of this session

Drug Evaluation &amp; Classification Training

XVII-2B

### Narcotic Analgesic

An "Analgesic" is a drug that relieves pain. It differs from an anesthetic, in that it lowers one's perception of pain, rather than stopping nerve transmission.

Drug Evaluation &amp; Classification Training

XVII-3

### Types of Narcotic Analgesics



- Opiates
  - Natural alkaloids
  - Opium derivatives



- Synthetics



Drug Evaluation &amp; Classification Training

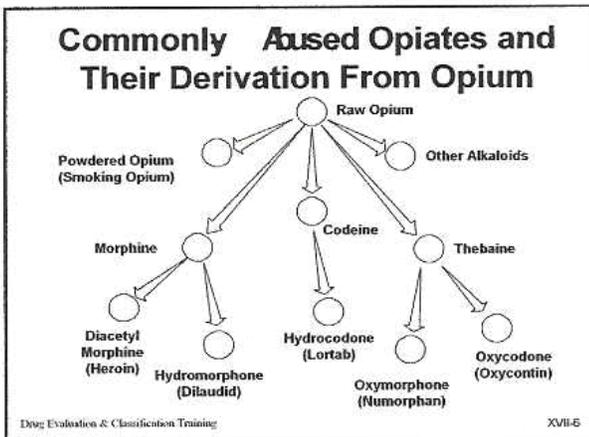
XVII-4

### Three Characteristics Common to All Narcotic Analgesics

1. Relieve pain
2. Produce withdrawal signs and symptoms
3. Suppress the signs and symptoms of chronic morphine withdrawal

Drug Evaluation &amp; Classification Training

XVII-5



### Common Synthetic Opiates

- Demerol
- Methadone
- Fentanyl
- MPPP
- Darvon

(Methadone Diskette)

Drug Evaluation & Classification Training XVII-7

### The Concept of Tolerance for a Drug

1. The same dose of the drug will produce diminishing effects
2. A steadily larger dose is needed to produce the same effects

Drug Evaluation & Classification Training XVII-8

### “On the Nod”

- Semiconscious
- Droopy eyelids (Ptosis)
- Head slumped forward, chin on chest
- Easily awakened
- Alert to questions

Drug Evaluation & Classification Training XVII-9

### On-Set and Duration of Heroin's Effects

- Immediate
  - Pleasure or euphoria
  - Relief from pain
  - Relief from withdrawal

Drug Evaluation & Classification Training XVII-10A

### On-Set and Duration of Heroin's Effects (Continued)

- 5-30 minutes: Onset of physical effects
  - “On the nod”
  - Poor motor coordination
  - Depressed reflexes
  - Slowed breathing

Drug Evaluation & Classification Training XVII-10B

## On-set and Duration of Heroin's Effects (Continued)

- Physical effects usually are observable for up to 4-6 hours



Drug Evaluation &amp; Classification Training

XVII-10C

## Signs and Symptoms of Withdrawal From Heroin

Symptoms normally begin: 4-6 hours following injection

- Aches
- Chills
- Insomnia
- Nausea

Drug Evaluation &amp; Classification Training

XVII-11A

## Signs and Symptoms of Withdrawal From Heroin (Continued)

Signs appear: 8-12 hours following injection

- Goose bumps
- Sweating
- Runny nose
- Tearing
- Vomiting
- Yawning

Drug Evaluation &amp; Classification Training

XVII-11B

## Signs and Symptoms of Withdrawal From Heroin (Continued)

Signs and symptoms intensify: 14 - 24 hours after injection

- Dilation of pupils
- Goosebumps
- Loss of appetite
- Similar to influenza or the common cold
- Slight tremors

Drug Evaluation &amp; Classification Training

XVII-11C

## Signs and Symptoms of Withdrawal From Heroin (Continued)

Situation worsens: 24 - 36 hours after injection

- Depression
- Diarrhea
- Hot and cold flashes
- Insomnia
- Vomiting
- Weakness

Drug Evaluation &amp; Classification Training

XVII-11D

## Signs and Symptoms of Withdrawal From Heroin (Continued)

Reaching the peak: 2 - 3 days after injection

- Muscular and abdominal cramps
- Severe tremors and twitching
- Elevated temperature
- Sharp loss of weight

Drug Evaluation &amp; Classification Training

XVII-11E

### Evaluation of Subjects Under the Influence of Narcotic Analgesics

- HGN or Vertical Gaze Nystagmus - none
- Lack of convergence - none
- Performance on Romberg, Walk and Turn, One Leg Stand and Finger to Nose will be impaired and will reflect slow and deliberate movements

Drug Evaluation &amp; Classification Training

XVII-12A

### Evaluation of Subjects Under the Influence of Narcotic Analgesics

#### Vital Signs:

- Pulse - down
- Blood pressure - down
- Body temperature - down
- Muscle tone - normal or flaccid

Drug Evaluation &amp; Classification Training

XVII-12B

### Evaluation of Subjects Under the Influence of Narcotic Analgesics

#### Dark Room:

- Pupils - constricted (Miosis)
- Reaction to light - little or none visible
- As the effects of the drug wear off, hippus (pulsating pupils) may be evident

Drug Evaluation &amp; Classification Training

XVII-12C

### Evaluation of Subjects Under the Influence of Narcotic Analgesics

#### General Indicators:

- Constricted pupils (Miosis)
- Depressed reflexes
- Droopy eyelids (Ptosis)
- Drowsiness
- Dry mouth
- Euphoria
- Facial itching
- Flaccid muscle tone
- Nausea
- On the nod
- Puncture marks
- Slow, low, raspy speech
- Slowed breathing

Drug Evaluation &amp; Classification Training

XVII-12D

### Narcotic Analgesic Symptomatology Chart

HGN	None
VGN	None
Lack of Convergence	None
Pupil Size	Constricted
Reaction to Light	Little or None Visible
Pulse Rate	Down
Blood Pressure	Down
Temperature	Down
Muscle Tone	Normal or Flaccid

Drug Evaluation &amp; Classification Training

XVII-13

### Classifying the Age of Puncture Wounds

- Fresh - Under 12 hours after injection; will be a red dot and have an oozing appearance
- Early - 12-96 hours after injection; will have a light scab, light bruise, reddened border and a crater appearance



Drug Evaluation &amp; Classification Training

XVII-14A

### Classifying the Age of Puncture Wounds

- Late - 5-14 days after injection; will have a dark scab, dark bruise and the crater will flatten
- Healing - Over 14 days after injection; scab will be flaking and falling off with shriveled light-colored skin underneath

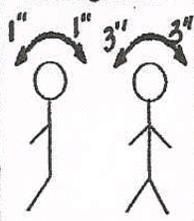
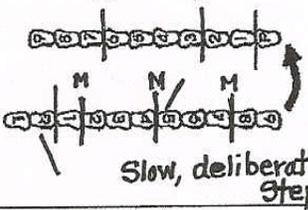
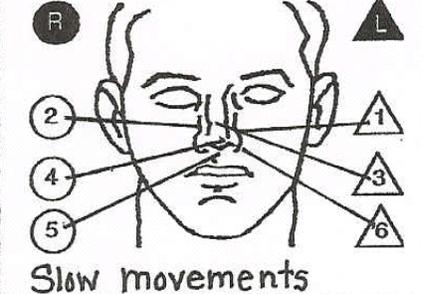
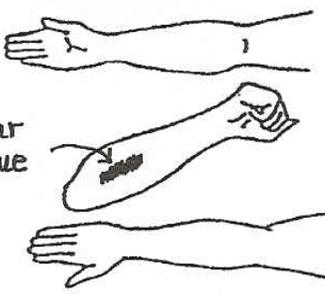
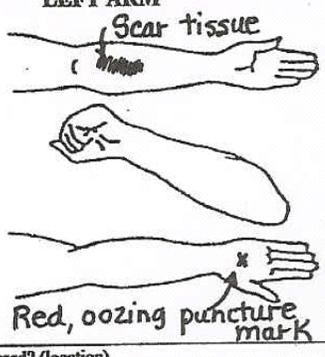


Drug Evaluation & Classification Training XVII-14B

# QUESTIONS?

Drug Evaluation & Classification Training

# DRUG INFLUENCE EVALUATION

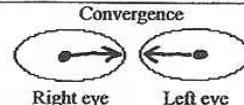
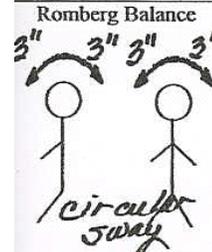
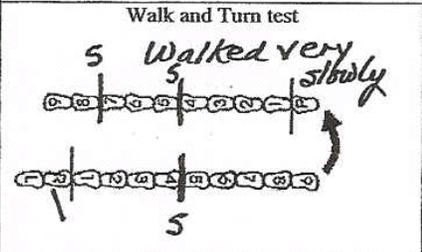
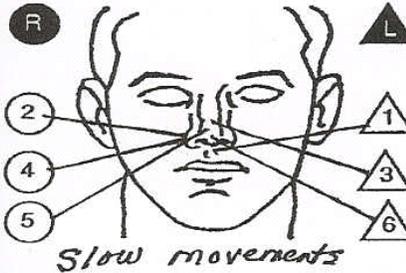
Evaluator <b>Karl Nieberlein, Sparks PD.</b>		DRE No. <b>1176</b>	Rolling Log No. <b>05-08-014</b>		Session XVII - #1						
Recorder/Witness <b>Sgt. Mac Venzon, Reno P.D.</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>05-44575</b>							
Arrestee's Name (Last, First MI) <b>Vaughn, Gerald T.</b>		DOB <b>5-14-80</b>	Sex <b>M</b>	Race <b>B</b>	Arresting Officer (Name, ID No.) <b>Ofc. Rich Gamwell, Sparks P.D.</b>						
Date Examined/Time/Location <b>08-24-05, 1805 hrs, Washoe Co.</b>		Breath Results: <input type="checkbox"/> Refused Instrument # <b>15344</b>		Chemical Test <input type="checkbox"/> Refused <input type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood							
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? <b>Nothing</b>		When? <b>N/A</b>	What have you been drinking? How much? <b>Dr. Pepper N/A</b>	Time of last drink? <b>N/A</b>					
Time now? <b>About 7pm</b>	When did you last sleep? <b>Last night</b>	How long? <b>4 hrs.</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>"Methadone"</b>		Attitude: <b>Cooperative, passive</b>		Coordination: <b>Relaxed, slow, unstable</b>							
Speech: <b>Low, raspy</b>		Breath: <b>Normal</b>		Face: <b>Normal</b>							
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal					
Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy							
Pulse and time 1. <b>56 / 1817</b> 2. <b>58 / 1825</b> 3. <b>58 / 1832</b>		HGN <b>Lack of smooth pursuit</b> Maximum deviation Angle of onset		Left Eye <b>No</b> Right Eye <b>No</b> Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		One Leg Stand <b>Counted Slowly</b>					
Romberg Balance 		Walk and Turn test 		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon: <input checked="" type="checkbox"/>		L R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms to balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input type="checkbox"/> <input type="checkbox"/> Puts foot down					
Internal clock <b>44</b> Est. as 30 seconds		Describe Turn <b>Slow, Deliberate</b>		Cannot do test (explain) <b>N/A</b>							
Draw lines to spots touched 		Pupil Size		Room Light		Darkness		Direct		Oral cavity: <b>Clear</b>	
Blood pressure <b>110/64</b>		Temperature <b>98.0° f</b>		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: <b>None</b>			
Muscle tone: <input type="checkbox"/> Near normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:		RIGHT ARM 		LEFT ARM 					
What medication or drug have you been using? How much? <b>"Just methadone, man" "The normal"</b>		Time of use? <b>3pm</b>		Where were the drugs used? (location) <b>"The clinic"</b>							
Date/Time of Arrest <b>8-24-05, 1720 hrs.</b>		Time DRE Notified <b>1745 hrs.</b>		Evaluation Start Time <b>1805</b>		Time Completed <b>1900</b>					
DRE signature (Ink/ID rank) <i>Karl Nieberlein</i>		ID # <b>1176</b>		Reviewed by <i>[Signature]</i>							
Opinion of evaluator:		<input type="checkbox"/> Rule Out <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant		<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen		<input type="checkbox"/> Dissociative Anesthetic <input checked="" type="checkbox"/> Narcotic Analgesic		<input type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis	

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Vaughn, Gerald T.

1. **LOCATION:** The evaluation of Gerald Vaughn took place in the DRE room at the Washoe County Jail.
2. **WITNESSES:** Sergeant Mac Venzon of the Reno Police Department.
3. **BREATH ALCOHOL TEST:** The A/O, Officer Rich Gamwell of the Sparks Police Department administered a breath test to Vaughn with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was contacted by radio and advised to contact Officer Gamwell at the Washoe County Jail for a drug evaluation. Officer Gamwell advised the suspect was operating a vehicle reported stolen earlier in the day by Reno PD. After stopping the suspect, Officer Gamwell noted that suspect's speech was slow, slurred and raspy. His coordination was poor and he was licking his lips repeatedly. His pupils were constricted and he performed poorly on the SFST's.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the DRE interview room at the Washoe County Jail. He appeared to be asleep. His eyes were closed, his head kept nodding forward and his breathing was slow. The suspect responded to questions and became more alert as time passed. His voice was raspy and his pupils appeared constricted. He was licking his lips and his movements were slow and deliberate.
6. **MEDICAL PROBLEMS AND TREATMENT:** None noted or stated.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect swayed approximately 1" front to back and approximately 3" side to side. He estimated 30 seconds in 44 seconds. Walk & Turn: Suspect lost his balance during the instructions, missed heel to toe three times on the first nine steps and twice on the return. He also stepped off the line and used his arms for balance. One Leg Stand: Suspect counted slowly, swayed and used his arms for balance. Finger to Nose: The suspect missed the end of his nose with five of the six attempts.
8. **CLINICAL INDICATORS:** Suspect's pulse and blood pressure were below the normal range. His pupils were constricted with no visible reaction to light. His eyelids were droopy.
9. **SIGNS OF INGESTION:** Subject had scar tissue on both his left and right forearms and a fresh oozing puncture wound on the back his left hand. (Photographed).
10. **SUSPECT'S STATEMENTS:** Suspect admitted using Methadone earlier in the day.
11. **DRE'S OPINION:** In my opinion Vaughn is under the influence of a Narcotic Analgesic and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a blood sample.

## DRUG INFLUENCE EVALUATION

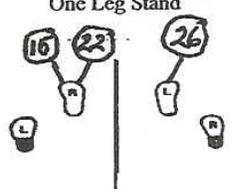
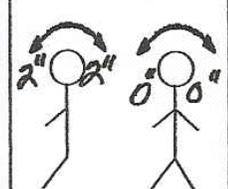
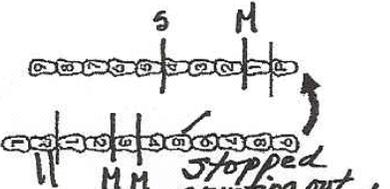
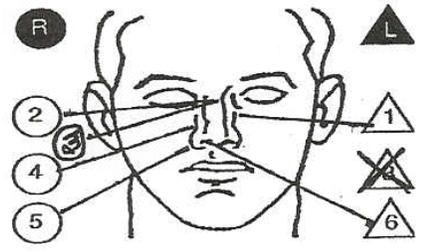
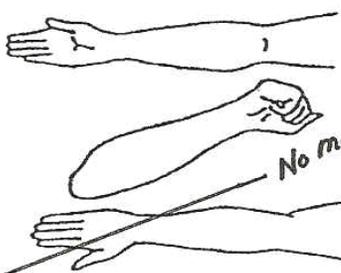
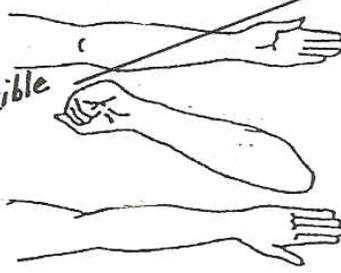
Evaluator <b>Sr. Tpr. Jim Pierce, OSP</b>		DRE No. <b>4600</b>	Rolling Log No. <b>04-017</b>	Session XVII - # 2	
Recorder/Witness <b>Sgt. Jeff Niiya, PPB</b>		Crash: <input type="checkbox"/> None <input checked="" type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>04-25250</b>	
Arrestee's Name (Last, First MI) <b>Bursten, David L.</b>		DOB <b>4/29/80</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID No.) <b>Sgt. Jeff Niiya, PPB</b>
Date Examined/Time/Location <b>11/01/04 4:15pm, Central Precinct</b>		Breath Results: <input type="checkbox"/> Refused Instrument # <b>21250</b>	<b>0.00 %</b>	Chemical Test <input type="checkbox"/> Refused <input checked="" type="checkbox"/> Urine <input type="checkbox"/> Blood	
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? <b>Nothing</b>	When? <b>N/A</b>	What have you been drinking? How much? <b>Nothing N/A</b>	Time of last drink? <b>N/A</b>
By: <b>Sgt. Niiya</b>		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Time now? <b>Don't know</b>		When did you last sleep? <b>Last night</b>	How long? <b>"a few hours"</b>		
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <b>Cooperative</b>		Coordination: <b>Poor, sloppy, stumbling</b>	
		Breath: <b>Normal</b>		Face: <b>Normal</b>	
Speech: <b>slow &amp; deliberate</b>		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery	Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)	Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Eyelids: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy	
Pulse and time 1. <b>60 / 1630</b> 2. <b>56 / 1642</b> 3. <b>60 / 1655</b>		HGN Lack of smooth pursuit Maximum deviation Angle of onset		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
		Left Eye <b>No</b>	Right Eye <b>No</b>	Convergence 	
		<b>No</b>	<b>No</b>	Right eye      Left eye	
Romberg Balance 		Walk and Turn test <b>5 Walked very slowly</b> 		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon: <input type="checkbox"/>	
				1 <sup>st</sup> Nine: <input checked="" type="checkbox"/> 2 <sup>nd</sup> Nine: <input checked="" type="checkbox"/>	
				Stops walking <input checked="" type="checkbox"/> Misses heel to toe <input checked="" type="checkbox"/>	
				Steps off line <input type="checkbox"/> Raises arms <input checked="" type="checkbox"/>	
				Actual # steps <b>9</b> <b>9</b>	
Internal clock <b>50</b> Est. as 30 seconds		Describe Turn <b>Lost Balance, Staggered to the left</b>		Cannot do test (explain) <b>N/A</b>	
Draw lines to spots touched 		Pupil Size		Room Light	
		Left <b>1.5</b>		Darkness <b>1.5</b>	
		Right <b>1.5</b>		Direct <b>1.5</b>	
		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
		Reaction to Light: <b>None visible</b>			
Blood pressure <b>100 / 60</b>		Temperature <b>97.0 °f</b>		Muscle tone: <input type="checkbox"/> Near normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid	
Comments: <b>Arms &amp; Neck very relaxed</b>		What medication or drug have you been using? How much? <b>None Refused</b>		Time of use? <b>Refused</b>	
		Where were the drugs used? (location) <b>Refused</b>			
Date/Time of Arrest <b>11/01/04 4:00 PM</b>		Time DRE Notified <b>4:05 PM</b>		Evaluation Start Time <b>4:15 PM</b>	
Time Completed <b>5:25 PM</b>		DRE signature (include rank) <b>Jim Pierce</b>		ID # <b>St. Tpr. 105P</b>	
Opinion of evaluator: <input type="checkbox"/> Rule Out <input type="checkbox"/> Medical		Reviewed by: <b>Sgt. A. Mervin</b>		Date: <b>11/10/04</b>	
<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant		<input type="checkbox"/> CNS Depressant <input type="checkbox"/> Hallucinogen		<input checked="" type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis	

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Bursten, David L.

1. **LOCATION:** The evaluation of David Bursten took place in the interview room at the Central Traffic Precinct of the Portland Police Bureau.
2. **WITNESSES:** The arresting officer, Sergeant. Jeff Niiya of the Portland Police Bureau witnessed and recorded the evaluation.
3. **BREATH ALCOHOL TEST:** Sergeant Niiya administered a breath test to Bursten using the Intoxilyzer 5000. The result was 0.00%.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was contacted by dispatch and advised to contact Sgt. Niiya for a drug evaluation. Sgt. Niiya advised the suspect had failed to stop at a red light on N.E. Burnside and struck a pedestrian in the crosswalk. The pedestrian was transported to the hospital in serious condition. Sgt. Niiya noted that the suspect had slow and deliberate movements and his speech was slow, slurred and raspy. He was unable to perform the SFST's as directed.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the interview room at the Central Precinct. He was repeatedly scratching his face and neck. His head kept nodding forward and he appeared to be "on the nod." His voice was raspy, his pupils appeared to be constricted and his eyelids were droopy.
6. **MEDICAL PROBLEMS AND TREATMENT:** None noted or stated.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect swayed approximately 3" in a circular motion and he estimated 30 seconds in 58 seconds. Walk & Turn: Suspect lost his balance during the instructions, stopped while walking once on the first nine steps and twice on the return. He walked very slowly and used his arms for balance. One Leg Stand: Suspect counted slowly, swayed, used his arms for balance and put his foot down. Finger to Nose: Suspect missed the tip of his nose on four of the six attempts.
8. **CLINICAL INDICATORS:** Suspect's blood pressure and temperature were below the normal ranges. His pupils were constricted and showed no visible reaction to light.
9. **SIGNS OF INGESTION:** Suspect had scars on his right forearm and fresh oozing puncture wounds on the inside of his right arm. The puncture wounds were photographed.
10. **SUSPECT'S STATEMENTS:** The suspect refused to answer questions about drug use.
11. **DRE'S OPINION:** In my opinion Bursten is under the influence of a Narcotic Analgesic and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a urine sample.

## DRUG INFLUENCE EVALUATION

Evaluator <b>Sgt. Tim Tomczak</b>		DRE No. <b>9139</b>	Rolling Log No. <b>04-033</b>		Session XVII - # 3	
Reporter/Witness <b>Eddie Buffalo</b>		Crash: <input type="checkbox"/> Fatal <input checked="" type="checkbox"/> None <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>04-3125</b>		
Arrestee's Name (Last, First MI) <b>Sheehan, Thomas</b>		DOB <b>5-16-66</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID No.) <b>Sgt. Brandon Craft, N.C.H.P.</b>	
Date Examined/Time/Location <b>3/17/04 2200 Raleigh PD</b>		Breath Results: <input type="checkbox"/> Refused Instrument # <b>4200</b>		Chemical Test <input type="checkbox"/> Refused <input checked="" type="checkbox"/> Urine <input type="checkbox"/> Blood		
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? When? <b>"Nothing, Don't know"</b>		What have you been drinking? How much? <b>I don't drink</b>		Time of last drink? <b>N/A</b>
Time now? <b>About 8pm</b>		When did you last sleep? How long? <b>This morning, 4 hrs.</b>		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"I don't take drugs"</b>		Attitude: <b>Sarcastic</b>		Coordination: <b>Poor, stumbling, staggering</b>		
		Breath: <b>Normal</b>		Face: <b>Pale</b>		
Speech: <b>Low, raspy</b>		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal
Corrective lens: <input type="checkbox"/> None <input checked="" type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Very Droopy
Pulse and time 1. <b>60/22/10</b> 2. <b>58/22/11</b> 3. <b>58/22/30</b>		HGN Lack of smooth pursuit Maximum deviation Angle of onset		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		One Leg Stand 
Romberg Balance 		Walk and Turn test 		Cannot keep balance <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Starts too soon: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		L R <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> Uses arms to balance <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> Puts foot down Type of footwear: <b>Dress shoes</b>
Internal clock <b>55</b> Est. as 30 seconds		Describe Turn <b>As instructed, Slow</b>		Stops walking <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Misses heel to toe <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Steps off line <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Raises arms <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Actual # steps <b>9</b> <b>9</b>		
Draw lines to spots touched 		Pupil Size Left <b>1.5</b> Right <b>1.5</b>		Room Light <b>2.0</b> Darkness <b>2.0</b> Direct <b>1.5</b>		Oral cavity: <b>Clear</b>
Blood pressure <b>110/70</b>		Temperature <b>97.9° f</b>		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: <b>Little to none, visible</b>
Muscle tone: <input type="checkbox"/> Near normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		RIGHT ARM 		LEFT ARM 		
Comments:		What medication or drug have you been using? How much? <b>"Nothing, I don't do drugs"</b>		Time of use? <b>I didn't</b>		Where were the drugs used? (location) <b>No answer</b>
Date/Time of Arrest <b>03/17/04 2130</b>		Time DRE Notified <b>2140</b>		Evaluation Start Time <b>2200</b>		Time Completed <b>2200</b>
DRE signature (include rank) <b>Tim Tomczak</b>		ID # <b>999</b>		Reviewed by <b>E. Buffalo</b>		
Opinion of evaluator: <input type="checkbox"/> Rule Out <input type="checkbox"/> Medical <input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant <input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant <input checked="" type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis						

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Sheehan, Thomas

1. **LOCATION:** The evaluation of Thomas Sheehan took place in the interview room at the Raleigh Police Department.
2. **WITNESSES:** The A/O; Sgt. Brandon Craft of the North Carolina Highway Patrol recorded the evaluation. Mr. Eddie Buffalo, the N.C. DRE State Coordinator witnessed.
3. **BREATH ALCOHOL TEST:** Sheehan had a 0.00% breath test result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was notified by radio to contact Sergeant Craft for a drug evaluation. Sergeant Craft advised the suspect was observed drifting in and out of his traffic lane and driving 20 mph under the posted speed on Highway 64. Sergeant Craft noted the suspect had poor coordination and had slow and deliberate movements. His speech was slow and slurred. His pupils were constricted. He performed poorly on the SFST's and was arrested for DUI.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the interview room at the Raleigh Police Department. He was sitting at the interview table scratching his face and appeared to be "on the nod." His voice was low, slow and raspy. His pupils were constricted and his eyelids were droopy. He stated he was cold.
6. **MEDICAL PROBLEMS AND TREATMENT:** None noted or stated.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect swayed approximately 2" front to back and estimated 30 seconds in 55 seconds. Walk & Turn: Suspect lost his balance during the instructions, missed heel to toe, stopped walking and used his arms for balance. One Leg Stand: Suspect counted slowly, swayed, used his arms for balance and put his foot down. Finger to Nose: Suspect missed the tip of his nose on five of the six attempts and used the incorrect order as directed
8. **CLINICAL INDICATORS:** Suspect's pulse and blood pressure were below the normal ranges. His pupils were constricted with no visible reaction to light.
9. **SIGNS OF INGESTION:** None evident.
10. **SUSPECT'S STATEMENTS:** The suspect denied drug use.
11. **DRE'S OPINION:** In my opinion Sheehan is under the influence of a Narcotic Analgesic and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a urine sample.
13. **MISCELLANEOUS:** An empty bottle of OxyContin was located in the suspect's vehicle.

Forty-Five Minutes

**SESSION XVIII**

**PRACTICE: TEST INTERPRETATION**

**SESSION XVIII PRACTICE: TEST INTERPRETATION**

Upon successfully completing this session the student will be able to:

- o Analyze the results of a complete drug influence evaluation and identify the category or categories of drugs affecting the individual examined.
- o Articulate the bases for the drug category identification.

Content Segments

- A. Interpretation Demonstrations
- B. Interpretation Practice

Learning Activities

- o Instructor Led Demonstrations
- o Small Group Practice
- o Participant Led Presentations

Aids	Lesson Plan	Instructor Notes
 <b>20 Minutes</b>  <b>XVIII-1</b> (Title)  <b>XVIII-2</b> (Objectives)	<p><b>PRACTICE: TEST INTERPRETATION</b></p> <p><b>A. Interpretation Demonstrations</b></p> <ol style="list-style-type: none"> <li>1. Case #1 "Subject Martinez"           <ol style="list-style-type: none"> <li>a. Preliminary Examination.</li> <li>b. Eye Examinations.</li> </ol> </li> </ol>	<p>Total Lesson Time: Approximately 45 Minutes</p> <p>Display Session Title</p> <p>Point out the "Test Interpretation" wallchart.</p> <p>Briefly review the objective content and activities of this session.</p> <p>Direct students to turn to the "Subject Martinez" exemplar in Section XVIII of their manual.</p> <p>Review the results of the preliminary examination of Subject Martinez.</p> <p><u>Ask</u> students: "What category or categories of drugs would produce preliminary examination results consistent with this exemplar?" <u>Probe</u> to draw out the basis for students' responses.</p> <p>Review the results of the eye examination of Subject Martinez.</p>

Aids	Lesson Plan	Instructor Notes
	<p>c. Psychophysical Tests.</p> <p>d. Vital Signs Examinations.</p> <p>e. Dark Room Examinations.</p> <p>f. Other evidence.</p>	<p><u>Ask</u> students to discuss the category or categories of drugs that would cause these eye examination results.</p> <p>Review the results of the psychophysical tests of Subject Martinez.</p> <p>Ask students to discuss the category or categories of drugs that would produce these psychophysical tests results.</p> <p>Review the results of the vital signs examinations of Subject Martinez.</p> <p>Ask students to discuss the category or categories of drugs that would cause these results.</p> <p>Review the results of the dark room examinations of Subject Martinez.</p> <p>Ask students to discuss the category or categories of drugs that would produce these results.</p> <p>Review the results of the examinations for injection sites and muscle rigidity, and of the final interview of Subject Martinez.</p> <p>Ask students to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.</p>

Aids	Lesson Plan	Instructor Notes
	<p>g. Opinions of Evaluator.</p> <p>2. Case #2: "Subject Groves".</p> <p>a. Preliminary Examination.</p> <p>b. Eye Examinations.</p> <p>c. Psychophysical Tests.</p> <p>d. Vital Signs Examinations</p>	<p><u>Point out</u> that the evidence indicates that Subject Martinez is under the influence of a Dissociative Anesthetic (PCP).</p> <p>Solicit students' questions concerning this demonstration.</p> <p>Direct students to review the "Subject Groves" exemplar.</p> <p>Review the results of the preliminary examination of Subject Groves.</p> <p><u>Ask</u> students: "What category or categories of drugs would produce preliminary examination results consistent with this exemplar?" Probe to draw out the basis for students' response.</p> <p>Review the results of the eye examinations of Subject Groves.</p> <p><u>Ask</u> students to discuss the category or categories of drugs that would cause these eye examination results.</p> <p>Review the results of the psychophysical tests of Subject Groves.</p> <p>Ask students to discuss the category or categories of drugs that would produce these psychophysical test results.</p> <p>Review the results of the vital signs examinations of Subject Groves.</p>

Aids	Lesson Plan	Instructor Notes
 <b>25 Minutes</b>	<p>e. Dark Room Examinations.</p> <p>f. Other evidence.</p> <p>g. Opinions of Evaluator.</p> <p><b>B. Interpretation Practice</b></p> <p>1. Team practice</p>	<p>Ask students to discuss the category or categories of drugs that would produce these results.</p> <p>Review the results of the dark room examinations of Subject Groves.</p> <p>Ask students to discuss the category or categories of drugs that would produce these results.</p> <p>Review the results of the examinations for injection sites and muscle rigidity, and of the final interview of Subject Groves.</p> <p>Ask students to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.</p> <p><u>Point out</u> that the evidence indicates that Subject Groves is under the influence of a Narcotic Analgesic.</p> <p>Solicit students' questions concerning this demonstration.</p> <p>Assign students to work in teams of three or four members.</p> <p>Tell teams that they are to review four exemplars (Subjects Hatos, Jackson,</p>

Aids	Lesson Plan	Instructor Notes
	<p>a. Review and discussion of exemplars by teams.</p> <p>b. Feedback of results.</p> <ul style="list-style-type: none"> <li>o Subject Martinez</li> <li>o Subject Groves</li> <li>o Subject Hatos</li> <li>o Subject Jackson</li> <li>o Subject Stevens</li> <li>o Subject Sholly</li> </ul> <p>2. Session Wrap up.</p>	<p>Stevens and Sholly). Team members are to discuss the evidence among themselves and reach a conclusion concerning the category or categories of drugs, <u>if any</u>.</p> <p>Teams will present their conclusions to the entire class.</p> <p>Allow teams approximately 15 minutes to review the three exemplars and reach their conclusions.</p> <p>Poll the teams to determine their conclusions concerning the category or categories of drugs present in each subject.</p> <p>Offer appropriate comments concerning the teams' performance.</p> <p>Solicit students' comments and questions concerning this practice session.</p>

**DRUG CATEGORIES FOR INTERPRETATION PRACTICE**

<u>SUBJECT</u>	<u>CATEGORY(IES)</u>
Martinez	Dissociative Anesthetic (PCP)
Groves	Narcotic Analgesic
Hatos	CNS Stimulant <u>and</u> ETOH
Jackson	Dissociative Anesthetic <u>and</u> Narcotic Analgesic
Stevens	Dissociative Anesthetic <u>and</u> CNS Depressant
Sholly	Medical rule out

## Session XVIII

### Practice: Test Interpretation



XVIII-1

### Practice: Test Interpretation

Upon successfully completing this session the student will be able to:

- Analyze the results of a complete drug influence evaluation and identify the category or categories of drugs affecting the individual examined
- Articulate the bases for the drug category identification

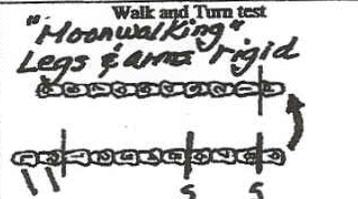
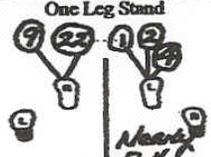
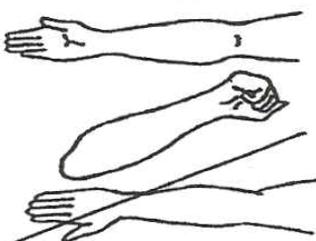
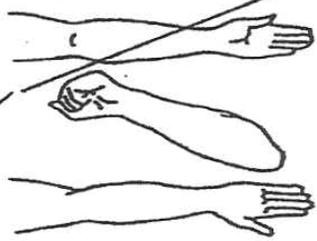
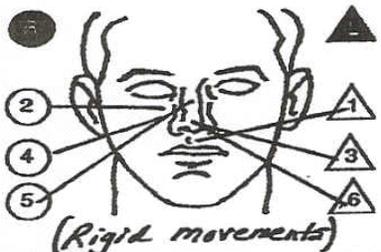
Drug Evaluation & Classification Training

XVIII-2

## QUESTIONS?

Drug Evaluation & Classification Training

### DRUG INFLUENCE EVALUATION

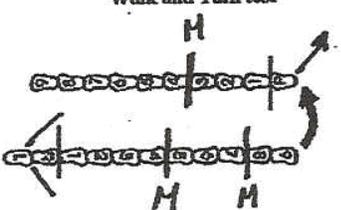
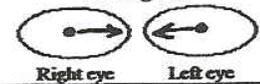
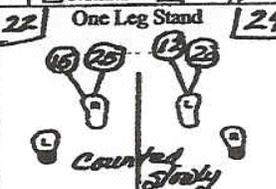
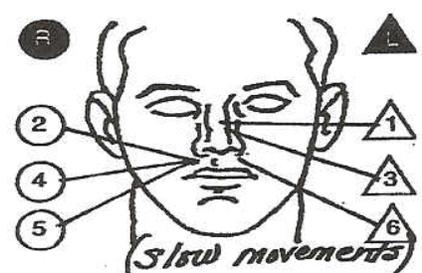
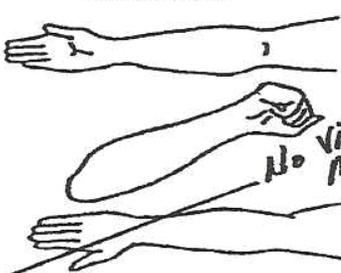
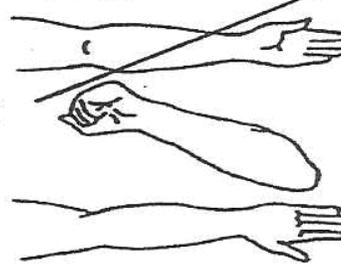
Evaluator <b>Sgt. Don Marose</b>		DRE No. <b>1767</b>	Rolling Log No. <b>04-11-33</b>	Session XVIII - I - #1	
Recorder/Witness <b>Lt. Doug Thooff, MSP</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>04-20014</b>	
Arrestee's Name (Last, First MI) <b>Martinez, Juan M.</b>		DOB <b>5/20/50</b>	Sex <b>M</b>	Race <b>H</b>	Arresting Officer (Name, ID No.) <b>Sgt. Bryan Schafer, MPD</b>
Date Examined/Time/Location <b>2/22/04, 2330, Central Intake</b>		Breath Results: <input type="checkbox"/> Refused Instrument # <b>3669</b> <b>0.00 %</b>		Chemical Test <input type="checkbox"/> Refused <input type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood	
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? When? <b>Nothing</b> <b>N/A</b>		What have you been drinking? How much? Time of last drink? <b>N/A</b> <b>N/A</b>	
By: <b>Schafer</b>		When did you last sleep? How long? <b>No answer</b> <b>N/A</b>		Are you sick or injured? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>"It's late"</b> <b>"Not sick"</b>	
Do you take insulin? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>"Not sick"</b>		Do you have any physical defects? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>"Not sick"</b>		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>No answer</b>	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>"Not sick"</b>		Attitude: <b>Not responsive, passive</b>		Coordination: <b>Unsteady, staggering</b>	
Speech: <b>Slow, slurred</b>		Breath: <b>Chemical odor</b>		Face: <b>Blank stare</b>	
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	
		Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
				Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy	
Pulse and time 1. <b>104   2340</b> 2. <b>108   2356</b> 3. <b>104   0010</b>		HGN Lack of smooth pursuit Maximum deviation Angle of onset		Vertical Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Romberg Balance 		Walk and Turn test <b>"Moonwalking"</b> <b>Legs &amp; arms rigid</b> 		Convergence 	
		Left Eye <b>Yes</b> Right Eye <b>Yes</b> 30°		Right eye <b>Yes</b> Left eye <b>Yes</b> 30°	
		Cannot keep balance <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		One Leg Stand 	
		Starts too soon:		Nasal area: <b>Clear</b>	
		Stops walking <input checked="" type="checkbox"/> 1 <sup>st</sup> Nine <input type="checkbox"/> 2 <sup>nd</sup> Nine		Oral cavity: <b>Clear</b>	
		Misses heel to toe		Reaction to Light: <b>Normal</b>	
		Steps off line		Rebound dilation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
		Raises arms <b>WV</b> <b>WV</b>		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
		Actual # steps		RIGHT ARM 	
		Type of footwear: <b>Athletic shoes</b>		LEFT ARM 	
Internal clock <b>33</b> Est. as 30 seconds		Describe Turn <b>Turned back-wards, stopped for 10 seconds</b>		Cannot do test (explain) <b>N/A</b>	
Draw lines to spots touched 		Pupil Size: Room Light      Darkness      Direct			
		Left: <b>4.0</b> <b>6.0</b> <b>4.0</b>			
		Right: <b>4.5</b> <b>6.0</b> <b>4.0</b>			
Blood pressure <b>140 / 90</b>		Temperature <b>99.4° F</b>			
Muscle tone: <input type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		Comments: <b>Arms &amp; Legs</b>			
What medication or drug have you been using? How much? <b>No answer</b>		Time of use? <b>No answer</b>		When were the drugs used? (location) <b>No answer</b>	
Date/Time of arrest <b>2/22/04 2300</b>		Time DRE Notified <b>2310</b>		Evaluation Start Time <b>2330</b>	
DRE Signature (include rank) <b>Sgt. D. Marose, MSP</b>		ID # <b>292</b>		Time Completed <b>0015 2/23/04</b>	
Opinion of evaluator: <input type="checkbox"/> Rule Out <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant <input type="checkbox"/> Hallucinogen		<input checked="" type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis	

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Martinez, Juan M.

1. **LOCATION:** The evaluation of Juan Martinez was conducted at Central Intake at the Minneapolis Police Department.
2. **WITNESSES:** Lt. Doug Thoof of the Minnesota S.P. recorded the evaluation.
3. **BREATH ALCOHOL TEST:** The arresting officer, Sergeant Bryan Schafer of the Minneapolis Police Department administered a breath test to Martinez with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was contacted and requested to contact Sgt. Schafer at the Intake Center for a drug evaluation. Sergeant Schafer advised he had observed the suspect on the West River Parkway drifting over the lane divider line nearly hitting other vehicles. When stopped, the suspect appeared dazed and confused. He had a blank stare and was non-responsive at times. He did poorly on the SFST's and was arrested for DUI.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the Intake Center. He appeared dazed and disoriented. He had a fixed, blank stare and responded very slowly to questions. His speech was slow and slurred.
6. **MEDICAL PROBLEMS AND TREATMENT:** None noted or stated.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect swayed approximately 3" side to side and estimated 30 seconds in 33 seconds. Walk & Turn: Suspect lost his balance twice during the instructions, stopped walking twice and used his arms for balance. One Leg Stand: Suspect put his foot down twice while standing on his left foot and nearly fell while attempting to stand on his right and the test was stopped. Finger to Nose: Suspect missed the tip of his nose on four of the six attempts and his arm movements were very rigid.
8. **CLINICAL INDICATORS:** Suspect exhibited an early onset of Nystagmus. Vertical Gaze Nystagmus and Lack of Convergence were also present. The suspect's pulse was above the normal range.
9. **SIGNS OF INGESTION:** There was a strong chemical odor on the suspect's breath.
10. **SUSPECT'S STATEMENTS:** The suspect did not respond to questions about drug use.
11. **DRE'S OPINION:** In my opinion Martinez is under the influence of a *Dissociative Anesthetic* and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a blood sample.
13. **MISCELLANEOUS:** A glass vial with an unknown liquid was found on the suspect.

## DRUG INFLUENCE EVALUATION

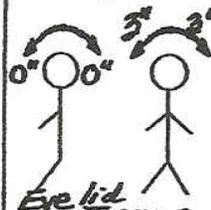
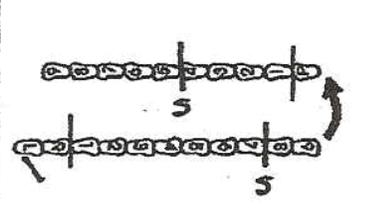
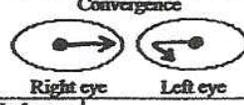
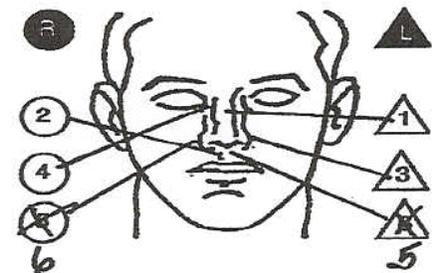
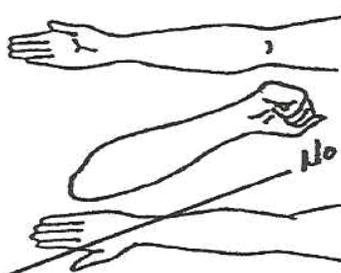
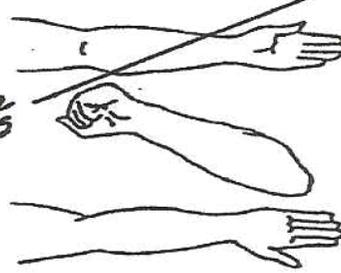
Evaluators: <b>Spec. Sam Ketchum, ISP</b>		DRE No: <b>9323</b>	Rolling Log No: <b>04-22</b>	Session XVIII-I-#2	
Recorder/Witness: <b>Sgt. Dean Matlock, ISP</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>04-10-2214</b>	
Arrestee's Name (Last, First MI): <b>Groves, Robert G.</b>		DOB: <b>8-10-77</b>	Sex: <b>M</b>	Race: <b>W</b>	Arresting Officer (Name, ID No.): <b>Off. Dave Cavanaugh, B.P.D.</b>
Date Examined/Time/Location: <b>10/15/04, 0100, Ada Co. Jail</b>		Breath Results: <input type="checkbox"/> Refused Instrument #: <b>4410</b>	<b>0.00%</b>	Chemical Test: <input checked="" type="checkbox"/> Urine <input type="checkbox"/> Blood	
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? <b>Chicken</b>	When? <b>6 pm</b>	What have you been drinking? How much? <b>Nothing N/A</b>	Time of last drink? <b>N/A</b>
Time now? <b>About midnight</b>	When did you last sleep? <b>Last night</b>	How long? <b>4 hrs.</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Dr. Freeman</b>	
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>"Pain pills for my back"</b>		Attitude: <b>Cooperative</b>		Coordination: <b>Poor, wobbly, stumbling</b>	
		Breath: <b>Normal, Slow, shallow</b>		Face: <b>Normal</b>	
Speech: <b>Slow, mumbling</b>		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery	Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Eyelids: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy					
Pulse and time: 1. <b>60 10/10</b> 2. <b>60 10/27</b> 3. <b>60 10/37</b>		HGN: <b>No</b> Lack of smooth pursuit Maximum deviation Angle of onset		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Romberg Balance:  <b>Circular Sway</b>		Walk and Turn test: 		Convergence: 	
		Cannot keep balance: <input checked="" type="checkbox"/> Starts too soon: <input checked="" type="checkbox"/>		One Leg Stand: <b>22</b> / <b>24</b> 	
		Stops walking: <input checked="" type="checkbox"/> Misses heel to toe: <input checked="" type="checkbox"/> Steps off line: <input checked="" type="checkbox"/> Raises arms: <input checked="" type="checkbox"/> Actual # steps: <b>9</b>		Type of footwear: <b>Lace up boots</b>	
Internal clock: <b>53</b> Est. as 30 seconds		Describe Turn: <b>Lost balance, staggered to right</b>		Nasal area: <b>Clear</b>	
Draw lines to spots touched:  <b>(slow movements)</b>		Pupil Size: Left: <b>2.0</b> Right: <b>2.0</b>		Oral cavity: <b>Clear</b>	
Blood pressure: <b>106/64</b>		Temperature: <b>97.8° F</b>		Reaction to Light: <b>None</b>	
Muscle tone: <input type="checkbox"/> Near normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Comments: <b>Arms &amp; neck</b>		RIGHT ARM: 		LEFT ARM: 	
What medication or drug have you been using? How much? <b>"A couple of pills for my back"</b>		Time of use? <b>with dinner</b>	Where were the drugs used? (location) <b>Sharis</b>		
Date/Time of Arrest: <b>10/15/04 0040</b>	Time DRE Notified: <b>0050</b>	Evaluation Start Time: <b>0100</b>	Time Completed: <b>1055</b>		
DRE Signature (Include rank): <b>Sam Ketchum</b>	ID #: <b>9323</b>	Reviewed by: <b>Sgt. Dean Matlock, ISP</b>			
Opinion of evaluator:	<input type="checkbox"/> Rule Out <input type="checkbox"/> Medical	<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant	<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Dissociative Anesthetic <input checked="" type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Groves, Robert G.

1. **LOCATION:** The evaluation was conducted at the Ada County Jail Intake Center.
2. **WITNESSES:** Officer Dave Cavanaugh of the Boise Police Department witnessed the evaluation. DRE State Coordinator, Sergeant Dean Matlock of the Idaho State Police recorded the evaluation.
3. **BREATH ALCOHOL TEST:** Officer Cavanaugh administered a breath test to Groves with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was contacted and requested to contact Officer Cavanaugh at the Intake Center for a drug evaluation. Officer Cavanaugh advised that he had observed the suspect's vehicle drifting over the center line and traveling 15 mph under the posted speed zone on W. Overland Road. When stopped, the suspect had slow and slurred speech. His balance and coordination was poor and he did poorly on the SFST's and was arrested for DUI. He admitted to taking a "couple pain pills" for his back.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the Intake Center. He appeared sleepy and his head was nodding forward. His speech was slow and slurred. When he stood, his balance was poor and he staggered when he walked.
6. **MEDICAL PROBLEMS AND TREATMENT:** The suspect stated he was taking pain medicine for a back injury he suffered about five years ago.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect swayed approximately 3" in a circular sway and estimated 30 seconds in 53 seconds. Walk & Turn: Suspect lost his balance twice during the instructions, missed heel to toe three times and used his arms for balance. One Leg Stand: Suspect put his foot down twice while standing on each foot and counted slowly. Finger to Nose: Suspect missed the tip of his nose on all six attempts and had slow arm movements.
8. **CLINICAL INDICATORS:** The suspect's pulse was at the low end of normal and his blood pressure was below the normal range. His pupils were constricted.
9. **SIGNS OF INGESTION:** None were evident.
10. **SUSPECT'S STATEMENTS:** Suspect admitted taking a "couple pain pills" with dinner.
11. **DRE'S OPINION:** In my opinion Groves is under the influence of a Narcotic Analgesic and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a urine sample.

## DRUG INFLUENCE EVALUATION

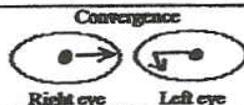
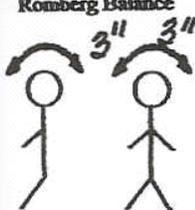
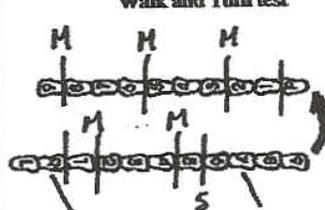
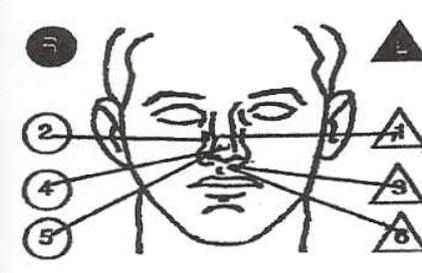
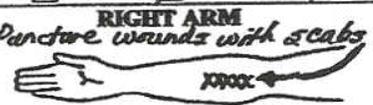
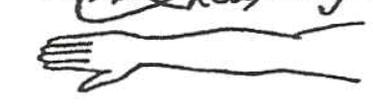
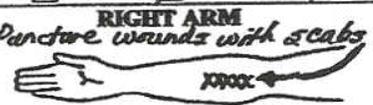
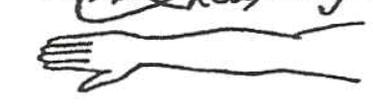
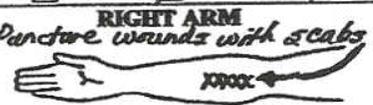
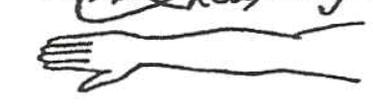
Evaluator <b>Dpty Greg Nottingham</b>		DRE No. <b>7023</b>	Rolling Log No. <b>2064-49</b>	Session XVIII-I-#3	
Recorder/Witness <b>Dan Mulleneaux, P.P.D.</b>		Crash: <input type="checkbox"/> Fatal <input checked="" type="checkbox"/> None <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>045699</b>	
Arrestee's Name (Last, First MI) <b>Hatos, Carlos</b>		DOB <b>7-13-70</b>	Sex <b>M</b>	Race <b>H</b>	Arresting Officer (Name, ID No.) <b>Jim Toland, Phoenix P.D.</b>
Date Examined/Time/Location <b>11/25/04, 2310 Maricopa Co. Jail</b>		Breath Results: <input type="checkbox"/> Refused Instrument # <b>12835</b> <b>0.04%</b>		Chemical Test <input type="checkbox"/> Refused <input checked="" type="checkbox"/> Urine <input type="checkbox"/> Blood	
Mirananda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? When? <b>Steak dinner, 7pm</b>		What have you been drinking? How much? Time of last drink? <b>Glass of wine, 1 8pm</b>	
Time now? <b>11 pm</b>		When did you last sleep? How long? <b>Last night, 8 hrs.</b>		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <b>Cooperative, nervous</b>		Coordination: <b>poor, jerky, stumbling</b>	
Speech: <b>Normal, Talkative</b>		Breath: <b>Alcoholic beverage</b>		Face: <b>Normal</b>	
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	
		Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
				Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy	
Pulse and time 1/100 123/6 2/104 123/9 3/108 123/8		HGN Lack of smooth pursuit Maximum deviation Angle of onset		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Romberg Balance 		Walk and Turn test 		Convergence 	
Internal clock <b>20</b> Est. as 30 seconds		Describe Turn <b>As instructed</b>		Cannot keep balance Starts too soon: Stops walking <input checked="" type="checkbox"/> Misses heel to toe <input type="checkbox"/> Steps off line <input type="checkbox"/> Raises arms <input checked="" type="checkbox"/> Actual # steps <b>9</b>	
Draw lines to spots touched 		Pupil Size Left <b>6.0</b> Right <b>6.0</b>		Room Light <b>8.5</b> Darkness <b>8.5</b> Direct <b>5.5</b>	
Blood pressure <b>146/100</b>		Temperature <b>99.2 °f</b>		Reaction to Light: <b>Slow</b>	
Muscle tone: <input checked="" type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Comments:		RIGHT ARM 		LEFT ARM 	
What medication or drug have you been using? How much? <b>None N/A</b>		Time of use? <b>I didn't</b>		Where were the drugs used? (location) <b>N/A</b>	
Date/Time of Arrest <b>11/25/04 2230</b>		Time DRE Notified <b>2300</b>		Evaluation Start Time <b>2310</b>	
DRE Signature (Include rank) <b>Dreg Nottingham, Deputy</b>		ID # <b>4417</b>		Reviewed by <b>Sgt. Judd Mangano</b>	
Opinion of evaluator: <input type="checkbox"/> Rule Out <input checked="" type="checkbox"/> Alcohol <input checked="" type="checkbox"/> CNS Stimulant <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant <input type="checkbox"/> Medical <input type="checkbox"/> CNS Depressant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis					

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Hatos, Carlos

1. **LOCATION:** The evaluation of Carlos Hatos was conducted the DRE room at the Maricopa County Jail .
2. **WITNESSES:** Dan Mulleneaux, the State DRE Coordinator witnessed the evaluation.
3. **BREATH ALCOHOL TEST:** The arresting officer, Officer Jim Toland of the Phoenix Police Department administered a breath test to Hatos with a 0.04% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was contacted and requested to Meet Officer Toland at Maricopa County Jail for a drug evaluation. Officer Toland advised he had observed the suspect's vehicle traveling at a high rate of speed on East Camelback Road. When stopped, the suspect appeared nervous and was very talkative. The suspect did poorly on the SFST's and was arrested for DUI.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the DRE interview room at the Maricopa County Jail. The suspect was very talkative, repeatedly shifted his weight from foot to foot and was making abrupt hand movements. When not speaking, he appeared to be grinding his teeth. There was an odor of alcoholic beverage on the suspect's breath.
6. **MEDICAL PROBLEMS AND TREATMENT:** None noted and none stated.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect swayed approximately 3" side to side and estimated 30 seconds in 20 seconds. Walk & Turn: Suspect lost his balance during the instructions, stopped twice while walking and used his arms for balance. One Leg Stand: Suspect put his foot down once while standing on his right foot, swayed while balancing and used his arms for balance. Finger to Nose: Suspect missed the tip of his nose on all six attempts and performed attempt #5 and #6 with the wrong finger.
8. **CLINICAL INDICATORS:** The suspect had a lack of smooth pursuit and a lack of convergence. His pulse and blood pressure were above the normal ranges. His pupils were dilated and he had a slow reaction to light.
9. **SIGNS OF INGESTION:** None were evident.
10. **SUSPECT'S STATEMENTS:** Suspect admitted drinking a glass of wine but denied using any other drugs.
11. **DRE'S OPINION:** In my opinion Hatos is under the influence of Alcohol (ETOH) and a CNS Stimulant and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a urine sample.

## DRUG INFLUENCE EVALUATION

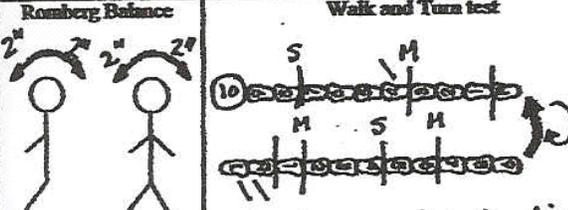
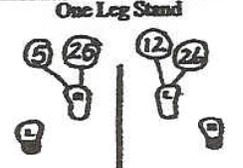
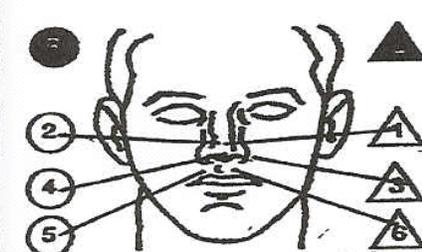
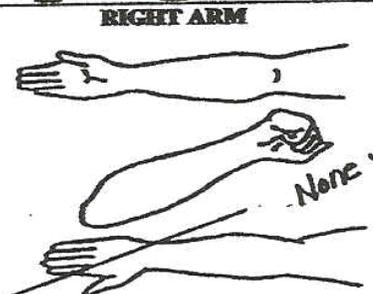
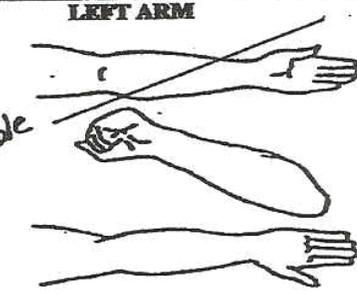
Evaluator <b>Ofc. Virgil Miller, Wichita PD</b>		DRE No. <b>10828</b>	Rolling Log No. <b>05-035</b>	Session XVIII-I-#4																			
Recorder/Witness <b>Det. KARRINA BRASSET, S.C.S.O</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>05-899105</b>																			
Arrestee's Name (Last, First MI) <b>JACKSON, SCOTT M.</b>		DOB <b>7-15-75</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID No.) <b>Tpr. Mark Crump, K.H.P.</b>																		
Date Examined/Time/Location <b>3/18/05 2030 hrs. Sedgwick Co. Jail</b>		Breath Results: <input type="checkbox"/> Refused Instrument # <b>88075 .00 %</b>		Chemical Test <input type="checkbox"/> Refused <input type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood																			
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Eggs &amp; Toast</b>	When? <b>9:00 am</b>	What have you been drinking? How much? <b>Coffee 2 cups</b>	Time of last drink? <b>N/A</b>																			
By: <b>Tpr. Crump</b>																							
Time now? <b>About midnight</b>	When did you last sleep? <b>Last night</b>	How long? <b>7 hrs.</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																			
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																				
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <b>Passive, Cooperative</b>		Coordination: <b>Poor, unsteady</b>																			
		Breath: <b>Halitosis</b>		Face: <b>Flushed, Blank stare</b>																			
Speech: <b>Slow, Low, Raspy</b>		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye																			
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal																			
				Eyelids: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy																			
Pulse and time 1. <b>92 / 2038</b> 2. <b>96 / 2051</b> 3. <b>94 / 2103</b>		HGN Lack of smooth pursuit Maximum deviation Angle of onset		Vertical Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																			
		Left Eye <b>Yes</b> Right Eye <b>Yes</b> <b>135°</b>		Convergence 																			
Romberg Balance 		Walk and Turn test 		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon: <input checked="" type="checkbox"/>																			
				<table border="1" style="width: 100%; text-align: center;"> <tr> <td></td> <td>1<sup>st</sup> Nine</td> <td>2<sup>nd</sup> Nine</td> </tr> <tr> <td>Stops walking</td> <td>✓</td> <td>✓✓</td> </tr> <tr> <td>Misses heel to toe</td> <td>✓</td> <td>✓✓</td> </tr> <tr> <td>Steps off line</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>Raises arms</td> <td>✓✓</td> <td>✓✓</td> </tr> <tr> <td>Actual # steps</td> <td>9</td> <td>9</td> </tr> </table>			1 <sup>st</sup> Nine	2 <sup>nd</sup> Nine	Stops walking	✓	✓✓	Misses heel to toe	✓	✓✓	Steps off line	✓	✓	Raises arms	✓✓	✓✓	Actual # steps	9	9
	1 <sup>st</sup> Nine	2 <sup>nd</sup> Nine																					
Stops walking	✓	✓✓																					
Misses heel to toe	✓	✓✓																					
Steps off line	✓	✓																					
Raises arms	✓✓	✓✓																					
Actual # steps	9	9																					
Internal clock <b>50</b> Est. as 30 seconds		Describe Turn <b>Abrupt spin, staggered</b>		Cannot do test (explain) <b>N/A</b>																			
Draw lines to spots touched 		Pupil Size		Reaction to Light: <b>None visible</b>																			
		Room Light: <b>2.0</b> Darkness: <b>2.5</b> Direct: <b>2.0</b>																					
		Right: <b>2.0</b> Darkness: <b>2.5</b> Direct: <b>2.0</b>																					
		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																			
Blood pressure: <b>130/90</b>		Temperature: <b>98.9 °F</b>		Type of footwear: <b>Tennis shoes</b>																			
Muscle tone: <input checked="" type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:		Nasal area: <b>clear</b>																			
Opinion of evaluator: <input type="checkbox"/> Rule Out <input type="checkbox"/> Medical <input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant <input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen		What medication or drug have you been using? How much? <b>"I didn't use"</b> <b>N/A</b>		Oral cavity: <b>clear</b>																			
		Time of use? <b>N/A</b>		Reaction to Light: <b>None visible</b>																			
		Where were the drugs used? (location) <b>N/A</b>		<table border="1" style="width: 100%;"> <tr> <td>RIGHT ARM</td> <td>LEFT ARM</td> </tr> <tr> <td><b>Puncture wounds with scabs</b></td> <td><b>Scar tissue</b></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td><b>Puncture wounds</b></td> <td><b>Scar tissue</b></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td><b>Red, oozing fluid</b></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </table>		RIGHT ARM	LEFT ARM	<b>Puncture wounds with scabs</b>	<b>Scar tissue</b>			<b>Puncture wounds</b>	<b>Scar tissue</b>			<b>Red, oozing fluid</b>							
RIGHT ARM	LEFT ARM																						
<b>Puncture wounds with scabs</b>	<b>Scar tissue</b>																						
																							
<b>Puncture wounds</b>	<b>Scar tissue</b>																						
																							
<b>Red, oozing fluid</b>																							
																							
Date/Time of Arrest <b>3/18/05 2010 hrs.</b>		Time DRE Notified <b>2020</b>		Evaluation Start Time <b>2030</b>																			
Time Completed <b>2125</b>		DRE signature (include title) <b>Virgil Miller</b>		Reviewed by: <b>[Signature]</b>																			
ID # <b>10828</b>																							

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Jackson, Scott M.

1. **LOCATION:** Evaluation was conducted in the interview room at the Sedgwick Co. Jail.
2. **WITNESSES:** Detective Karrina Brassler, a DRE with the Sedgwick County S.O. witnessed and recorded the evaluation.
3. **BREATH ALCOHOL TEST:** The arresting officer, Master Trooper Mark Crump of the Kansas Highway Patrol administered a breath test to Jackson with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was contacted and requested to contact M/Tpr. Crump at the Sedgwick County Jail for a drug evaluation. M/Tpr. Crump advised he located the suspect's vehicle traveling E/B on Highway 54 near the Garden Plain exit. The suspect was traveling at approximately 45 mph and drifting in and out of his lane. When M/Tpr. Crump tried to stop the suspect, he continued on for over a mile before stopping. The suspect had a blank stare and his speech was thick and slow. The suspect did poorly on the SFST's and was arrested for DUI.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the interview room at the jail. He was cooperative and had slow, thick, raspy speech. He was slow to respond to questions and was very unstable on his feet.
6. **MEDICAL PROBLEMS AND TREATMENT:** None noted or stated.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect swayed approximately 3" side to side and he estimated 30 seconds in 50 seconds. Walk & Turn: Suspect lost his balance during the instructions, stepped off the line, missed heel, stopped while walking and used his arms for balance. He also made an improper turn. One Leg Stand: Suspect put his foot down three times while standing on the left foot. After putting his foot down four times while standing on the right, the test was stopped. Finger to Nose: Suspect missed the tip of his nose on four of the six attempts.
8. **CLINICAL INDICATORS:** Suspect had six clues of Nystagmus and VGN. He also had a lack of convergence. His pulse rates were above the normal range.
9. **SIGNS OF INGESTION:** The suspect had a fresh, oozing puncture mark on his right forearm.
10. **SUSPECT'S STATEMENTS:** Suspect denied using drugs.
11. **DRE'S OPINION:** In my opinion Jackson is under the influence of a Dissociative Anesthetic and a Narcotic Analgesic and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a blood sample.

## DRUG INFLUENCE EVALUATION

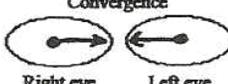
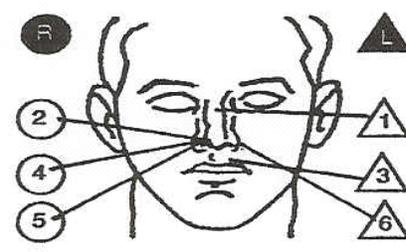
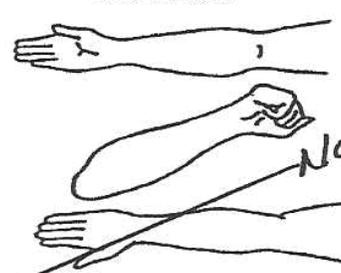
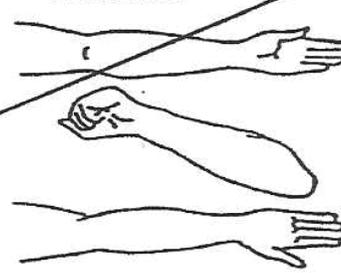
Evaluater <b>Sgt. Paul Kotter, Utah H.P.</b>		DRE No. <b>10262</b>	Rolling Log No. <b>05-01-02</b>	Session XVIII-I-#5	
Recorder/Witness <b>Ofc. Jody Whitaker, S.L.C.P.D.</b>		Crash: <input type="checkbox"/> Fatal <input checked="" type="checkbox"/> None <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>05-001784</b>	
Arrestee's Name (Last, First MI) <b>Stevens, William A.</b>		DOB <b>4-14-84</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID No.) <b>Ofc. John Beener, Salt Lake City PD</b>
Date Examined/Time/Location <b>01/17/05, 2200 hrs, SALT LAKE CITY PD</b>		Breath Results: Instrument # <b>47745</b>	<input type="checkbox"/> Refused <b>.00 %</b>	Chemical Test <input type="checkbox"/> Refused <input type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood	
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>"Burger"</b>		When? <b>Noon</b>	What have you been drinking? How much? <b>"Just water"</b>	Time of last drink? <b>N/A</b>
By: <b>Ofc. Beener</b>	Time now? <b>8 pm</b>	When did you last sleep? <b>Last night</b>	How long? <b>2 hrs.</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Valium - 2 each day</b>		Attitude: <b>Cooperative</b>		Coordination: <b>Poor, staggering</b>	
Speech: <b>Thick, slurred, slow to respond</b>		Breath: <b>Chemical odor</b>		Face: <b>Normal, Blank stare</b>	
Concave lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input checked="" type="checkbox"/> Watery	Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy	
Pulse and time 1. <b>92 / 2210</b> 2. <b>92 / 2225</b> 3. <b>94 / 2235</b>	HGN <b>Lack of smooth pursuit Maximum deviation Angle of onset</b>		Left Eye <b>yes yes 30°</b>	Right Eye <b>yes yes 30°</b>	Vertical Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	Walk and Turn test  <b>Had to repeat instructions</b>		Cannot keep balance <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Starts too soon: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		One Leg Stand 
Romberg Balance 		Stops walking <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Type of footwear: <b>Boots</b>	
Internal clock <b>46</b> Est. as 30 seconds		Describe Turn <b>Turned backwards</b>		Nasal area: <b>Clear</b>	
Draw lines to spots touched  <b>(Rigid arm movements)</b>		Pupil Size: Left <b>4.0</b> Right <b>4.0</b>	Room Light <b>4.0</b>	Darkness <b>6.0</b>	Direct <b>4.0</b>
Blood pressure: <b>144 / 100</b>		Temperature: <b>99.0° F</b>		Reaction to Light: <b>Slow</b>	
Muscle tone: <input type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
RIGHT ARM 		LEFT ARM 		None visible	
What medication or drug have you been using? How much? <b>"Just my pills" "2 a day"</b>		Time of use? <b>10 am</b>	Where were the drugs used? (location) <b>At home</b>		
Date/Time of Arrest <b>01/17/05, 2120 hrs.</b>	Time DRE Notified <b>2140</b>	Evaluation Start Time <b>2200</b>	Time Completed <b>2315</b>		
DRE Signature (Ink) <b>Sgt. Paul Kotter</b>	ID # <b>10262</b>	Reviewed by: <b>[Signature]</b>			
Opinion of evaluator: <input type="checkbox"/> Rule Out <input type="checkbox"/> Medical	<input type="checkbox"/> Alcohol <input checked="" type="checkbox"/> CNS Depressant	<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen	<input checked="" type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant	<input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis	

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Stevens, William A.

1. **LOCATION:** The evaluation of William Stevens was conducted in the interview room at the Salt Lake City Police Department.
2. **WITNESSES:** Officer Jody Whitaker, a DRE with the Salt Lake City Police Department witnessed and recorded the evaluation.
3. **BREATH ALCOHOL TEST:** The arresting officer, Officer John Beener of the Salt Lake City Police Department administered a breath test to Stevens with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was on duty and requested to contact Officer Beener at the Salt Lake City Police Department for a drug evaluation. Officer Beener advised he had located the suspect's vehicle stopped in the intersection at California and S. 900th. He contacted the suspect who sitting in the driver's seat. He had a blank stare and his speech was thick and slow. The suspect appeared confused and disoriented. He did poorly on the SFST's and was arrested for DUI.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the interview room at the P.D. The suspect was cooperative and had slow, thick, slurred speech. He was slow to respond to questions. His balance was poor and he staggered when walking.
6. **MEDICAL PROBLEMS AND TREATMENT:** The suspect indicated that he was seeing a doctor for stress.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect swayed approximately 2" in a circular motion and he estimated 30 seconds in 46 seconds. Walk & Turn: Suspect lost his balance twice during the instructions, stepped off the line twice, missed heel to toe three times and used his arms for balance. He also made an improper turn, turning backwards. One Leg Stand: Suspect put his foot down twice on each attempt, swayed while balancing and used his arms for balance. Finger to Nose: Suspect missed the tip of his nose on five of the six attempts. His arm movements were slow and rigid.
8. **CLINICAL INDICATORS:** Suspect had six clues of Nystagmus and a Lack of Convergence. His pulse and blood pressure were above the normal ranges.
9. **SIGNS OF INGESTION:** The suspect had a chemical-like odor on his breath.
10. **SUSPECT'S STATEMENTS:** Suspect admitted taking two (2) Valium earlier in the day.
11. **DRE'S OPINION:** In my opinion Stevens is under the influence of a Dissociative Anesthetic and a CNS Depressant and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a urine sample.

## DRUG INFLUENCE EVALUATION

Evaluator <b>Danny Lamm, CHP</b>		DRE No. <b>0926</b>	Rolling Log No. <b>04-06-25</b>	Session XVIII-I-#6	
Recorder/Witness <b>Vaughn Gates, CHP</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>04-717418</b>	
Arrestee's Name (Last, First MI) <b>Sholly, Cameron H.</b>		DOB <b>10-3-78</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID No.) <b>Off. Tom Flahaver, CHP</b>
Date Examined/Time/Location <b>6/10/04, 1245 Sacramento Co. Jail</b>		Breath Results: <input type="checkbox"/> Refused Instrument # <b>015233A</b> <b>0.00%</b>		Chemical Test <input type="checkbox"/> Refused <input type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood	
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? <b>Nothing</b>		When? <b>N/A</b>	What have you been drinking? How much? <b>"I didn't drink anything"</b>
By: <b>Flahaver</b>		Time of last drink? <b>N/A</b>		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Time now? <b>"Don't know"</b>		When did you last sleep? <b>"About 2 days ago"</b>		How long? <b>N/A</b>	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"Um... Not yet"</b>		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"I don't go to the doctor"</b>	
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>"I took some Tylenol this morning."</b>		Attitude: <b>Slow to Cooperative, respond</b>		Coordination: <b>Slow, shaky</b>	
Speech: <b>Low, slow, slurred at times</b>		Breath: <b>Normal</b>		Face: <b>Normal</b>	
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input checked="" type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	
Pupil size: <input type="checkbox"/> Equal <input checked="" type="checkbox"/> Unequal (explain) <b>Left larger (2mm)</b>		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pulse and time 1. <b>120/1248</b> 2. <b>120/1305</b> 3. <b>120/1345</b>		HGN Lack of smooth pursuit Maximum deviation Angle of onset		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Romberg Balance  <b>No sway</b>		Walk and Turn test <b>Stated, "This is impossible." Stopped at line and would not continue.</b>		Convergence  Right eye      Left eye	
Internal clock <b>15</b> Est. as 30 seconds		Describe Turn <b>N/A</b>		Cannot keep balance Starts too soon: 1 <sup>st</sup> Nine      2 <sup>nd</sup> Nine <b>Refused</b>	
Draw lines to spots touched 		Pupil Size Left <b>3.5</b> Right <b>3.6</b>		Room Light <b>7.5</b> Darkness <b>5.5</b> Direct <b>3.0</b>	
Blood pressure <b>160/80</b>		Temperature <b>99.0°f</b>		Reaction to Light: <b>Normal</b>	
Muscle tone: <input checked="" type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Comments:		RIGHT ARM 		LEFT ARM 	
What medication or drug have you been using? How much? <b>Just two Tylenol</b>		Time of use? <b>This morning</b>		Where were the drugs used? (location) <b>Home</b>	
Date/Time of Arrest <b>6/10/04 1230</b>		Time DRE Notified <b>1240</b>		Evaluation Start Time <b>1245</b>	
Time Completed <b>1345</b>		DRE signature (Include rank) <b>Danny Lamm, CHP</b>		ID # <b>0926</b>	
Reviewed by: <b>Sgt. Helene Williams, CHP</b>		Opinion of evaluator: <input checked="" type="checkbox"/> Rule Out <input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant <input type="checkbox"/> Medical <input type="checkbox"/> CNS Depressant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis			

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Sholly, Cameron H.

1. **LOCATION:** The evaluation of Cameron Sholly was conducted in the interview room at the Sacramento County Jail.
2. **WITNESSES:** Officer Vaughn Gates, a DRE Instructor with the California Highway Patrol witnessed and recorded the evaluation.
3. **BREATH ALCOHOL TEST:** Officer Tom Flahaven of the C.H.P. administered a breath test to Sholly with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was on-duty and requested to meet Officer Flahaven at the Sacramento County Jail for a drug evaluation. According to Officer Flahaven, Sholly was a driver involved in a fatal crash on I-5 north of Sacramento. His vehicle struck a stopped vehicle from behind at a construction site. Sholly was acting very strange at the scene and was slow to respond to questions. His speech was slow and slurred at times and he was unstable on his feet.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed Sholly in the interview room at the jail. He was cooperative and appeared stable. He was slow to respond to questions and he slurred his speech at times. He seemed confused and anxious.
6. **MEDICAL PROBLEMS AND TREATMENT:** Sholly was slow to respond when asked about medical problems and/or medical treatment. He eventually stated, "I don't go to the doctor."
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Sholly exhibited no sway and he estimated 30 seconds in 15 seconds. Walk & Turn: Sholly refused to do the test stating "This is impossible!" One Leg Stand: Sholly put his foot down one time while standing on each foot and swayed while balancing. Finger to Nose: Sholly missed the tip of his nose on all three attempts with the left hand and touched the end of his nose as directed with all three right hand attempts.
8. **CLINICAL INDICATORS:** Sholly's pulse and systolic blood pressure were above the normal range. His pupils were unequal in all three lighting levels.
9. **SIGNS OF INGESTION:** None were evident or stated.
10. **SUSPECT'S STATEMENTS:** Sholly admitted taking Tylenol only.
11. **DRE'S OPINION:** In my opinion Sholly is not under the influence and is a medical rule out.
12. **TOXICOLOGICAL SAMPLE:** Sholly provided a blood sample.

One Hour and Thirty-Five Minutes

**SESSION XIX**

**INHALANTS**

## SESSION XIX    **INHALANTS**

Upon successfully completing this session the student will be able to:

- o Explain a brief history of the Inhalant category of drugs.
- o Identify common drug names and terms associated with this category.
- o Identify common methods of administration for this category.
- o Describe the symptoms, observable signs and other effects associated with this category.
- o Describe the typical time parameters, i.e. onset and duration of effects associated with this category.
- o List the clues that are likely to emerge when the drug influence evaluation is conducted for a person under the influence of this drug category.
- o Correctly answer the "topics for study" questions at the end of this session.

### Content Segments

### Learning Activities

- |    |                                    |   |  |
|----|------------------------------------|---|--|
| A. | Overview of the Category           | o | Instructor Led Presentations                           |
| B. | Possible Effects                   | o | Review of Drug Evaluation and Classification Exemplars |
| C. | Onset and Duration of Effects      | o | Reading Assignments                                    |
| D. | Overdose Signs and Symptoms        | o | Video Presentations (If Available)                     |
| E. | Expected Results of the Evaluation | o | Slide Presentations                                    |

Aids	Lesson Plan	Instructor Notes
 <b>15 Minutes</b>  <b>XIX-1 (Title)</b>  <b>XIX-2A&amp;B (Objectives)</b>   <b>XIX-3 (Major Types of Inhalants)</b>	<p><b>INHALANTS</b></p> <p><b>A. Overview of the Category</b></p> <ol style="list-style-type: none"> <li>1. Inhalants are breathable chemicals that produce mind altering results.           <ol style="list-style-type: none"> <li>a. Inhalants vary widely in terms of the chemicals involved and the specific effects produced.</li> <li>b. Depending on the nature of the particular Inhalant, the effects produced may be similar to those of CNS Stimulants, Depressants or Hallucinogens.</li> </ol> </li> <li>2. There are three major subcategories of Inhalants.           <ol style="list-style-type: none"> <li>a. Volatile Solvents</li> <li>b. Aerosols</li> <li>c. Anesthetic gases</li> </ol> </li> </ol>	<p>Total Lesson Time: Approximately 95 Minutes</p> <p>Display Session Title</p> <p>Briefly review the objectives, content and activities of this session.</p> <p><b>INSTRUCTOR NOTES:</b> Inhalants are sometimes called "Deliriant," in that they may produce delirium. Delirium is usually a brief state characterized by incoherent excitement, confused speech, restlessness and possible hallucinations.</p>

## Aids

## Lesson Plan

## Instructor Notes



**XIX-4A&B**  
(Volatile  
Solvents)

3. The Volatile Solvents include a large number of readily available substances, none of which are intended by their manufacturers to be used as drugs.
- a. One widely abused Volatile Solvent is plastic cement, or "model airplane glue".
  - b. Plastic cement includes the following volatile chemicals.
    - o Toluene
    - o Acetone
    - o Naphtha
    - o Aliphatic Acetates (straight-chained hydrocarbons)
    - o Hexane
    - o Cyclohexane
    - o Benzene
  - c. Other frequently abused Volatile Solvents include:
    - o Gasoline
    - o Kerosene
    - o lighter fluid
    - o household cements and glues
    - o fingernail polish remover
    - o paint thinners
    - o engine degreasers
    - o typewriter correction fluid (liquid paper)
    - o paints (particularly oil or solvent based)
    - o dry cleaning fluids
    - o spray paints

"Volatile" means that they evaporate easily to produce fumes.

Ask students to name a Volatile Solvent that often is abused as a drug.

Contains Naphtha  
Rubber Cements contain Benzene

Contains Acetone

Aids	Lesson Plan	Instructor Notes
 <p><b>XIX-5</b> (Aerosols)</p>	<p>4. <u>Aerosols</u> are chemicals discharged from a pressurized container by the propellant force of a compressed gas.</p> <p>a. Commonly abused Aerosols include hair sprays, deodorants, insecticides, glass chillers and vegetable frying pan lubricants.</p> <p>b. All of these abused Aerosols contain various hydrocarbon gases that produce drug effects.</p>	<p>Older stocks contain Trichlorethylene.</p> <p>E.g., Freon, which is now available primarily in many medical Aerosols.</p> <p>If available, display slides of typically abused Aerosols.</p>
 <p><b>XIX-6</b> (Typical Abusers)</p>	<p>5. The overwhelming majority of abusers of Volatile Solvents and Aerosols are pre-teens and teenagers.</p> <p>a. Male Inhalant abusers outnumber females</p> <p>6. The third subcategory, <u>Anesthetic gases</u>.</p> <p>a. Anesthetic gases are drugs that abolish pain.</p> <p>b. They are used medically during surgical procedures such as childbirth, dental surgery, etc.</p>	<p>Some reasons: These substances appear in nearly every household. They are inexpensive and readily accessible.</p> <p>Adults may be more frequent users of the anesthetic gases subcategory than of the Aerosols or Volatile Solvents.</p>
 <p><b>XIX-7</b> (Anesthetic Gases)</p>	<p>c. Anesthetic gases that sometimes are abused as Inhalants:</p> <p>o Ether</p>	<p>Many of these substances have a long history of medical use and illicit use, e.g., Ether abuse dates to the 1790's in England.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>o Nitrous Oxide</li>   <li>d. Other common Inhalants in this subcategory that do not relieve pain are: <ul style="list-style-type: none"> <li>o Amyl Nitrite</li> <li>o Butyl Nitrite</li> <li>o Isobutyl nitrite and Butyl nitrite have essentially identical effects to Amyl nitrite.</li> </ul> </li>   <li>7. Inhalants obviously are ingested by breathing, or inhaling, their fumes. <ul style="list-style-type: none"> <li>a. Some are ingested directly from the source.</li> </ul> </li> </ul>	<p>Nitrous oxide has been used since 1845. It is still used in certain dental procedures.</p> <p>Nitrous Oxide is a propellant for whipped cream. Drug paraphernalia stores often sell Nitrous Oxide in cartridges that are identical to carbon dioxide containers. They are termed by users "whippets", and are allegedly sold to purchasers as devices to propel whipped cream.</p> <p>Nitrites are vasodilating substances used medically to relieve angina pectoris (heart-related chest pains) and for treatment of cyanide poisoning. In angina, the nitrites work by dilating blood vessels near the heart so that more blood can reach the heart. Nitroglycerin, ordinarily not abused as an intoxicant, is also used for this purpose.</p> <p>Anesthetic gases usually cause blood pressure to become lower than normal. This is due to the fact that the anesthetic gases restrict the pumping action of the heart.</p> <p>Common slang and brand names for the nitrites are: "Rush" and "Locker Room".</p> <p><u>Examples:</u> Amyl Nitrite and Butyl Nitrite are sold in small glass bottles or bulbs. The user</p>

Aids	Lesson Plan	Instructor Notes
<p></p> <p><b>10 Minutes</b></p> <p></p> <p><b>XIX-8</b> (Effects of Inhalants)</p>	<p> b. Some are soaked into rags, handkerchiefs or tissue papers for repeated inhalation.  c. Some are placed in paper or plastic bags which the user places over the face or head. These may be placed in twist lock beverage containers.  d. Some are used by breathing the fumes or vapors from balloons.  e. Some common street names that Inhalant users use are: huffing, hacking, ballooning, and glading. </p> <p><b>B. Possible Effects</b></p> <p> 1. The effects of Inhalants vary somewhat from one substance to another.  2. Common effects of Inhalants include:  a. Altered shapes and colors.  b. Antagonistic behavior.  c. Bizarre thoughts.  d. Distorted perceptions of time and distance. </p>	<p> simply opens the bottle and breathes in the fumes. They have been marketed in drug paraphernalia stores as room deodorizers. </p> <p> Solicit students' comments or questions concerning this overview of Inhalants. </p> <p> In fact, many of the Inhalants are classified as Depressants in medical texts. Their effects, consequently, often mirror Alcohol intoxication. </p>

Aids	Lesson Plan	Instructor Notes
 <b>5 Minutes</b>	<p>e. Dizziness and numbness.</p> <p>f. Drowsiness and weakness.</p> <p>g. Euphoria and grandiosity.</p> <p>h. Floating sensations.</p> <p>i. Inebriation similar to alcohol intoxication.</p> <p>j. Intense headaches.</p> <p>k. Light headedness.</p> <p>l. Nausea and excessive salivation.</p> <p>m. Possible hallucinations.</p> <p>3. Persons under the influence of Inhalants generally will appear confused and disoriented, and their speech will be slurred.</p> <p><b>C. On-Set and Duration of Effects</b></p> <p>1. Inhalants' effects are felt virtually immediately.</p> <p>2. Duration very much depends on the particular substance.</p>	<p>Solicit students' questions and comments concerning possible effects of Inhalants.</p> <p><u>Point out</u> that the route of passage of the drugs from lungs to brain can be traveled very quickly.</p>

Aids	Lesson Plan	Instructor Notes
 <b>5 Minutes</b>	<p>a. The effects of nitrous oxide last 5 minutes or less.</p> <p>b. Amyl Nitrite, Isobutyl Nitrite, and Butyl Nitrite produce effects that last a few seconds up to 20 minutes.</p> <p>c. Glue, paint, gasoline and other commonly abused Inhalants produce effects that last several or more hours. (Generally 6-8 hours for most volatile solvents depending on exposure.)</p> <p><b>D. Overdose Signs and Symptoms</b></p> <p>1. There is a risk of death due to overdose of Inhalants.</p> <p>a. Some Inhalants will depress the Central Nervous System to the point where respiration ceases.</p> <p>b. Others can produce instant death from heart failure.</p> <p>c. Overdoses of Inhalants frequently induce severe nausea and vomiting: If the user vomits while he or she is unconscious, death can result from aspiration of the vomitus.</p>	<p>Inhalation of these produces a distinct "rush" similar to that of the related substance, Nitrous Oxide.</p> <p>Users claim these Nitrites enhance sexual excitement. This may occur from dilation of genital arteries (vasodilation) and relaxation of other smooth muscles.</p> <p>Point out that residue of these substances may be deposited inside the nostrils, causing the user to breathe the fumes constantly.</p> <p>Solicit students' comments and questions concerning the time parameters of Inhalants.</p> <p>All volatile solvents make the heart more sensitive to adrenaline. This sometimes causes a dangerous cardiac arrhythmia. The term "sudden sniffing death" (SSD) has been used to describe death resulting from physical exertion and the breathing of Inhalants in an enclosed, poorly ventilated space.</p>

Aids	Lesson Plan	Instructor Notes
<p></p> <p><b>60 Minutes</b></p> <p></p> <p><b>XIX-9A-C</b> (Evaluation Results)</p>	<ol style="list-style-type: none"> <li>2. Death can also result indirectly, if a person places a plastic bag over the head, loses consciousness and suffocates.</li> <li>3. Long term abuse of Inhalants can cause permanent damage to the Central Nervous System, and greatly reduced mental and physical abilities.</li> <li>4. Evidence also exists of liver, kidney, bone and bone marrow damage resulting from long term Inhalant abuse.</li> <li>5. There is no well defined withdrawal symptoms for these substances. Physical dependence has not been documented, although habituation is common.</li> </ol> <p><b>E. Expected Results of the Evaluation.</b></p> <ol style="list-style-type: none"> <li>1. Observable evidence of impairment. <ul style="list-style-type: none"> <li>o Horizontal Gaze Nystagmus will generally be present.</li> <li>o Vertical Gaze Nystagmus may be present.</li> <li>o Lack of Convergence will be present.</li> </ul> </li> </ol>	<p>Solicit students' questions and comments concerning overdose signs and symptoms.</p> <p><u>Emphasize</u> that, with Inhalants, there is significant variation in effects from one substance to another.</p> <p><u>Point out</u> that immediate onset of Nystagmus may be observed.</p> <p><u>Point out</u> that high doses (for that individual) of Inhalants may cause Vertical Gaze Nystagmus.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>o Performance on the Romberg, Walk and Turn, One Leg Stand, and Finger to Nose tests will be impaired.</li>   <li>o pulse will be up</li>   <li>o blood pressure will be up or down</li>   <li>o effect on body temperature may be up, down or normal.</li>   <li>o Pupil size will be normal but may be dilated.</li>   <li>o Reaction to light will be slowed.</li> </ul>	<p><u>Point out</u> that subjects may sway when performing the Romberg, One Leg Stand, and Finger to Nose tests.</p> <p><u>Point out</u> that subjects may take slow, deliberate steps on the Walk and Turn, and will tend to stagger.</p> <p>Pulse increase is due to many factors, including oxygen displacement. The heart may beat faster in order to supply body tissues with a sufficient supply of oxygen.</p> <p><u>NOTE:</u> The Anesthetic Gases generally <u>lower</u> blood pressure while elevating pulse rate. The Volatile Solvents and the Aerosols usually elevate both blood pressure and pulse rate.</p> <p>The lowering of blood pressure by Anesthetic Gases is due to their vasodilation effect. The heart compensates for this vasodilation by increasing its heart rate.</p> <p>Anesthetic gases may produce some dilation, although usually not to the extent seen with CNS Stimulants or Hallucinogens. <u>No</u> Inhalants produce pupillary constriction.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XIX-9D</b> (General Indicators)</p>	<p>a. General indicators</p> <ul style="list-style-type: none"> <li>o Bloodshot, watery eyes</li> <li>o Confusion</li> <li>o Disoriented</li> <li>o Flushed face</li> <li>o Intense headaches</li> <li>o Lack of muscle control</li> <li>o Non-communicative</li> <li>o Normal or Flaccid muscle tone</li> <li>o Odor of the inhaled substance</li> <li>o Possible nausea</li> <li>o Residue of the substance around the face and nose and on the hands or clothing</li> <li>o Slow, thick, slurred speech</li> </ul>	<p><u>Point out</u> that muscle tone can be either normal or flaccid. Anesthetic gases normally cause the muscles to be flaccid.</p> <p>Speech usually clears up quickly when substance is no longer being inhaled.</p>
 <p><b>XIX-10</b> (Symptomatology Chart)</p>	<p>3. Summary</p>	
	<p>4. Demonstrations</p> <ul style="list-style-type: none"> <li>a. Video demonstrations (if available)</li> <li>b. Drug Evaluation and Classification exemplar demonstrations</li> </ul>	<p>Show video of subject(s) under the influence of Inhalants. Relate behavior/ observations to the Symptomatology Chart.</p> <p>Refer students to the exemplars found at the end of Section XIX of their student manuals.</p> <p>Relate the items noted on the exemplars to the Symptomatology chart.</p>

**Aids****Lesson Plan****Instructor Notes**

Solicit students' comments and questions concerning expected results of the evaluation of subjects under the influence of Inhalants.

## **Topics for Study**

1. What are the three major subcategories of Inhalants?

**Volatile Solvents, Aerosols, Anesthetic gases**

2. What are some of the principal active ingredients in many volatile substances?

**Toluene, acetone, naphtha, Aliphatic acetates, hexane, cyclohexane, benzene**

3. In what important respect do the effects of Anesthetic Gases differ from the effects of Volatile Solvents and Aerosols?

**Anesthetic gases lower blood pressure while keeping the pulse rate elevated, Volatile solvents and aerosols elevate blood pressure and pulse.**

4. Does any of the subcategories of Inhalants cause pulse rate to decrease?

**No**

5. The effects of Amyl Nitrite and Butyl Nitrite last from a few seconds to up to \_\_\_\_\_ minutes.

**20**

## Session XIX

### Inhalants



XIX-1

### Inhalants

Upon successfully completing this session the student will be able to:

- Explain a brief history of the Inhalant category of drugs
- Identify common drug names and terms associated with this category
- Identify common methods of administration for this category
- Describe the symptoms, observable signs, and other effects associated with this category

Drug Evaluation &amp; Classification Training

XIX-2A

### Inhalants (Continued)

- Describe the typical time parameters, i.e. onset and duration of effects associated with this category
- List the clues that are likely to emerge when the drug influence evaluation is conducted for a person under the influence of this category of drugs
- Correctly answer the "topics for study" questions at the end of this session

Drug Evaluation &amp; Classification Training

XIX-2B

### Major Types of Inhalants

- Volatile solvents
- Aerosols
- Anesthetic gases



Drug Evaluation &amp; Classification Training

XIX-3

### Volatile Solvents

- Fingernail polish remover
- Household cements and glue
- Lighter fluid
- Plastic cement ("model airplane glue")
- Petroleum products
  - Gasoline
  - Kerosene



Drug Evaluation &amp; Classification Training

XIX-4A

### Volatile Solvents

- Dry cleaning fluids
- Paints (particularly oil or solvent based)
- Paint thinners
- Spray paints
- Typewriter correction fluid



Drug Evaluation &amp; Classification Training

XIX-4B

## Aerosols

- Deodorants
- Frying pan lubricants
- Glass chillers
- Hair sprays
- Insecticides



Drug Evaluation &amp; Classification Training

XIX-5

## Typical Abusers of Inhalants

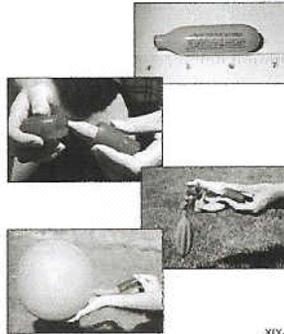
- Children
- Males outnumber females
- Poor children are significantly overrepresented

Drug Evaluation &amp; Classification Training

XIX-6

## Anesthetic Gases

- Amyl Nitrite
- Butyl Nitrite
- Ether
- Isobutyl Nitrite
- Nitrous Oxide



Drug Evaluation &amp; Classification Training

XIX-7

## Effects of Inhalants

- Altered shapes and colors
- Antagonistic behavior
- Bizarre thoughts
- Distorted perceptions of space and time
- Dizziness and numbness
- Drowsiness and weakness
- Euphoria and grandiosity
- Floating sensations
- Inebriation similar to alcohol intoxication
- Intense headaches
- Light headedness
- Nausea and excessive salivation
- Possible hallucinations

Drug Evaluation &amp; Classification Training

XIX-8

## Evaluation of Subjects Under the Influence of Inhalants

- Horizontal Gaze Nystagmus - present
- Vertical Gaze Nystagmus – present (high dose for that individual person)
- Lack of Convergence - present
- Impaired performance will be evident on Romberg, Walk and Turn, One Leg Stand and Finger to Nose tests

Drug Evaluation &amp; Classification Training

XIX-9A

## Evaluation of Subjects Under the Influence of Inhalants

### Vital Signs:

- Pulse – up
- Blood Pressure – up or down\*
- Body temperature - up, down or normal

\*Up with volatile solvents or aerosols; down with anesthetic gases

Drug Evaluation &amp; Classification Training

XIX-9B

## Evaluation of Subjects Under the Influence of Inhalants

### Dark Room:

- Pupil size - normal\*
- Pupil reaction to light - slow

\*May be dilated

## Evaluation of Subjects Under the Influence of Inhalants

### General Indicators:

- Bloodshot, watery eyes
- Confused, disoriented appearance
- Flushed face, possibly sweating
- Intense headaches
- Lack of muscle control
- Non-communicative
- Odor of the inhaled substance
- Possible traces of the substance around the face and nose
- Slow, thick, slurred speech

## Inhalants Symptomatology Chart

HGN	Present
VGN	Present (High dose for that individual)
Lack of Convergence	Present
Pupil Size	Normal*
Reaction to Light	Slow
Pulse Rate	Up
Blood Pressure	Up or down**
Temperature	Up, down, or normal
Muscle Tone	Normal or flaccid

\*But may be dilated

\*\*Up with volatile solvents or aerosols; down with anesthetic gases

# QUESTIONS?

## DRUG INFLUENCE EVALUATION

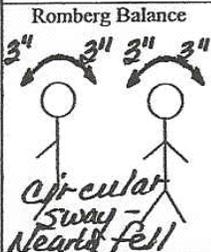
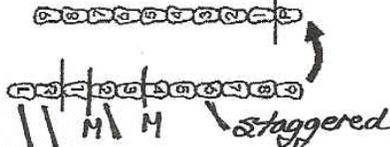
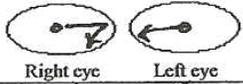
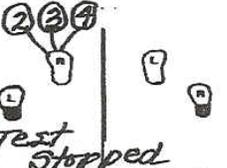
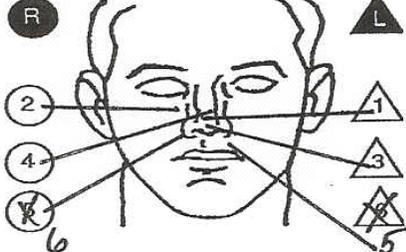
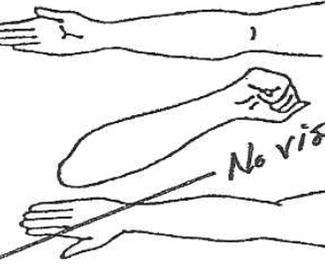
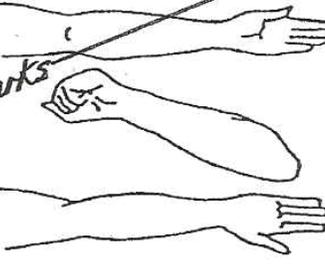
Evaluator <b>Sgt. Gerry Britt, Y.P.D.</b>		DRE No. <b>5479</b>	Rolling Log No. <b>04-07-15</b>		Session XIX - #1	
Recorder/Witness <b>Sgt. Don Decker, M.P.D.</b>		Crash: <input type="checkbox"/> Fatal <input checked="" type="checkbox"/> None <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>04-79961</b>		
Arrestee's Name (Last, First MI) <b>Graves, James L.</b>		DOB <b>6-08-88</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID No.) <b>Sgt. Deb Batista, Middleboro P.D.</b>	
Date Examined/Time/Location <b>07/02/04, 2200 Middleboro P.D.</b>		Breath Results: <input type="checkbox"/> Refused <input checked="" type="checkbox"/> Instrument # <b>77880</b> <b>0.00%</b>		Chemical Test <input type="checkbox"/> Refused <input type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood		
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? When? <b>Hamburger 6 pm</b>		What have you been drinking? How much? <b>Coke N/A</b>		Time of last drink? <b>N/A</b>
By: <b>Sgt. Batista</b>		Time now? <b>About 10 pm</b>		When did you last sleep? <b>Last night</b>		How long? <b>6 hrs.</b>
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <b>Cooperative</b>		Coordination: <b>Poor, unsteady, barely stand</b>		
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Breath: <b>Paint/ Chemical odor</b>		Face: <b>Paint residue on lips and chin</b>		
Speech: <b>Slurred, mumbling</b>		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input checked="" type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy
Pulse and time 1. <b>104/22/10</b> 2. <b>102/22/4</b> 3. <b>104/22/0</b>		HGN Lack of smooth pursuit Maximum deviation Angle of onset		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		One Leg Stand 
Romberg Balance 		Walk and Turn test <b>Test stopped - Subject could not stand</b> 		Cannot keep balance: <b>VVV</b>		L R <input type="checkbox"/> Sways while balancing <input type="checkbox"/> Uses arms to balance <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> Puts foot down
				Starts too soon: 1 <sup>st</sup> Nine 2 <sup>nd</sup> Nine Stops walking Misses heel to toe Steps off line Raises arms Actual # steps		
Internal clock <b>N/A</b> Est. as 30 seconds		Describe Turn <b>N/A</b>		Cannot do test (explain) <b>Unable to stand heel-toe</b>		Type of footwear: <b>Athletic shoes</b>
Draw lines to spots touched (Used palm of hand to touch nose)  Test administered in seated position		Pupil Size		Direct		Nasal area: <b>Paint on upper lip</b>
		Left: <b>4.0</b>		Darkness: <b>6.5</b>		Oral cavity: <b>odor of paint</b>
		Right: <b>4.0</b>		Darkness: <b>6.5</b>		Reaction to Light: <b>Normal</b>
		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
		RIGHT ARM 		LEFT ARM 		
Blood pressure: <b>140/100</b>		Temperature: <b>98.6 °f</b>				
Muscle tone: <input checked="" type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:				
What medication or drug have you been using? How much? <b>"I hunted some Gold" "Not much"</b>		Time of use? <b>8 pm</b>		Where were the drugs used? (location) <b>In the park</b>		
Date/Time of Arrest <b>07/02/04 2130</b>		Time DRE Notified <b>2145</b>		Evaluation Start Time <b>2200</b>		Time Completed <b>2250</b>
DRE Signature (Include rank) <b>Gerry Britt, Sgt.</b>		ID # <b>818</b>		Reviewed by: <b>Sgt. D. Decker</b>		
Opinion of evaluator:		<input type="checkbox"/> Rite Out <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant		<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic <input checked="" type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Graves, James L.

1. **LOCATION:** The evaluation of James Graves was conducted in the interview room at the Middleboro Police Department.
2. **WITNESSES:** The evaluation was witnessed and recorded by Sgt. Don Decker of the Marblehead Police Department.
3. **BREATH ALCOHOL TEST:** The arresting officer, Sgt. Deb Batista of the Middleboro Police Department administered a breath test to Graves with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was contacted by radio and advised to contact Sgt. Batista for a drug evaluation. Sgt. Batista advised she arrested Graves for DUI after observing him fail to stop at a red traffic light at Main and Wareham Street. The suspect was cooperative but appeared dazed. He performed poorly on the SFST's. A can of Krylon gold spray paint was located in the front seat of the suspect's vehicle along with paint soaked rags.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the interview room at the P.D. He appeared passive and dazed. He had very poor coordination and balance. Gold paint smears were visible on his hands and face.
6. **MEDICAL PROBLEMS AND TREATMENT:** None noted or stated.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: The suspect was unable to perform the test and it was stopped for safety reasons. Walk & Turn: The suspect lost his balance three times and the test was stopped for safety reasons. One Leg Stand: The suspect put his foot down twice while standing on the left foot. He was unable to perform the test when attempting to stand on the right foot and the test was stopped. Finger to Nose: The suspect was allowed to sit down for this test. He used the palm of his hands and touched in the general area of his nose.
8. **CLINICAL INDICATORS:** The suspect had six clues of HGN and a Lack of Convergence. His pulse and blood pressure were above the normal ranges.
9. **SIGNS OF INGESTION:** Paint-like odor on his breath. Paint smears on hands and face.
10. **SUSPECT'S STATEMENTS:** Suspect admitted "huffing" some gold paint in the park.
11. **DRE'S OPINION:** In my opinion Graves is under the influence of an Inhalant and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a blood sample.

## DRUG INFLUENCE EVALUATION

Evaluator <b>Sgt. Craig Porter</b>		DRE No. <b>3102</b>	Rolling Log No. <b>04-12-16</b>	Session XIX - #2	
Recorder/Witness <b>Sgt. Russ Belz, Story Co. S.O.</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>04-12859</b>	
Arrestor's Name (Last, First MI) <b>Mashburn, Cathy</b>		DOB <b>9-01-84</b>	Sex <b>F</b>	Race <b>W</b>	Arresting Officer (Name, ID No.) <b>Dpty. Dan Grimm, Polk Co. S.O.</b>
Date Examined/Time/Location <b>12/07/04, 2000 Polk Co. Jail</b>		Breath Results: <input type="checkbox"/> Refused Instrument # <b>16670</b> <b>0.00%</b>		Chemical Test <input type="checkbox"/> Refused <input checked="" type="checkbox"/> Urine <input type="checkbox"/> Blood	
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Pizza After work</b>		When? <b>After work</b>		What have you been drinking? How much? <b>Couple of wine coolers</b>
By: <b>Dpty. Grimm</b>	Time now? <b>About 8 pm</b>		When did you last sleep? <b>Last night</b>	How long? <b>7 hrs.</b>	Are you sick or injured? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>"I feel dizzy"</b>
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <b>Cooperative, slow to respond</b>		Coordination: <b>Poor, staggering at times</b>	
Speech: <b>Slow, slurred</b>		Breath: <b>Gas type odor</b>		Face: <b>Flushed</b>	
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input checked="" type="checkbox"/> Watery	Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy	
Pulse and time 1. <b>100 / 20/5</b> 2. <b>100 / 20/4</b> 3. <b>96 / 20/6</b>		HGN Lack of smooth pursuit Maximum deviation Angle of onset		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Romberg Balance 		Walk and Turn test <b>Test Stopped</b> 		Convergence 	
Internal clock <b>19</b> Est. as 30 seconds		Describe Turn <b>N/A</b>		One Leg Stand 	
Draw lines to spots touched 		Pupil Size Left <b>5.0</b> Right <b>5.0</b>		Room Light <b>6.5</b> Darkness <b>4.5</b> Direct <b>4.5</b>	
Blood pressure <b>146/104</b>		Temperature <b>98.8 °f</b>		Nasal area: <b>Runny nose Gas-like odor</b>	
Muscle tone: <input checked="" type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Comments:		RIGHT ARM 		LEFT ARM 	
What medication or drug have you been using? How much? <b>"I don't do drugs"</b>		Time of use? <b>Refused</b>		Where were the drugs used? (location) <b>Refused</b>	
Date/Time of Arrest <b>12/07/04 1945</b>		Time DRE Notified <b>1955</b>		Evaluation Start Time <b>2000</b>	
DRE signature (include rank) <b>Craig Porter, Sgt</b>		ID # <b>282</b>		Reviewed by <b>A. E. Becker</b>	
Opinion of evaluator: <input type="checkbox"/> Rule Out <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant		<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic <input checked="" type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis	

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Mashburn, Cathy

1. **LOCATION:** The evaluation of Cathy Mashburn was conducted at the Polk County Jail.
2. **WITNESSES:** The evaluation was witnessed and recorded by Sergeant Russ Belz of the Story County Sheriff's Office.
3. **BREATH ALCOHOL TEST:** The arresting officer, Deputy Dan Grimm of the Polk County S.O. administered a breath test to Mashburn with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was notified by radio to contact Deputy Grimm at the Polk County Jail for a drug evaluation. Deputy Grimm advised he arrested Mashburn after observing her pull out in front of oncoming traffic nearly causing a crash. The suspect was cooperative but slow to respond to questions. She performed poorly on the SFST's and was arrested for DUI.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the interview room at the jail. Her speech was slow and slurred. She had poor coordination, staggering at times. Her eyes were watery and bloodshot.
6. **MEDICAL PROBLEMS AND TREATMENT:** The suspect stated she felt dizzy.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: The suspect had an approximate 3" circular sway and she estimated 30 seconds in 19 seconds. Walk & Turn: The suspect lost her balance twice during the instructions, staggered, nearly fell and the test was stopped. One Leg Stand: After putting her foot down three times and nearly falling, the test was stopped. Finger to Nose: The suspect was allowed to sit down for the test for safety reasons. She touched the tip of her nose on one of the six attempts. She also used the wrong hand on attempts #5 and #6.
8. **CLINICAL INDICATORS:** The suspect had six clues of HGN and a Lack of Convergence. Her pulse and blood pressure were above the normal ranges.
9. **SIGNS OF INGESTION:** The suspect had a runny nose, bloodshot and watery eyes. She also had a gas-like odor on her breath and clothing.
10. **SUSPECT'S STATEMENTS:** Suspect admitted drinking a "couple of wine coolers" but denied using any other substances.
11. **DRE'S OPINION:** In my opinion Mashburn is under the influence of an Inhalant and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a urine sample.

Sixty Minutes

**SESSION XX**

**PRACTICE: VITAL SIGNS EXAMINATIONS**

**SESSION XX      PRACTICE: VITAL SIGNS EXAMINATIONS**

Upon successfully completing this session the student will be able to:

- o      Conduct examinations of pulse, blood pressure and temperature.
- o      Describe the vital signs examination procedures.
- o      Document the results of the vital signs examinations.

**Content Segments**

- A.      Procedures For This Session
- B.      Pulse Measurements
- C.      Blood Pressure Measurements
- D.      Session Wrap Up

**Learning Activities**

- o      Instructor Led Presentations
- o      Students Hands On Practice
- o      Instructor Led Coaching
- o      Student Led Coaching

Aids	Lesson Plan	Instructor Notes
 <p><b>10 Minutes</b></p>  <p><b>XX-1 (Title)</b></p>  <p><b>XX-2 (Objectives)</b></p>	<p><b>PRACTICE: VITAL SIGNS EXAMINATIONS</b></p> <p><b>A. Procedures For This Session</b></p> <ol style="list-style-type: none"> <li>1. Participants will work in three or four member teams. <ol style="list-style-type: none"> <li>a. At any given time, one member of the team will be engaged in conducting and recording vital signs examinations of another member.</li> <li>b. The remaining member(s) will help coach and critique the student who is conducting the examinations.</li> <li>c. Students will take turns serving as test administrator, test subject and coach.</li> </ol> </li> </ol>	<p>Total Lesson Time: Approximately 60 Minutes</p> <p>Display Session Title</p> <p>Point out "Practice Sessions" wallchart.</p> <p>Briefly review the objectives, content and activities of this session.</p> <p><b>REFER TO CHAPTER VII IF THERE ARE ANY QUESTIONS ON VITAL SIGNS.</b></p> <p><u>Make</u> team assignments.</p> <p><u>Emphasize</u> that students can help each other learn by pointing out errors of omission or commission.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>20 Minutes</b></p>	<p>2. Teams initially will practice taking one another's <u>pulse</u>.</p> <p>3. Teams subsequently will practice taking one another's <u>blood pressure</u>.</p> <p>4. Students will record their measurements, using the Vital Signs Examination Data Sheet.</p> <p><b>B. Pulse Measurements</b></p>	<p><u>Point out</u> that the student who is "coaching" should simultaneously take the subject's pulse along with the test administrator. Example: administrator can take pulse at subject's left wrist, coach can take it at subject's right wrist.</p> <p>Then, the administrator and coach can compare the measurements they obtain.</p> <p><u>Demonstrate</u> this, using a student subject and two instructors.</p> <p><u>NOTE:</u> If specially designed training stethoscopes are available, the student coach can "listen in" on the blood pressure measurements being taken by the student administrator.</p> <p><u>Hand out</u> copies of the Vital Signs Examination Data Sheet to each student.</p> <p>Solicit students' questions concerning procedures for this practice session.</p> <p><u>Monitor</u> teams and coach students as necessary and appropriate.</p> <p>Terminate this segment after 20 minutes, or after each student has administered a pulse measurement to each of their team members (whichever comes first).</p>

Aids	Lesson Plan	Instructor Notes
 <b>25 Minutes</b>	<b>C. Blood Pressure Measurements</b>	<p><u>Monitor</u> teams and coach students as necessary and appropriate.</p> <p>If a training Stethoscope is available, "listen in" on occasional blood pressure measurements to verify that the students are taking accurate measurements.</p> <p>Terminate this segment after 25 minutes, or after each student has measured the blood pressure of each member of their team (whichever comes first).</p>
 <b>5 Minutes</b>	<b>D. Session Wrap Up</b>	<p><u>Offer</u> appropriate comments and observations about the students' performance.</p> <p>Solicit students' comments concerning the practice session.</p>

### VITAL SIGNS EXAMINATIONS DATA SHEET

EXAMINER'S NAME \_\_\_\_\_

DATE \_\_\_\_ / \_\_\_\_ / \_\_\_\_

PULSE MEASUREMENTS

BLOOD PRESSURE MEASUREMENTS

SUBJECT'S NAME \_\_\_\_\_ SUBJECT'S NAME \_\_\_\_\_

TIME \_\_\_\_\_ TIME \_\_\_\_\_

PULSE POINT USED \_\_\_\_\_ SYSTOLIC \_\_\_\_\_

BEATS PER MINUTES \_\_\_\_\_ DIASTOLIC \_\_\_\_\_

SUBJECT'S NAME \_\_\_\_\_ SUBJECT'S NAME \_\_\_\_\_

TIME \_\_\_\_\_ TIME \_\_\_\_\_

PULSE POINT USED \_\_\_\_\_ SYSTOLIC \_\_\_\_\_

BEATS PER MINUTES \_\_\_\_\_ DIASTOLIC \_\_\_\_\_

SUBJECT'S NAME \_\_\_\_\_ SUBJECT'S NAME \_\_\_\_\_

TIME \_\_\_\_\_ TIME \_\_\_\_\_

PULSE POINT USED \_\_\_\_\_ SYSTOLIC \_\_\_\_\_

BEATS PER MINUTES \_\_\_\_\_ DIASTOLIC \_\_\_\_\_

# Session XX

## Practice: Vital Signs Examinations



XX-1

## Practice: Vital Signs Examinations

Upon successfully completing this session the students will be able to:

- Conduct examinations of pulse, blood pressure and temperature
- Describe the vital signs examination procedures
- Document the results of the vital signs examinations

Drug Evaluation & Classification Training

XX-2

# QUESTIONS?

Drug Evaluation & Classification Training

One Hour and Twenty-Five Minutes

**SESSION XXI**  
**CANNABIS**

**SESSION XXI    CANNABIS**

Upon successfully completing this session the student will be able to:

- o Explain a brief history of Cannabis.
- o Identify common names and terms associated with Cannabis.
- o Identify common methods of administration for Cannabis.
- o Describe the symptoms, observable signs and other effects associated with Cannabis.
- o Describe the typical time parameters, i.e. onset and duration of effects associated with Cannabis.
- o List the clues that are likely to emerge when the drug influence evaluation is conducted for a person under the influence of this drug category.
- o Correctly answer the "topics for study" questions at the end of this session.

**Content Segments****Learning Activities**

- |                                       |  |
|---------------------------------------|--|
| A. Overview of the Category           | o Instructor Led Presentations                           |
| B. Possible Effects                   | o Review of Drug Evaluation and Classification Exemplars |
| C. On-Set and Duration of Effects     | o Reading Assignments                                    |
| D. Overdose Signs and Symptoms        | o Video Presentations (If Available)                     |
| E. Expected Results of the Evaluation | o Slide Presentations                                    |

## Aids

## Lesson Plan

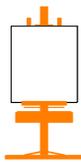
## Instructor Notes



10 Minutes



XXI-1 (Title)

XXI-2A&B  
(Objectives)**CANNABIS****A. Overview of the Category**

1. "Cannabis" is a category of drugs derived primarily from various species of Cannabis plants, such as Cannabis Sativa and Cannabis Indica.
  - a. Cannabis grows readily throughout the temperate zones of the world
  - b. It has been cultivated for centuries.
2. The primary psychoactive ingredient in Cannabis is Delta-9 Tetrahydrocannabinol.
  - a. THC is found principally in the leaves and flowers of the plant rather than in the stem or branches.

Total Lesson Time:  
Approximately 85 Minutes

Display Session Title

Briefly review the objectives, content and activities of this session.

If available, display slides of Cannabis plants, leaves, flowers, etc.

**INSTRUCTORS NOTE:** Some jurisdictions as well as botanists don't recognize Cannabis Indica as a separate plant species.

Example: At the first permanent English settlement in America, Jamestown, VA, where it was grown to produce hemp.

Point out: "Δ- 9 THC" on dry erase board or wall chart.

Point out that the highest known THC content is 33.12%, from marijuana seized by the Oregon State Police in 2002.

Source: Drug ID Bible, 2004/2005

Aids	Lesson Plan	Instructor Notes
 <p><b>XXI-3</b> (Forms of Cannabis)</p>	<ul style="list-style-type: none"> <li>b. Different varieties of the Cannabis have different concentrations of THC.</li> <li>c. One variety that has a relatively high concentration of THC is <u>Sinsemilla</u>, which is the unfertilized female Cannabis Sativa plant.</li> </ul> <p>3. There are four principal forms of Cannabis.</p> <ul style="list-style-type: none"> <li>a. <u>Marijuana</u> - The dried leaves of the plant.</li> <li>b. Hashish - A form of cannabis made from the dried and pressed resin of a marijuana plant.</li> <li>c. Hash Oil - Sometimes referred to as "marijuana oil". it is a highly concentrated svrup-like oil extracted from mariiuana. It is normally produced by soaking mariiuana in a container of solvent. such as acetone or alcohol for several hours and after the solvent has evaporated, a thick svrup-like oil is produced with a THC content generally of 8-20%.</li> <li>d. <u>Marinol</u> (or Dronabinol) - A synthetic form of THC. This is a prescriptive drug used to inhibit vomiting. It is prescribed for certain cancer patients undergoing chemotherapy.</li> </ul>	<p><u>Explanatory note:</u> "Sinsemilla" is a Spanish derivative of the latin expression "sine semina" meaning "without seed".</p> <p>Show slides - of special types</p> <p>Source: Drug Identification Bible, 2004/2005 Edition.</p> <p>Hash Oil THC Content Source: Drug Identification Bible, 2004/2005 Edition.</p> <p>"Dronabinol" is the generic, or chemical name for the synthetic THC. "Marinol" is a the trade name for Dronabinol.</p>

Aids	Lesson Plan	Instructor Notes
	<p>Nabilone - an analog of Dronabinol used as an anti-vomiting agent.</p> <p>4. Cannabis has some limited medical applications.</p> <p>a. It lowers intraocular pressure, which can be helpful for Glaucoma patients.</p> <p>b. It suppresses nausea, and sometimes is recommended for cancer patients to relieve the nausea accompanying chemotherapy.</p> <p>c. <u>Cannabidiol</u>, a non-psychoactive ingredient found in Cannabis, is used in treating Epilepsy; it helps to inhibit seizures.</p> <p>d. Cannabis has also had some limited medical applications as:</p> <ul style="list-style-type: none"> <li>o an appetite enhancer for victims of Anorexia Nervosa;</li> <li>o a muscle relaxant;</li> <li>o a tumor growth retardant.</li> </ul> <p>5. Potency, Purity and Dose</p> <p>a. Average THC concentration:</p>	<p>Note: Nabilone is not commercially available in the United States.</p> <p>"Intraocular": within the eyeball.</p> <p>Cannabis lowers the intraocular pressure by dilating in size the blood vessels of the eyes (more size- less pressure).</p> <p>This causes reddening of the conjunctiva.</p> <p><u>Point out</u> that Marijuana has been legalized for medical treatment in many states.</p>

Aids	Lesson Plan	Instructor Notes
 <b>5 Minutes</b>	<ul style="list-style-type: none"> <li>o Marijuana 1-5%</li> <li>o Hashish 5-15%</li> <li>o Hashish Oil 10-12%</li> <li>o Sinsemilla 15%+</li> </ul> <p>b. Recreational doses are highly variable</p> <p>6. Marijuana usually is smoked.</p> <p>7. Marijuana, Hashish and Hash oil also can be ingested orally, for example, baked in cookies or brownies and eaten.</p> <p>8. In controlled studies, passive inhalation of Marijuana smoke has resulted in behavioral effects as well as a measurable amount in toxicology samples. Study does not address quantitative amount of physical impairment.</p> <p><b>B. Possible Effects</b></p> <p>1. One major effect of Marijuana is that it appears to interfere with a person's ability to <u>pay attention</u>.</p> <ul style="list-style-type: none"> <li>a. People under the influence of Marijuana simply seem not to pay attention, or to have very brief attention spans.</li> <li>b. In particular, they do not divide their attention very successfully.</li> </ul>	<p>The lower the THC the more hits required to achieve desired effects.</p> <p>Solicit students' comments and questions concerning this overview of Cannabis.</p> <p><u>Clarification:</u> They have a difficult time dealing with more than one or two tasks at once.</p>

Aids	Lesson Plan	Instructor Notes
	<p>c. This can make them very unsafe drivers, since driving requires the ability to divide attention among many simultaneous tasks, i.e.</p> <ul style="list-style-type: none"> <li>o steering</li> <li>o operating the accelerator</li> <li>o signaling</li> <li>o observing other traffic</li> <li>o recognizing traffic control devices</li> <li>o shifting</li> </ul> <p>d. People under the influence of Marijuana may attend to one or a few of these driving tasks, but simply ignore the other tasks.</p> <p>e. Because Marijuana impairs attention, Standardized Field Sobriety Tests like Walk and Turn and One Leg Stand are excellent tools for recognizing people under the influence of Marijuana.</p> <p>2. Pharmacological Effects of Marijuana</p> <ul style="list-style-type: none"> <li>a. Relaxation</li> <li>b. Euphoria</li> <li>c. Relaxed Inhibitions</li> <li>d. Disorientation</li> </ul>	<p><u>Ask</u> students: "What are some of the things that drivers have to do simultaneously?"</p> <p>Loss of depth perception would be demonstrated by stopping improperly. Short attention span would be indicated by erratic speeds, failing to maintain a single lane and stopping for a red light then continuing on.</p> <p><u>Remind</u> students that WAT and OLS are <u>divided attention</u> Standardized Field Sobriety Tests.</p> <p>Note: effects will vary with dose, route of administration, experience of user, and other factors.</p>

Aids	Lesson Plan	Instructor Notes
 <b>5 Minutes</b>   <b>XXI-4 (On-set &amp; Duration)</b>	<ul style="list-style-type: none"> <li>e. Altered time and distance perception</li> <li>f. Sedation</li> </ul> <p>3. Other Characteristic Indicators</p> <ul style="list-style-type: none"> <li>a. Odor of marijuana</li> <li>b. Marijuana debris in the mouth</li> <li>c. Possible green coating on the tongue</li> <li>d. Reddening of the conjunctivae</li> <li>e. Body tremors</li> <li>f. Eyelid tremors</li> </ul> <p><b>C. Onset and Duration of Effects</b></p> <ol style="list-style-type: none"> <li>1. Persons begin to feel and exhibit the effects within 8-9 seconds after smoking Marijuana.</li> <li>2. The effects reach their peak within 10-30 minutes.</li> <li>3. Depending on the amount smoked and on the concentration of THC in the Marijuana, the person will</li> </ol>	<p><u>Point out</u> that there are no known studies that confirm marijuana causing a green coating on the tongue.</p> <p><u>Point out</u> that this may become evident when the suspect attempts to estimate the passage of 30 seconds when performing the Romberg test.</p> <p>Solicit students' comments or questions concerning possible effects of Marijuana.</p> <p><u>NOTE:</u> A 1985 Stanford University study shows pilots have difficulty in holding patterns and in lining up with runways for up to 24 hours after using Marijuana.</p>

Aids	Lesson Plan	Instructor Notes
    <b>XXI-5</b> (THC Metabolites)  	<p>continue to feel and exhibit the effects for 2 - 3 hours.</p> <p>4. Generally, the person will feel "normal" within 3-6 hours after smoking Marijuana.</p> <p>a. The user may be impaired long after the euphoric feelings have ceased.</p> <p>5. Note that blood and urine tests will continue to disclose evidence of the use of Marijuana long after the effects of Marijuana have disappeared.</p> <p>a. Blood tests may disclose Marijuana use for at least 3 days after smoking.</p> <p>b. Urine tests may indicate the presence of metabolites of THC for a month or more.</p> <p>c. There are two important metabolites, or chemical by-products of THC.</p> <ul style="list-style-type: none"> <li>o <u>Hydroxy THC</u>, which causes the user to feel euphoric.</li> <li>o <u>Carboxy THC</u>, there is no evidence at this time that it is psychoactive.</li> </ul>	<p>In 1990 - a second Stanford University Study shows: Marijuana impaired performance at .25, 4, 8, 24 hours after smoking. While 7 of the 9 pilots showed some degree of impairment at 24 hours after smoking Cannabis, only one reported any awareness of the drugs effects.</p> <p>Solicit students' comments and questions concerning onset and duration factors.</p> <p>Source Marijuana Alert, Peggy Mann (Bibliography)</p> <p>NIDA Study, "Blood Brain Barrier"</p> <p><u>Point out</u> that it can take as long as 4 hours for THC to appear in the urine at concentrations sufficient to trigger a positive drug screen (50 ng/ml) following smoking.</p> <p>Write "Hydroxy THC: Causes Impairment <u>and</u> Euphoria" on the dry erase board or flip-chart.</p>

Aids	Lesson Plan	Instructor Notes
 <p>5 Minutes</p>	<p>d. Hydroxy THC usually is eliminated from the blood plasma within six hours.</p> <p>e. Carboxy THC may be found in the blood plasma for several days following Marijuana use.</p> <p>6. Cannabis is a fat soluble (i.e. it dissolves easily into fatty tissue); therefore, it can remain for long periods in the brain tissue, which is about one-third fat.</p> <p>7. Cannabis principally is eliminated from the body in feces and urine.</p> <p><b>D. Overdose Signs and Symptoms</b></p> <p>1. Excessive or long term use of Marijuana can have very undesirable consequences.</p> <p>2. Marijuana has been observed to produce sharp personality changes, especially in adolescent users.</p> <p>3. It can create paranoia and possible psychosis.</p> <p>4. Long term effects include:</p> <p>a. Lung damage</p> <p>b. Chronic Bronchitis</p> <p>c. Lowering of Testosterone (male sex hormone)</p>	<p>Ask students: "Is there danger of death from Cannabis overdose?"</p> <p>Answer: It is not likely that there is a <u>direct</u> risk of death from an overdose. However, persons impaired by Cannabis may <u>behave</u> in foolishly dangerous ways, and become injured or killed as a result.</p>

Aids	Lesson Plan	Instructor Notes
<p style="text-align: center;">●</p> <p style="text-align: center;"><b>60 Minutes</b></p> <p style="text-align: center;"></p> <p><b>XXI-6A-C</b> (Evaluation Results)</p>	<ul style="list-style-type: none"> <li>d. Possible birth defects, still births and infant deaths</li> <li>e. Acute anxiety attacks</li> <li>f. Chronic reduction of attention span</li> <li>g. Research indicates that life threatening overdoses rarely if ever occur.</li> <li>h. Withdrawal - is similar to alcohol dependence withdrawal.</li> <li>i. Physical dependence can occur with chronic use.</li> </ul> <p><b>E. Expected Results of the Evaluation</b></p> <ul style="list-style-type: none"> <li>1. Observable evidence of impairment <ul style="list-style-type: none"> <li>a. Clinical indicators <ul style="list-style-type: none"> <li>o neither Horizontal nor Vertical Gaze Nystagmus will be present.</li> <li>o Lack of Convergence generally will be present.</li> </ul> </li> </ul> </li> </ul>	<p>Solicit students' questions concerning signs and symptoms of Cannabis overdose.</p> <p><u>But</u> remind students that Marijuana users often drink alcohol in conjunction with their smoking, and that others often lace their Marijuana with PCP. Either combination would cause Nystagmus.</p>



Aids	Lesson Plan	Instructor Notes
 <p><b>XXI-6D</b> (General Indicators)</p>	<p>b. General indicators:</p> <ul style="list-style-type: none"> <li>o Body tremors</li> <li>o Disoriented</li> <li>o Debris in mouth</li> <li>o Eyelid tremors</li> <li>o Impaired perception of time and distance</li> <li>o Increased appetite</li> <li>o Marked reddening of the conjunctiva</li> <li>o Odor of marijuana</li> <li>o Possible paranoia</li> <li>o Relaxed inhibitions</li> </ul>	<p>which the light from the penlight is directed into the eye. <u>NOTE HOWEVER</u> that this phenomenon has not been systematically investigated in controlled research.</p> <p>Draw an eye on a balloon and squeeze it to demonstrate the difference between Hippus and Rebound</p> <p>NOTE: Remind students that the final size determination being estimated at the end of the 15-second time period in which the light from the penlight is directed into the eye. Caution should be used by the officer so as not to move the light beam or allow the bulb to change in light intensity.</p> <p><u>Note:</u> Occasionally some users of marijuana have displayed a greenish coating on their tongue after recent use. However, this does not occur with all users.</p> <p><u>Point out</u> that this is properly called Conjunctival Injection. Conjunctiva is the mucous membrane that lines the inner surface of the eyelids and is continued over the forepart of the eyeball.</p> <p><u>Point out</u> that this should not be confused with conjunctivitis which is a disease of the eye. The vasodilation is the primary cause of the reddening of the eyes not the Cannabis smoke.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XXI-7</b> (Symptomatology Chart)</p> 	<p>3. Summary</p> <p>4. Demonstrations</p> <p>a. Video demonstrations (if available)</p> <p>b. Drug Evaluation and Classification exemplar demonstrations.</p>	<p>Visine causes vaso-constriction in the eyes and is often used to reduce the reddening.</p> <p>Show video of subject(s) under the influence of Cannabis. Relate behavior/ observations to the Symptomatology Chart.</p> <p>Refer students to the exemplars found at the end of Section XXI of their student manuals.</p> <p>Solicit students' comments and questions concerning expected results of the evaluation.</p>

## **Topics for Study**

1. What is the active ingredient in Cannabis?

### **Delta 9 THC**

2. Why are the Walk and Turn test and the One Leg Stand test excellent tools for recognizing persons under the influence of marijuana?

**Cannabis appears to interfere with a person's ability or willingness to pay attention. People under the influence of marijuana do not divide their attention very well. Walk and Turn and the One Leg Stand tests are divided attention tests.**

3. What is Marinol?

**A synthetic form of THC that is not derived from Cannabis plants. It is a prescriptive drug that is sometimes administered to cancer patients to suppress nausea that may accompany chemotherapy. Also known as Dronabinol.**

4. What is Sinsemilla?

**The unpollinated female cannabis plant, having a relatively high concentration of THC**

5. Name two important metabolites of THC, and describe how they affect the duration and perception of the effects of Cannabis.

**Hydroxy THC - causes the user to feel euphoric so they are aware of the effects.**

**Caboxy THC - there is no evidence at this time that this metabolite is psychoactive.**

# Session XXI

## Cannabis



XXI-1

## Cannabis

Upon successfully completing this session the student will be able to:

- Explain a brief history of Cannabis
- Identify common names and terms associated with Cannabis
- Identify common methods of administration for Cannabis
- Describe the symptoms, observable signs and other effects associated with Cannabis

Drug Evaluation & Classification Training

XXI-2A

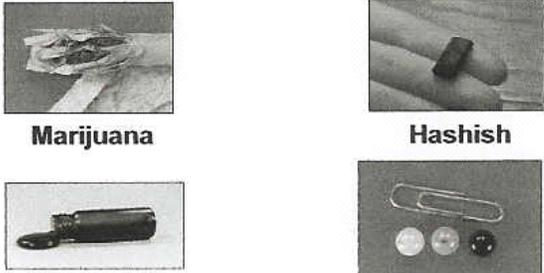
## Cannabis (Continued)

- Describe the typical time parameters, i.e. onset and duration of effects associated with Cannabis
- List the clues that are likely to emerge when the drug influence evaluation is conducted for a person under the influence of Cannabis
- Correctly answer the "topics for study" questions at the end of this session

Drug Evaluation & Classification Training

XXI-2B

## Forms of Cannabis



Marijuana

Hashish

Hash Oil

Marinol

Drug Evaluation & Classification Training

XXI-3

## Onset and Duration of Marijuana's Effects



- 8-9 seconds - User begins to feel and exhibit effects
- 10-30 minutes - Peak effects are reached
- 2-3 hours - User continues to feel and exhibit effects
- 3-6 hours - User feels "normal"

Note: Evidence of marijuana use may be present in blood/urine tests for extended periods after use.

Drug Evaluation & Classification Training

XXI-4

## Metabolites of THC

- Hydroxy THC
  - Causes Impairment and Euphoria
- Carboxy THC
  - (Not psychoactive)

Drug Evaluation & Classification Training

XXI-5

### Evaluation of Subjects Under the Influence of Cannabis

- HGN or VGN - none
- Lack of Convergence - present
- Impaired performance will be evident on Romberg, Walk and Turn, One Leg Stand and Finger to Nose

Drug Evaluation & Classification Training XXI-6A

### Evaluation of Subjects Under the Influence of Cannabis

**Vital Signs:**

- Pulse - up
- Blood pressure - up
- Body temperature - normal

Drug Evaluation & Classification Training XXI-6B

### Evaluation of Subjects Under the Influence of Cannabis

**Dark Room:**

- Pupil size - dilated\*
- Pupil reaction to light - normal

\*Possibly normal

Drug Evaluation & Classification Training XXI-6C

### Evaluation of Subjects Under the Influence of Cannabis

**General Indicators:**

- Body tremors
- Disoriented
- Debris in mouth (possible)
- Eyelid tremors
- Impaired perception of time and distance
- Increased appetite
- Marked reddening of conjunctiva
- Odor of marijuana
- Possible paranoia
- Relaxed inhibitions

Drug Evaluation & Classification Training XXI-6D

### Cannabis Symptomatology Chart

HGN	None
VGN	None
Lack of Convergence	Present
Pupil Size	Dilated*
Reaction to Light	Normal
Pulse Rate	Up
Blood Pressure	Up
Temperature	Normal
Muscle Tone	Normal

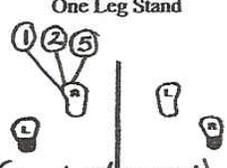
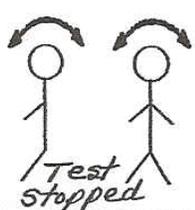
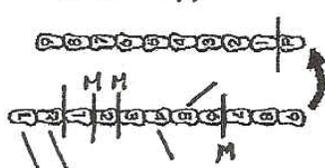
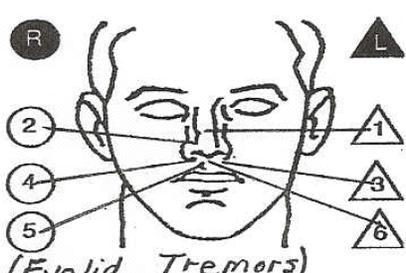
\* Or possibly normal

Drug Evaluation & Classification Training XXI-7

# QUESTIONS?

Drug Evaluation & Classification Training

## DRUG INFLUENCE EVALUATION

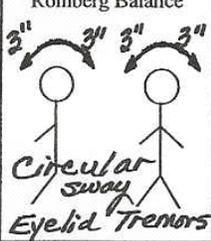
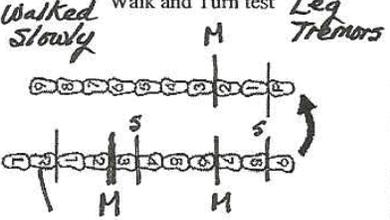
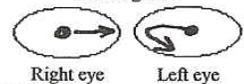
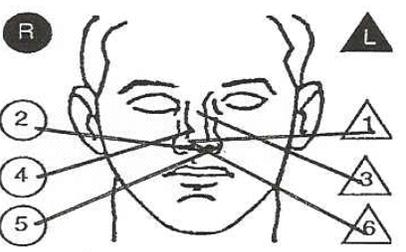
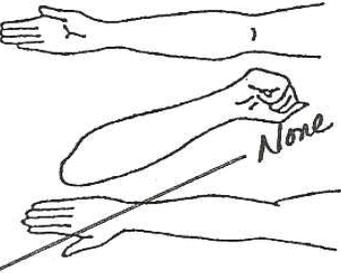
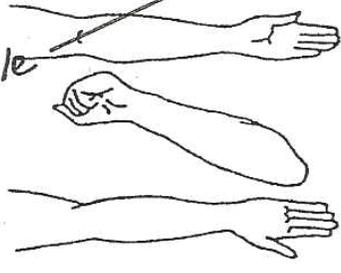
Evaluator <i>Cst. John Bercic, Vancouver PD</i>		DRE No. <i>4651</i>	Rolling Log No. <i>05-11-04</i>	Session XXI - #1	
Recorder/Witness <i>Sgt. Paul Milne, N.W.P.S</i>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <i>345789-05</i>	
Arrestee's Name (Last, First MI) <i>Clark, Kenneth A.</i>		DOB <i>5-24-84</i>	Sex <i>M</i>	Race <i>W</i>	Arresting Officer (Name, ID No.) <i>West Cst. John Ferguson, Kootney H.P.</i>
Date Examined/Time/Location <i>11-05-05, 2200 Hrs., Vancouver P.D.</i>		Breath Results: Instrument # <i>47451</i> <i>0.00 %</i>	Chemical Test <input type="checkbox"/> Refused <input type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood		
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <i>Couple hot dogs</i>	When? <i>5 pm</i>	What have you been drinking? How much? <i>Nothing</i>	Time of last drink? <i>N/A</i>	
By: <i>Cst. Ferguson</i>					
Time now? <i>About 1030 pm</i>	When did you last sleep? <i>Last night</i>	How long? <i>6 hrs.</i>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>Hell no, I feel great</i>	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>No, are you?</i>	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>"No drugs man."</i>		Attitude: <i>Boisterous, Cooperative</i>		Coordination: <i>Unstable</i>	
		Breath: <i>Odor of marijuana</i>		Face: <i>Flushed, sweaty</i>	
Speech: <i>Loud, talkative</i>		Eyes: <input checked="" type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery	Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)	Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy	
Pulse and time <i>1. 104 12212 2. 106 12227 3. 104 12240</i>	HGN Lack of smooth pursuit Maximum deviation Angle of onset	Left Eye <i>No</i> <i>No</i> <i>None</i>	Right Eye <i>No</i> <i>No</i> <i>None</i>	Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	One Leg Stand 
Romberg Balance 	Walk and Turn test <i>Test Stopped</i> 	Cannot keep balance <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Stops walking Misses heel to toe <i>✓✓</i> Steps off line <i>✓✓</i> Raises arms <i>✓</i> Actual # steps	
Internal clock <i>N/A</i> Est. as 30 seconds	Describe Turn <i>N/A</i>	Cannot do test (explain) <i>Nearly fell - Test stopped</i>		Type of footwear: <i>Lace up boots</i>	
Draw lines to spots touched 		Pupil Size Left <i>5.5</i> Right <i>5.5</i>	Room Light <i>5.5</i>	Darkness <i>8.0</i>	Direct <i>5.0 - 7.5</i>
		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Blood pressure <i>154/106</i>		Temperature <i>98.6°F</i>		Oral cavity: <i>Clear</i>	
Muscle tone: <input checked="" type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:		Reaction to Light: <i>Normal</i>	
What medication or drug have you been using? How much? <i>"Don't hassle me man." No answer</i>		Time of use? <i>No answer</i>	Where were the drugs used? (location) <i>"I ain't saying anything."</i>		
Date/Time of Arrest <i>11/05/05 2115 hrs.</i>	Time DRE Notified <i>2150</i>	Evaluation Start Time <i>2200</i>	Time Completed <i>2310</i>		
DRE signature (include rank) <i>John Bercic</i>		ID# <i>4651</i>	Reviewed by <i>[Signature]</i>		
Opinion of evaluator:		<input type="checkbox"/> Rule Out	<input type="checkbox"/> Alcohol	<input type="checkbox"/> CNS Stimulant	<input type="checkbox"/> Dissociative Anesthetic
		<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Inhalant
				<input type="checkbox"/> Narcotic Analgesic	<input checked="" type="checkbox"/> Cannabis

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Clark, Kenneth A.

1. **LOCATION:** The evaluation of Kenneth Clark was conducted in the interview room at the Vancouver Police Department.
2. **WITNESSES:** The evaluation was witnessed and recorded by Sgt. Paul Milne of the New Westminster Police Services.
3. **BREATH ALCOHOL TEST:** The arresting officer, Constable John Ferguson of the R.C.M.P. administered a breath test to Clark with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was contacted by radio and advised to contact Cst. Ferguson at the Vancouver Police Department for a drug evaluation. Cst. Ferguson advised he stopped Clark after observing him exit Highway 1A at a high rate of speed then fail to stop at a stop sign. The suspect seemed unconcerned about his driving and told the Constable that he was “just having some fun.” After performing poorly on the SFST’s, he was arrested for DUI.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the interview room at V.P.D. He was loud and laughing and repeatedly said, “This machine says I’m not drunk.” He had poor coordination and balance and several times bumped into the interview table. He had a noticeable reddening of the conjunctiva.
6. **MEDICAL PROBLEMS AND TREATMENT:** None noted or stated.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect was unable to perform the test and it was stopped for safety reasons. Walk & Turn: Suspect lost his balance twice during the instructions stage, missed heel to toe three times in the first seven steps and the test was stopped for safety reasons. One Leg Stand: Suspect put his foot down three times, nearly fell and the test was stopped for safety reasons. Finger to Nose: Suspect was seated and missed the tip of his nose on each attempt. The suspect exhibited eyelid tremors.
8. **CLINICAL INDICATORS:** Suspect had a Lack of Convergence. His pupils were dilated in room light and direct light. His pulse and blood pressure were above the normal ranges.
9. **SIGNS OF INGESTION:** The suspect had an odor of marijuana on his breath.
10. **SUSPECT’S STATEMENTS:** Suspect at first denied using drugs then stated, “What’s the big deal? A little pot doesn’t hurt anybody, man.”
11. **DRE’S OPINION:** In my opinion Clark is under the influence of a Cannabis and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a blood sample.

## DRUG INFLUENCE EVALUATION

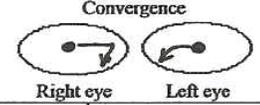
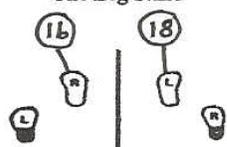
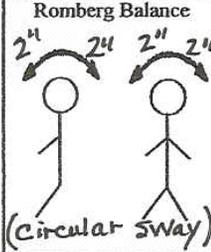
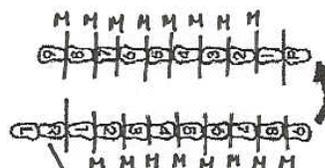
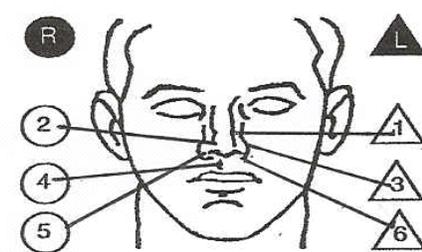
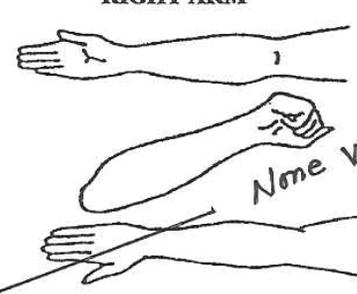
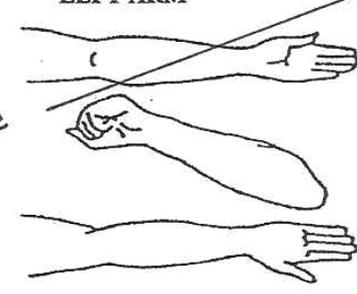
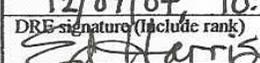
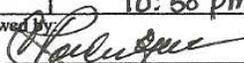
Evaluator <b>Robert Hayes, Albany PD</b>		DRE No. <b>6606</b>	Rolling Log No. <b>04-23</b>	Session XXI - # 2	
Recorder/Witness <b>Sgt. Eric Judah, OSP</b>		Crash: <input type="checkbox"/> Fatal <input checked="" type="checkbox"/> None <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>04-99325</b>	
Arrestee's Name (Last, First MI) <b>Peltier, Charles E.</b>		DOB <b>5-16-70</b>	Sex <b>M</b>	Race <b>B</b>	Arresting Officer (Name, ID No.) <b>Tpr. Steve Webster, OSP</b>
Date Examined/Time/Location <b>09/11/04, 2325 Linn Co. Jail</b>		Breath Results: <input type="checkbox"/> Refused Instrument # <b>21240</b> <b>0.06 %</b>		Chemical Test <input type="checkbox"/> Refused <input checked="" type="checkbox"/> Urine <input type="checkbox"/> Blood	
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? <b>Hot dog 3 hrs ago</b>		What have you been drinking? How much? Time of last drink? <b>Beer "Two" 2 hrs ago</b>	
By: <b>Tpr. Webster</b>		When?		Time of last drink?	
Time now? <b>About 9 pm</b>		When did you last sleep? <b>Last night</b>		How long? <b>About 5 hrs</b>	
Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"I don't take anything"</b>		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"Nothing man."</b>		Attitude: <b>Impatient, anxious</b>		Coordination: <b>Poor, disoriented</b>	
Speech: <b>slow, slurred</b>		Breath: <b>Alcoholic beverage</b>		Face: <b>Normal</b>	
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	
Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy	
Pulse and time 1. <b>110 / 2330</b> 2. <b>112 / 2342</b> 3. <b>110 / 2353</b>		HGN Lack of smooth pursuit Maximum deviation Angle of onset		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Romberg Balance 		Walk and Turn test <b>Walked Slowly</b> 		Convergence 	
Cannot keep balance Starts too soon:		Leg Tremors		One Leg Stand 	
Internal clock <b>42</b> Est. as 30 seconds		Describe Turn <b>Lost balance, stepped to the right</b>		Cannot do test (explain) <b>N/A</b>	
Draw lines to spots touched 		Pupil Size Left <b>6.5</b> Right <b>6.5</b>		Room Light <b>8.0</b> Darkness <b>8.0</b> Direct <b>6.0</b>	
Blood pressure <b>148/100</b>		Temperature <b>98.4 °F</b>		Oral cavity: <b>Brownish coating on tongue</b>	
Muscle tone: <input checked="" type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Comments:		RIGHT ARM 		LEFT ARM 	
What medication or drug have you been using? How much? <b>"Just a couple of beers"</b>		Time of use? <b>N/A</b>		Where were the drugs used? (Location) <b>N/A</b>	
Date/Time of Arrest <b>09/11/04, 2305 hrs.</b>		Time DRE Notified <b>2315 hrs.</b>		Evaluation Start Time <b>2325</b>	
DRE Signature (Include rank) <b>Robert Hayes</b>		ID # <b>6606</b>		Time Completed <b>0030 09/12/04</b>	
Opinion of evaluator:		<input checked="" type="checkbox"/> Alcohol <input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant		<input type="checkbox"/> Rule Out <input type="checkbox"/> Medical <input type="checkbox"/> CNS Depressant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Narcotic Analgesic <input checked="" type="checkbox"/> Cannabis	

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Peltier, Charles E.

1. **LOCATION:** The evaluation of Charles Peltier was conducted in the interview room at the Linn County Jail.
2. **WITNESSES:** The evaluation was witnessed and recorded by Sgt. Eric Judah of the Oregon State Police.
3. **BREATH ALCOHOL TEST:** The arresting officer, Senior Trooper Steve Webster of the Oregon State Police administered a breath test to Peltier with a 0.06% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was contacted by radio and advised to contact Sgt. Judah and Sr. Tpr. Webster at the Linn County Jail for a drug evaluation. Sr. Tpr. Webster advised he arrested Peltier for DUI after he attempted to elude officers on I-5 south of Salem. The suspect was detained with the use of spike strips. The suspect was disoriented and had poor balance and coordination. After performing poorly on the SFST's, he was arrested for DUI.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the interview room at the jail. He seemed impatient and anxious. He had poor coordination and balance and his speech was slow and slurred.
6. **MEDICAL PROBLEMS AND TREATMENT:** None noted or stated.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect had an approximate 3" circular sway and estimated 30 seconds in 42 seconds. Walk & Turn: Suspect lost his balance during the instructions stage, missed heel to toe, stopped twice while walking and raised his arms for balance. One Leg Stand: Suspect swayed while balancing, used his arms for balance, put his foot down once and had noticeable leg tremors. Finger to Nose: Suspect missed the tip of his nose on four of the six attempts and exhibited eyelid tremors.
8. **CLINICAL INDICATORS:** Suspect had a Lack of Convergence. His pupils were dilated in room light and direct light. His pulse and blood pressure were above the normal ranges.
9. **SIGNS OF INGESTION:** The suspect had a brownish coloration on his tongue.
10. **SUSPECT'S STATEMENTS:** Suspect admitted drinking "Two beers" and laughed when asked about smoking marijuana.
11. **DRE'S OPINION:** In my opinion Peltier is under the influence of Alcohol and Cannabis and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a urine sample.

## DRUG INFLUENCE EVALUATION

Evaluator <b>Ofc. Ed Harris, Seattle P.D.</b>		DRE No. <b>9532</b>		Rolling Log No. <b>04-034</b>		Session <b>XXI - #3</b>	
Recorder/Witness <b>Sgt. Rob Sharpe, W.S.P.</b>		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input checked="" type="checkbox"/> Property		Case # <b>04-776165</b>			
Arrestee's Name (Last, First MI) <b>Wright, James B.</b>		DOB <b>10/20/83</b>		Sex <b>M</b>		Race <b>W</b>	
Date Examined/Time/Location <b>12/07/04 10:50 pm, Seattle P.D. West Precinct</b>		Breath Results: Instrument # <b>47731</b> <b>.00 %</b>		Chemical Test <input type="checkbox"/> Refused <input type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood		Arresting Officer (Name, ID No.) <b>Sgt. R. Sharpe, WSP #9636</b>	
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? By: <b>Sgt. Sharpe</b> <b>Couple of burgers</b> <b>7pm</b>		When? <b>7pm</b>		What have you been drinking? How much? <b>Nothing, I don't drink</b>	
Time now? <b>About midnight</b>		When did you last sleep? <b>Last night</b>		How long? <b>9 hrs.</b>		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <b>Relaxed, Care free</b>		Coordination: <b>Poor, Stumbling</b>			
Speech: <b>Slow &amp; deliberate</b>		Breath: <b>Odor of marijuana</b>		Face: <b>Normal</b>			
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy			
Pulse and time 1. <b>108 / 11:07 pm</b> 2. <b>110 / 11:20 pm</b> 3. <b>108 / 11:30 pm</b>		HGN Lack of smooth pursuit Maximum deviation Angle of onset		Left Eye <b>No</b> Right Eye <b>No</b> Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Convergence  Right eye Left eye		One Leg Stand  <b>Counted slowly</b>	
Romberg Balance  <b>(Circular sway)</b>		Walk and Turn test 		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon: <input checked="" type="checkbox"/>		Type of footwear: <b>Loafers</b>	
Internal clock <b>41</b> Est. as 30 seconds		Describe Turn <b>Spun around</b>		Cannot do test (explain) <b>N/A</b>		Nasal area: <b>clear</b>	
Draw lines to spots touched  <b>(Eyelid Tremors)</b>		Pupil Size Left <b>6.0</b> Right <b>6.0</b>		Room Light <b>6.0</b> Darkness <b>7.5</b> Direct <b>5.0-7.0</b>		Oral cavity: <b>Green coating on tongue</b>	
Blood pressure <b>140/96</b> Temperature <b>98.8 °f</b>		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Reaction to Light: <b>Normal</b>	
Muscle tone: <input checked="" type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		RIGHT ARM  <b>None visible</b>		LEFT ARM 			
Comments:		What medication or drug have you been using? How much? <b>"Nothing man"</b> <b>N/A</b>		Time of use? <b>"I didn't"</b>		Where were the drugs used? (location) <b>"I ain't saying"</b>	
Date/Time of Arrest <b>12/07/04 10:25 p.m.</b>		Time DRE Notified <b>10:40 p.m.</b>		Evaluation Start Time <b>10:50 pm</b>		Time Completed <b>11:50 p.m.</b>	
DRE signature (include rank) 		ID # <b>9532</b>		Reviewed by: 			
Opinion of evaluator:		<input type="checkbox"/> Rule Out <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant		<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen	
		<input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant		<input type="checkbox"/> Narcotic Analgesic <input checked="" type="checkbox"/> Cannabis			

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Wright, James B.

1. **LOCATION:** The evaluation of James Wright took place in the interview room at the West Precinct of the Seattle Police Department.
2. **WITNESSES:** Arresting officer, Sgt. Rob Sharpe of the Washington State Patrol.
3. **BREATH ALCOHOL TEST:** Sgt. Sharpe administered a breath test to Wright with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was on duty at the West Precinct when contacted by Sgt. Sharpe requesting a drug evaluation. Sgt. Sharpe advised he arrested Wright after his vehicle struck another vehicle on Highway 99 north of Seattle. There was an odor of marijuana coming from the suspect's vehicle. He had poor balance and coordination and was unable to perform the SFST's as directed. Sgt. Sharpe located a small pipe containing marijuana residue in the suspect's vehicle.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the interview room at the jail. He was very relaxed and carefree acting. He had poor coordination and balance and his speech was slow and deliberate.
6. **MEDICAL PROBLEMS AND TREATMENT:** None noted or stated.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect had an approximate 2" circular sway and estimated 30 seconds in 41 seconds. Walk & Turn: Suspect lost his balance during the instructions stage, started walking too soon, raised his arms for balance and failed to touch heel to toe on any of his steps. One Leg Stand: Suspect swayed while balancing, used his arms for balance and put his foot down. Finger to Nose: Suspect missed the tip of his nose on all six attempts and exhibited eyelid tremors.
8. **CLINICAL INDICATORS:** Suspect had a Lack of Convergence. His pupils were dilated in room light and direct light. He also had rebound dilation. His pulse and blood pressure were above the normal ranges.
9. **SIGNS OF INGESTION:** The suspect had a green coating on his tongue.
10. **SUSPECT'S STATEMENTS:** Suspect denied using drugs.
11. **DRE'S OPINION:** In my opinion Wright is under the influence of Cannabis and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a blood sample.
13. **MISCELLANEOUS:** The suspect was also charged with possession of marijuana.

**SESSION XXII**  
**OVERVIEW OF SIGNS AND SYMPTOMS**

## **SESSION XXII    OVERVIEW OF SIGNS AND SYMPTOMS**

Upon successfully completing this session the student will be able to:

- o     Describe the possible effects that may be observed in each major indicator of drug impairment.
  
- o     Identify the effects that will most likely be observed with subjects under the influence of each drug category.

### Content Segments

- A.    The Major Indicators and Their Possible Effects
  
- B.    Effects Associated With the Drug Categories

### Learning Activities

- o     Instructor Led Presentations
  
- o     Interactive Discussions

**Aids**

**Lesson Plan**

**Instructor Notes**



**XXII-1** (Title)



**XXII-2**  
(Objectives)



**OVERVIEW OF SIGNS AND SYMPTOMS**

Total Lesson Time:  
Approximately 60 Minutes

Display Session Title

**NOTE: PRIOR TO THE START OF THIS SESSION, DRAW THE FOLLOWING MATRIX ON THE DRY ERASE BOARD OR FLIPCHART:**

	Possible Effects	Depress	Stimul	Halluc	D/A	Narcot	Inhal	Canna
HGN								
VGN								
Lack Conv								
Pupil Size								
React Light								
Pulse Rate								
Blood Press								
Temp								



**15 Minutes**

**A. The Major Indicators and Their Possible Effects**

1. The major indicators of drug impairment are:

Point to the major indicators on the matrix.

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>a. Horizontal Gaze Nystagmus</li> <li>b. Vertical Gaze Nystagmus</li> <li>c. Lack of Convergence</li> <li>d. Pupil Size</li>   <li>e. The Reaction of the Pupils to Light.</li>   <li>f. Pulse Rate</li> <li>g. Blood Pressure</li> <li>h. Body Temperature</li>   <li>2. Possible effects that might be observed with <b>Nystagmus</b>. <ul style="list-style-type: none"> <li>a. With Horizontal Gaze Nystagmus, there are only two possible effects that might be observed. <ul style="list-style-type: none"> <li>o Either HGN will be <b>present</b>;</li> <li>o or it will be <b>none</b>.</li> </ul> </li> </ul> </li> </ul>	<p>Point out that the first five major indicators all concern the eyes.</p> <p>Point out that the last three major indicators concern the vital signs.</p> <p><b>ANNOUNCE TO THE STUDENTS: WE WILL NOW REVIEW ALL OF THE POSSIBLE EFFECTS THAT WE MIGHT OBSERVE WITH EACH MAJOR INDICATOR.</b></p> <p>Under the "Possible Effects" column of the matrix, opposite "HGN", write:  <b>PRESENT</b>  <b>OR</b>  <b>NONE</b></p> <p>Point out that there is no drug that <u>stops</u> Horizontal Gaze Nystagmus. Some drugs cause HGN to be present, others do not; but there is no drug that "cures" HGN.</p>

Aids	Lesson Plan	Instructor Notes
	<p>b. With Vertical Gaze Nystagmus, there are also only two possible effects.</p> <ul style="list-style-type: none"> <li>o Either it will be <b>present</b>;</li> <li>o or it will be <b>none</b>.</li> </ul> <p>3. For <b>Lack of Convergence</b>, there are also only two possible effects.</p> <ul style="list-style-type: none"> <li>a. Either Lack of Convergence will be <b>present</b>;</li> <li>b. Or it will be <b>none</b>.</li> <li>c. Just as with Nystagmus, there is no drug that "cures" Lack of Convergence.</li> </ul> <p>4. For <b>Pupil Size</b>, there are three possible effects that might be seen.</p> <ul style="list-style-type: none"> <li>a. The pupils might be <b>normal</b> of size;</li> <li>b. or, the pupils might be <b>dilated</b>;</li> <li>c. or, they might be <b>constricted</b>.</li> </ul>	<p><b>Ask students:</b> What are the possible effects we might observe with Vertical Gaze Nystagmus?</p> <p>Opposite "VGN", write: <b>PRESENT</b> <b>OR</b> <b>NONE</b></p> <p><b>Ask students:</b> What effects might we observe with Lack of Convergence?</p> <p>Opposite "Lack Conv", write: <b>PRESENT</b> <b>OR</b> <b>NONE</b></p> <p>Point out that, when we say that "Lack of Convergence is present", we mean that the eyes are <b>unable</b> to converge or cross properly.</p> <p><b>Now ask students:</b> What effects might we observe with Pupil Size?</p> <p>Opposite "Pupil Size", write: <b>NORMAL</b> <b>OR</b> <b>DILATED</b> <b>OR</b> <b>CONSTRICTED</b></p> <p><b>Ask students:</b> What effects might we observe with the pupils' reaction to light?</p>

Aids	Lesson Plan	Instructor Notes
	<p>5. There are a number of effects that might be observed in the pupils' <b>Reaction to Light</b>.</p> <p>a. The pupils might react in a <b>normal</b> manner, i.e. by constricting somewhat in one second or less.</p> <p>b. Or, the pupils might react <b>slow</b>, i.e. by constricting somewhat, but requiring more than one second to do so.</p> <p>c. In some instances, you may observe very little, or no visible reaction to light.</p> <p>d. If there is a visible reaction of the pupils, it is possible that two other effects might be seen.</p> <ul style="list-style-type: none"> <li>o <b>Hippus</b>, i.e. pupils rhythmically pulsating in size.</li> <li>o <b>Rebound Dilation</b>, i.e. a period of constriction followed by dilation with a change equal to or greater than 2 mm.</li> </ul> <p>6. For each of the <b>Vital Signs</b>, there are three possible effects.</p> <p>a. The pulse rate, or blood pressure, or body temperature could be <b>normal</b>.</p> <p>b. Or, it could be <b>UP</b>.</p>	<p>Opposite "React Light", write:  <b>NORMAL</b>  <b>OR</b>  <b>SLOW</b>  <b>OR</b>  <b>LITTLE TO NONE VISIBLE</b></p> <p>Point out that we should <u>not</u> report that the "pupils did not react at all", but rather we should report "no visible reaction".</p> <p>Opposite "Pulse Rate", write:  <b>NORMAL</b>  <b>OR</b>  <b>UP</b>  <b>OR</b>  <b>DOWN</b></p>

Aids	Lesson Plan	Instructor Notes
 <p>45 Minutes</p>	<p>c. Or, it could be <b>DOWN</b>.</p> <p><b>B. Effects Associated with the Drug Categories</b></p> <p>1. CNS Depressants.</p> <p>a. HGN: <b>present</b></p> <p>b. VGN: <b>present</b></p> <p>c. Lack Conv: <b>present</b></p> <p>d. Pupil Size: <b>normal</b>, <u>except</u> with the specific depressant Methaqualone and Soma, which <b>dilates</b> pupils.</p> <p>e. React Light: <b>slow</b></p> <p>f. Pulse Rate: <b>down except Methaqualone and ETOH, which may elevate.</b></p> <p>g. Blood Pressure: <b>down</b></p>	<p>Write exactly the same things opposite "Blood Press".</p> <p>Write exactly the same things opposite "Body Temp".</p> <p>Solicit students' comments and questions about the possible effects of the eight major indicators.</p> <p>Ask for a student to volunteer to state the major effects that usually will be seen in a suspect under the influence of a <b>CNS Depressant</b>. Correct the students' statements, as necessary, and <b>write</b> the correct effects on the matrix, under the "Depress." column.</p> <p>i.e. at high doses for that individual.</p>



Aids	Lesson Plan	Instructor Notes
	<p>3. Hallucinogens</p> <ul style="list-style-type: none"> <li>a. HGN: <b>none</b></li> <li>b. VGN: <b>none</b></li> <li>c. Lack Conv: <b>none</b></li> <li>d. Pupil Size: <b>dilated</b></li> <li>e. React Light: <b>normal, certain Psychedelic Amphetamines cause slow reaction.</b></li> <li>f. Pulse Rate: <b>up</b></li> <li>g. Blood Press: <b>up</b></li> <li>h. Body Temp: <b>up</b></li> </ul> <p>4. Dissociative Anesthetics</p> <ul style="list-style-type: none"> <li>a. HGN: <b>present</b></li> <li>b. VGN: <b>present</b></li> <li>c. Lack Conv: <b>present</b></li> <li>d. Pupil Size: <b>normal</b></li> <li>e. React Light: <b>normal</b></li> <li>f. Pulse Rate: <b>up</b></li> </ul>	<p>Point out that "Reaction to Light" is the only major indicator that distinguishes Hallucinogens from CNS Stimulants, and "Reaction to Light" is a relatively subtle clue. For this reason, it can be very difficult to differentiate between these two categories.</p> <p>Thank the "volunteer" for thier help with Hallucinogens. Pick another volunteer to help with Dissociative Anesthetics.</p> <p>i.e. at high doses; however, it is more common to see Vertical Gaze Nystagmus in someone under the influence of a Dissociative Anesthetic.</p>

Aids	Lesson Plan	Instructor Notes
	<p>g. Blood Press: <b>up</b></p> <p>h. Body Temp: <b>up</b></p> <p>5. Narcotic Analgesics</p> <p>a. HGN: <b>none</b></p> <p>b. VGN: <b>none</b></p> <p>c. Lack Conv: <b>none</b></p> <p>d. Pupil Size: <b>constricted</b></p> <p>e. React Light: <b>little or none visible</b></p> <p>f. Pulse Rate: <b>down</b></p> <p>g. Blood Press: <b>down</b></p> <p>h. Body Temp: <b>down</b></p> <p>6. Inhalants</p> <p>a. HGN: <b>present</b></p> <p>b. VGN: <b>present</b></p>	<p>Thank the "volunteer" for their help..</p> <p>Select another volunteer to help with <b>Narcotic Analgesics</b>.</p> <p>Thank the "volunteer" for their help with Narcotic Analgesics.</p> <p>Select another volunteer to help with <b>Inhalants</b>. Remind the volunteer that, with Inhalants, many of the effects noted on the major indicators will depend upon the specific substance inhaled.</p> <p>The vast majority of Inhalants <u>will</u> cause HGN; but it is possible that HGN would not be observed with a few specific Inhalants.</p> <p>High dose for that individual</p>

Aids	Lesson Plan	Instructor Notes
	<p>c. Lack Conv: <b>present</b></p> <p>d. Pupil Size: <b>normal but may be dilated</b></p> <p>e. React Light: <b>slow</b></p> <p>f. Pulse Rate: <b>up</b></p> <p>g. Blood Press: <b>up/down</b></p> <p>h. Body Temp: <b>up/down/normal</b></p> <p>7. Cannabis</p> <p>a. HGN: <b>none</b></p> <p>b. VGN: <b>none</b></p> <p>c. Lack Conv: <b>present</b></p> <p>d. Pupil Size: <b>dilated or possibly normal</b></p> <p>e. React Light: <b>normal</b></p> <p>f. Pulse Rate: <b>up</b></p>	<p>The Volatile Solvents and the Aerosols usually cause blood pressure to be above normal; but the Anesthetic Gases can cause blood pressure to be below normal, even though they elevate the pulse rate.</p> <p>Some Inhalants leave body temperature within the normal range; others may elevate the temperature.</p> <p>Thank the "volunteer" for their help with Inhalants. Select another volunteer to help with <b>Cannabis</b>.</p>

Aids	Lesson Plan	Instructor Notes
	<p>g. Blood Press: <b>up</b></p> <p>h. Body Temp: <b>normal</b></p>	<p>Thank the "volunteer" for their help with Cannabis.</p> <p>Solicit students' comments or questions about the drug categories.</p> <p><u>REFER STUDENTS TO</u> the addendum at the end of this session is a small portion of the available scientific literature dealing with drug influence symptomatology. The sources are considered to be reliable sources of drug symptomatology.</p> <p><u>Stress</u> that not all symptoms associated with a drug category will be observed in all subjects in all cases. The excerpts from the references are consistent with DRE instruction and experience.</p>

# Session XXII

## Overview of Signs and Symptoms



XXII-1

## Overview of Signs and Symptoms

Upon successfully completing this session the students will be able to:

- Describe the possible effects that may be observed in each major indicator of drug impairment
- Identify the effects that will most likely be observed with subjects under the influence of each drug category

Drug Evaluation & Classification Training

XXII-2

# QUESTIONS?

Drug Evaluation & Classification Training

**COMPARISON OF DRE SYMPTOMATOLOGY  
WITH CROSS SECTION OF DRUG SYMPTOMATOLOGY SOURCES**

**CNS DEPRESSANTS:**

DRE Symptomatology:

Nystagmus	decreased pulse
decreased blood pressure	uncoordinated
disoriented	sluggish
thick slurred speech	drunk-like appearance

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A.; Goodman, I.; MacMillan Publishing Co. 1985, Barbiturates, pages 546-547:

Nystagmus	Strabismus
difficulty in visual accommodation	
vertigo	ataxia gait
positive Romberg sign	Hypotonia
Dysmetria	Diplopia
sluggishness	difficulty in thinking
slowness, slurring of speech	poor comprehension
poor memory	faulty judgement
emotional lability	

A Primer of Drug Action, Julien, Robert M. W.H. Freeman and Company, New York, 8 Ed. 1997.

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3rd Ed. , Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989. p.19.

Encyclopedia of Drug Abuse, O'Brien, Robert; Cohen, Sydney. M.D. Facts on File, INC New York (1984), page 36: barbiturates effects like alcohol (staggering, poor motor control).

Drug Abuse and Dependence, Grinspoon, Lester,MD; Bakalar,James B., Harvard Medical School Mental Health Review No. 1 (1990), page 11: sedative hypnotics same as alcohol and other depressants

Drugs of Abuse, Giannini, A. James, M.D.; Slaby, Andrew E. M.D., Ph.D. Medical Economics Books, Oradell, New Jersey (1989), page 72: Benzodiazepines same as barbiturate effects; pages 247; 292): Barbiturates:

Nystagmus	depressed pulse
depressed blood pressure	diminished concentration
incoordination	decreased reaction time

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer, Joseph, M.D.. Ph.D..D Plenum Medical Book Company, New York (1988), p. 135.

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 159

Maladaptive behavioral changes, e.g., disinhibition of sexual or aggressive impulses, mood lability, impaired judgment, impaired social or occupational functioning.

slurred speech	incoordination
unsteady gait	impairment in attention or memory

### **CNS STIMULANTS:**

DRE Symptomatology:

dilated pupils	increased pulse rate
increased temperature	increased blood pressure
body tremors	restlessness
excited	euphoric
talkative	exaggerated reflexes
anxiety	grinding teeth
redness to nasal area	runny nose
loss of appetite	insomnia
increased alertness	

The Pharmacological Basis of Therapeutics, Seventh Edition,

Gilman, A.; Goodman, I.; MacMillan Publishing Co. 1985, Cocaine 551-554

Medical Toxicology-Diagnosis and Treatment of Human Poisoning, Ellenhorn, Matthew J., Barceloux, Donald G. Elsevier Science Pub. Co. 1988, Amphetamines, Page 634:

Mild influence:	
Mydriasis	hyperreflexia

restlessness  
irritability  
tremor  
Diaphoresis  
nausea  
pallor

talkativeness  
insomnia  
flushing  
combativeness  
vomiting  
dry mucous membranes

Moderate:

hyperactivity  
hypertension  
Tachycardia  
chest discomfort  
abdominal pain  
mild temperature  
elevation  
repetitive behavior  
panic reactions

confusion  
Tachypnea  
premature ventricular contraction  
vomiting  
Profuser Diaphoresis

impulsivity  
hallucinations

Serious:

delirium  
Hyperreflexia  
Hypotension

marked Hypertension/Tachycardia  
convulsions  
coma

Cocaine, page 650-659

Early Stimulation:

euphoria  
excitement  
irritable behavior  
sudden headache  
vomiting  
twitching of small muscles  
tremor  
Cocaine Psychosis  
elevation of pulse

Garrulity  
apprehension  
Mydriasis  
nausea  
dizziness  
tics  
jerks  
hallucinations  
increased respiration

Advanced:

convulsions  
decreased consciousness

Hyperreflexia  
increased pulse and blood pressure

Later Stages:

Hypotension  
Dyspnea et al

Hypothermia

A Primer of Drug Action, Julien, Robert M. W.H. Freeman and Company, New York, 1992, pages 120-123: Amphetamines and cocaine (CNSS):

dilation of pupils	increased blood pressure
slight tremor	restlessness
agitation	possibly hallucinations

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3rd Ed. , Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989, page 99: CNSS cause:

dilation of pupils	rapid heart rate
elevation of blood pressure	tremor in hands
increased body temperature	restlessness

Encyclopedia of Drug Abuse, O'Brien, Robert; Cohen, Sydney. M.D. Facts on File, INC New York (1984), pages 25, 121: Amphetamine:

dilation of pupils	increase heart rate
blood pressure	flushing
teeth grinding	dry mouth
tremors	lack of coordination

pages 64, 100, 121:

dilation of pupils	increased heartbeat
increased temperature	similar to Amphetamine

Drug Abuse and Dependence, Grinspoon, Lester,MD; Bakalar,James B., Harvard Medical School Mental Health Review No. 1 (1990), pages 8 and 10 Cocaine and Amphetamine:

dilated pupils	increased pulse
increased blood pressure	vasoconstriction
agitation tremors	increased temperature

Drugs of Abuse, Giannini, A. James, M.D.; Slaby, Andrew E. M.D., Ph.D. Medical Economics Books, Oradell, New Jersey(1989), page 29 Amphetamines:

pupil dilation (Mydriasis)	increased pulse rate
elevated blood pressure	hyperactive
talkative	irritable
restless	Anorexia

tremors  
teeth grinding (Bruxism)  
illogical, loose thoughts

urinary retention  
fidgety, jerky, random motions

Page 295: Cocaine:

dilated pupils  
increased blood pressure  
Hyperpyrexia

Tachycardia  
vasoconstriction

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer, Joseph, M.D.. Ph.D..D Plenum Medical Book Company, New York (1988) page 142: Amphetamine:

increased pulse  
possibly increased temperature  
general increase in psychomotor activity

increased blood pressure  
increased wakefulness

page 145: Cocaine

Mydriasis (dilated pupils);  
euphoria

may cause psychosis  
agitation

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 142.

COCAINE:

Maladaptive behavioral changes, e.g., euphoria, fighting, grandiosity, hyper-vigilance, psychomotor agitation, impaired judgment, impaired social or occupational functioning.

pupillary dilation  
elevated blood pressure  
nausea or vomiting

Tachycardia  
perspiration or chills  
visual or tactile hallucinations

AMPHETAMINE

Maladaptive behavioral changes, e.g., fighting, grandiosity, hyper-vigilance, psychomotor agitation, impaired judgment, impaired social or occupational functioning.

pupillary dilation  
elevated blood pressure  
nausea or vomiting

Tachycardia  
perspiration or chills

**HALLUCINOGENS:**

## DRE Symptomatology:

dilated pupils	increased pulse rate
increased blood pressure	increased temperature
dazed appearance	body tremors
Synesthesia	hallucinations
paranoia	uncoordinated
nausea	disoriented
difficulty in speech	perspiring
poor perception of time/distance	

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A.; Goodman, I.; MacMillan Publishing Co. 1985, LSD and Related Drugs, page 564

pupillary dilation	increased blood pressure
Tachycardia	Hyperreflexia
tremor	nausea
Piloerection	muscular weakness
increased body temperature	hallucinations
Hyper vigilance	Synesthesia
loss of boundaries	

Medical Toxicology-Diagnosis and Treatment of Human Poisoning, Ellenhorn, Matthew J., Barceloux, Donald G. Elsevier Science Pub. Co. 1988, LSD, pages 667-669:

pupillary dilation	increased heart rate
increased body temperature	Piloerection
weakness	tremor
Hyperreflexia	Ataxia
hallucinations	depersonalization
poor judgment	mood swings

A Primer of Drug Action, Julien, Robert M.; W. H. Freeman and Company, New York, 1992

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3rd Ed.), Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989 page 160:

dilated pupils	increased blood pressure
increased awareness	faltered body images
sensory input	fine tremor
flushed face	increased body temperature

Encyclopedia of Drug Abuse, O'Brien, Robert; Cohen, Sydney. M.D. Facts on File, Inc New York (1984), pages 100; 115 120, 153): Hallucinogens:

dilated pupils	increased heart rate
increased blood pressure	increased temperature
profuse perspiration	loss of appetite
hallucinations	

Drug Abuse and Dependence, Grinspoon, Lester, MD; Bakalar, James B., Harvard Medical School Mental Health Review No. 1 (1990)

Drugs of Abuse, Giannini, A. James, M.D.; Slaby, Andrew E. M.D., Ph.D. Medical Economics Books, Oradell, New Jersey (1989), page 218: LSD:

Ataxia	high blood pressure
Hyperreflexia	incoordination
Tachycardia	

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer, Plenum Medical Book Company, New York (1988)

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 145.

Maladaptive behavioral changes, e.g., marked anxiety or depression, ideas of reference, fear of losing one's mind, paranoid ideation, impaired judgment, impaired social or occupational functioning.

Perceptual changes occurring in a state of full wakefulness and alertness, e.g., subjective intensification of perceptions, depersonalization, derealization, illusions, hallucinations, Synesthesia

pupillary dilation	Tachycardia
sweating	palpitations
blurring of vision	tremors
incoordination	

### **DISSOCIATIVE ANESTHETICS (PHENCYCLIDINE)**

DRE Symptomatology:

Nystagmus	increased pulse
increased blood pressure	increased temperature
perspiring	warm to the touch

blank stare	early onset of nystagmus
"moon walking"	difficulty in speech
incomplete responses	repetitive response
repetitive speech	increased pain threshold
cyclic behavior	confused, agitated
hallucinations	possibly violent and combative

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A.; Goodman, I.; MacMillan Publishing Co. 1985, PCP, page 565-567

Nystagmus	elevated heart rate
elevated blood pressure	feeling of intoxication
staggering gait	slurred speech
numbness of extremities	sweaty
muscular rigidity	blank stare
drowsiness	hostile behavior
repetitive movements	

Medical Toxicology-Diagnosis and Treatment of Human Poisoning, Ellenhorn, Matthew J., Barceloux, Donald G. Elsevier Science Pub. Co. 1988, PCP 768-777:

Nystagmus	Miosis
depressed light reflexes	blurred vision
diminished pain	Ataxia
tremors	muscle weakness
slurred speech	drowsiness
increased pulse rate	increased blood pressure
Amnesia	anxiety/agitation
body image distortion	euphoria
depersonalization	disordered thought processes
hallucinations	

A Primer of Drug Action, Julien, Robert M. W.H. Freeman and Company, New York, 1997, page 262: PCP:

increased blood pressure	blank stare
disinhibition	mood swings
muscle rigidity	agitation
delirium excitement	disorientation
hallucinations	analgesia
speech difficulty	pain tolerance
elevated blood pressure	

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3rd Ed.), Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989 p. 178

sweating	muscle rigidity
fever convulsions	increased blood pressure

Encyclopedia of Drug Abuse, O'Brien, Robert; Cohen, Sydney. M.D. Facts on File, INC New York (1984), page 100, 208: PCP:

Nystagmus	increased blood pressure
increased pulse rate	flushing
mood swings	hallucinations
changes in body awareness	speech difficulties
violent behavior	decreased responsiveness

Drug Abuse and Dependence, Grinspoon, Lester, M.D.; Bakalar, James B., Harvard Medical School Mental Health Review No. 1 (1990), page 25: PCP:

body image distortions	increased blood pressure
Nystagmus	muscle rigidity
loss of muscle control	incoherent speech
memory loss drooling	blank stare

Drugs of Abuse, Giannini, A. James, M.D.; Slaby, Andrew E. M.D., Ph.D. Medical Economics Books, Oradell, New Jersey(1989) page 296: PCP:

Nystagmus	disorientation
hallucination	extreme agitation
loss of motor control	disassociation from
automated speech	environment
Nystagmus at rest	

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer, Joseph, M.D. Ph.D.D Plenum Medical Book Company, New York (1988), page 156: PCP:

Ataxia	tremors,
muscular hypertonicity	Hyperreflexia
Ptosis	Tachycardia
Horizontal Gaze, Vertical Gaze and Rotary Nystagmus	
elevated blood pressure	
mood swings	

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 155.

Maladaptive behavioral changes, e.g., belligerence, assaultiveness, impulsiveness, unpredictability, psychomotor agitation, impaired judgment, impaired social or occupational functioning.

Vertical or Horizontal Gaze Nystagmus  
increased blood pressure or heart rate  
numbness or diminished responsiveness to pain.

Ataxia  
Dysarthria (slurred speech)  
muscle rigidity  
seizures  
Hyperacusis

### **NARCOTICS:**

DRE Symptomatology:	
constricted pupils	decreased pulse rate
decreased blood pressure	decreased temperature
Ptosis (droopy eyelids)	"on the nod"
drowsiness	depressed reflexes
low, raspy speech	dry mouth
facial itching	euphoria
fresh puncture marks	

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A.; Goodman, I.; MacMillan Publishing Co. 1985, Opioids page 541-545

Medical Toxicology-Diagnosis and Treatment of Human Poisoning, Ellenhorn, Matthew J., Barceloux, Donald G. Elsevier Science Pub. Co. 1988; Heroin, pages 702-703. See also Methadone, Demerol, etc.:

A Primer of Drug Action, Julien, Robert M. W.H. Freeman and Company, New York, 1997: Morphine:

constricted pupils	decreased blood pressure
drowsiness	Dysphoria
mental clouding	sedation
depressed respiration	Analgesia
euphoria	

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3rd Ed., Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989

Decrease pain (p.6)

Encyclopedia of Drug Abuse, O'Brien, Robert, Cohen, Sydney. M.D. Facts on File, INC New York (1984) page 100, 120, 123, 124: Narcotics:

constricted pupils	reduced heart rate
Analgesia	depressed appetite
euphoria	going "on the nod"

Drug Abuse and Dependence, Grinspoon, Lester, MD; Bakalar, James B., Harvard Medical School Mental Health Review No. 1 (1990), page 14: Narcotics:

constricted pupils	"nodding off"
dreamy state	pain suppression
euphoria	

Drugs of Abuse, Giannini, A. James, M.D.; Slaby, Andrew E. M.D., Ph.D. Medical Economics Books, Oradell, New Jersey (1989) page 293 - 294:

Miosis (constricted pupils)	Bradycardia
Hypothermia	(decreased heart beat)
decreased temperature)	euphoria/dysphoria
drowsiness lethargy	confusion
flaccid muscle tone	depressed respiration
Analgesia	

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer, Joseph, M.D.. Ph.D..D Plenum Medical Book Company, New York (1988), page 132

Miosis (constricted pupils)	low blood pressure
itching	flushing sweating

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 152.

Maladaptive behavioral changes, e.g., initial euphoria followed by apathy, dysphoria, psychomotor retardation, impaired judgment, impaired social or occupational functioning.

pupillary constriction	drowsiness
slurred speech	impairment in attention or memory

### INHALANTS:(Toluene)

DRE Symptomatology:	
Nystagmus	increased pulse rate

increased blood pressure	residue around nose
odor on mouth	nausea disorientation
slurred speech	confusion

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A.; Goodman, I.; MacMillan Publishing Co. 1985, Inhalants, page 567

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3rd Ed. , Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989. p. 185

decreased inhibitions	floating sensation
drowsiness	light sensitivity
sneezing runny nose	

Encyclopedia of Drug Abuse, O'Brien, Robert; Cohen, Sydney. M.D. Facts on File, INC New York (1984)

lowered inhibitions	restlessness
incoordination confusion	disorientation
nausea	impaired judgment

Drug Abuse and Dependence, Grinspoon, Lester, MD; Bakalar, James B., Harvard Medical School Mental Health Review No. 1 (1990)

Drugs of Abuse, Giannini, A. James, M.D.; Slaby, Andrew E. M.D., Ph.D. Medical Economics Books, Oradell, New Jersey(1989), pages 265, 272, 297: Toluene:

Nystagmus	mental dulling
tremors cerebellar	Ataxia
rambling speech	irritability
light headedness	tremors
CNS depression that mimics Ataxia	
Narcotic Analgesics	
blank stare	
euphoric mood	

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer, Joseph, M.D.. Ph.D..D Plenum Medical Book Company, New York (1988)

brief euphoria  
giddy intoxication, similar to alcohol  
CNS depression (volatile solvents/toluene)  
dizziness

## Vertigo

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 149.

Maladaptive behavioral changes, e.g., belligerence, assaultiveness, apathy, impaired judgment, impaired social or occupational functioning.

Nystagmus	dizziness
incoordination	slurred speech
unsteady gait	lethargy
depressed reflexes	psychomotor retardation
tremor generalized muscle	blurred vision or diplopia
stupor or coma	weakness
euphoria	

**CANNABIS**

## DRE Symptomatology:

dilated pupils	marked reddening of conjunctivae
odor of Marijuana	debris in mouth
body tremors	eyelid tremors
relaxed inhibitions	increased appetite
paranoia	disorientation
impaired perception of time and distance	

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A.; Goodman, I.; MacMillan Publishing Co. 1985, Cannabis, pages 559-561

euphoria	short term memory impairment
temporal disintegration	balance and stance impairment
information processing impairment	increased hunger
dry mouth	additive to alcohol

## Lower doses

affects perception, impairing well beyond when subject subjectively feels effects; alters all information processing; relatively simple motor skills unaffected

## High doses:

anxiety	hallucinations
increased heart rate	increased systolic blood pressure
marked reddening of Conjunctiva	simple motor skills affected

Medical Toxicology-Diagnosis and Treatment of Human Poisoning, Ellenhorn, Matthew J., Barceloux, Donald G. Elsevier Science Pub. Co. 1988; Cannabis, page

678-681

reddening of Conjunctiva	alteration in mood
motor coordination impairment	euphoria
relaxation	sleepiness
temporal distortion (time slows)	decrease in balance, steadiness and muscle strength
impairment of motor tasks and reaction times requires higher dosages	
loss of short term memory	elective attention
systematic thinking impaired	stimulated appetite
dry mouth	

A Primer of Drug Action, Julien, Robert M. W.H. Freeman and Company, New York, 1997, Marijuana

reddening of Conjunctiva  
increased blood pressure  
dry mouth  
altered sensory perception

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3rd Ed. , Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989, page 145: Cannabis:

red Conjunctiva	euphoria
relaxation	dry mouth
increased heart rate	possibly Nystagmus
time distortion	short term memory
impairment in ability to do multi-step tasks	tremors
decrease level of motor coordination	

Encyclopedia of Drug Abuse, O'Brien, Robert; Cohen, Sydney. M.D. Facts on File, INC New York (1984), pages 100, 120: Marijuana:

red eye	increased appetite
increased heart beat	time and space distortions
dryness of mouth and throat	increased heart rate
increased pulse rate	lack of coordination

Drug Abuse and Dependence, Grinspoon, Lester,MD; Bakalar,James B., Harvard Medical School Mental Health Review No. 1 (1990).page 19: Marijuana:

increased appetite	faster heartbeat
bloodshot eyes	confusion
agitation	incoordination
hallucinations	

Drugs of Abuse, Giannini, A. James, M.D.; Slaby, Andrew E. M.D., Ph.D. Medical Economics Books, Oradell, New Jersey(1989), page 296: Cannabis:

red Conjunctiva	increased appetite
pleasant relaxation	intensification of sensations
slowed time	passivity
apathy	Tachycardia (increased heart rate)
problems with motor coordination	

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer, Joseph, M.D.. Ph.D..D Plenum Medical Book Company, New York (1988), page 147: Cannabis:

red Conjunctiva	increased hunger
changes in time sense	short-term memory loss
memory	dry mouth
coordination	Tachycardia (rapid heart beat)
balance and stance	elevated systolic pressure affected

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 140.

Maladaptive behavioral changes, e.g., euphoria anxiety, suspiciousness, or paranoid ideation, sensation of slowed time, impaired judgment, social withdrawal.

red Conjunctiva	increased appetite
Tachycardia (rapid heart)	dry mouth

**SESSION XXIII**  
**CURRICULUM VITAE PREPARATION AND MAINTENANCE**

## **SESSION XXIII CURRICULUM VITAE PREPARATION AND MAINTENANCE**

Upon successfully completing this session, the participant will be able to:

- o Describe and discuss the purpose of the DRE Curriculum Vitae.
- o Identify the elements of a DRE Curriculum Vitae.
- o Prepare a basic Curriculum Vitae summarizing their relevant training, education, experience and accomplishments to date.
- o Update and extend the Curriculum Vitae, as their relevant achievements continue to expand.

### Content Segments

### Learning Activities

- |  |                                |
|--|--------------------------------|
| A. Purpose of the Curriculum Vitae                             | o Instructor Led Presentations |
| B. Preparation for Court Qualification                         | o Group Work session           |
| C. Curriculum Vitae Content                                    | o Reading Assignments          |
| D. Guidelines for Curriculum Vitae Preparation and Maintenance |                                |

Aids	Lesson Plan	Instructor Notes
 <b>10 Minutes</b>	<p><b>CURRICULUM VITAE PREPARATION AND MAINTENANCE</b></p>	<p>Total Session Time: Approximately 50 Minutes</p> <p>Display Session Title</p>
 <b>XXIII-1 (Title)</b>		
 <b>XXIII-2 (Objectives)</b>		<p>Overview session objectives, content segments and learning activities.</p>
 <b>XXIII-3 (Witness)</b>	<p><b>A. Purpose of the Curriculum Vitae</b></p>	
	<ol style="list-style-type: none"> <li>1. The basic purpose of the Curriculum Vitae is to record education, training and experience in a single document for use in establishing qualifications when testifying in court.</li> <li>2. Generally a witness can testify only to personal knowledge.</li> <li>3. Witness cannot give an opinion on a matter.</li> <li>4. Basic rule is that a person skilled in some art, trade, science or profession, having a knowledge of matters not within</li> </ol>	<p><u>Point out</u> that this generally consists of facts which they observed or witnessed.</p> <p><u>Point out</u> that opinions are allowed only if the witness is qualified as an expert.</p> <p>(People vs. Willis, 70 Cal APP. 465)</p>

## Aids

## Lesson Plan

## Instructor Notes



**XXIII-4A&B**  
(Expert  
Witness)



**XXIII-5**  
(Voir Dire)



**5 Minutes**

the knowledge of persons of average education, learning and experience, may assist the jury in arriving at a verdict by expressing an opinion on a state of facts shown by the evidence and based upon his or her special knowledge.

5. A witness is not qualified as an expert witness unless it is shown he or she is familiar with the subject upon which he or she is asked to give an opinion.
6. Only the court can determine whether a witness is qualified to testify as an expert.
7. Where a witness is qualified to give expert testimony, any question as to degree of knowledge goes to weight rather than admissibility.
8. Witnesses' qualification is achieved through Voir Dire Examination.

**B. Preparation for Court Qualification**

1. Being qualified as an expert may be as simple as stating your occupation, or take several hours of exhausting questioning by both the prosecutor and the defense attorney.
2. Although knowledge only

(People vs McLean, 56 Cal 2d 660)

(People vs Perry, 44 Cal 2d 861)

Voir Dire - literally, French for "to see, to say"; loosely translated as "to seek the truth").

Aids	Lesson Plan	Instructor Notes
 <p><b>XXIII-6</b> (Expertise)</p>  <p><b>20 Minutes</b></p>  <p><b>XXIII-7(CV</b> Content)</p>	<p>greater than what the public has is required to qualify you as an expert, your testimony will carry much more "weight" if you have good credentials.</p> <p>3. Accurate, up to date information is essential for an officer who is called upon to give his or her qualifications as an expert in any field.</p> <p>4. Drug Recognition Experts will base their expertise on the following areas:</p> <ul style="list-style-type: none"> <li>a. Formal education and training</li> <li>b. Relevant Experience</li> <li>c. Outside readings and studies</li> </ul> <p><b>C. Curriculum Vitae Content</b></p> <p>1. Formal education.</p> <ul style="list-style-type: none"> <li>a. High school(s) attended</li> <li>b. Colleges and Universities attended.</li> </ul>	<p>Point out that it is imperative that each officer maintain an ongoing Curriculum Vitae to establish their credentials as an expert.</p> <p>o list dates - highlight classes which provided knowledge in the area of drugs.</p> <p>o list dates, major, degree, etc. highlight classes which provided knowledge in the</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>c. Specialized College or University level courses.</li> </ul> <p>2. Formal training.</p> <ul style="list-style-type: none"> <li>a. Police Academy (recruit training)</li> <li>b. Specialized police training or in-service training.</li> <li>c. Other specialized training:               <ul style="list-style-type: none"> <li>o military training</li> <li>o lectures and seminars</li> </ul> </li> </ul> <p>3. Experience</p> <ul style="list-style-type: none"> <li>a. Job experience - years</li> <li>b. Assignments</li> <li>c. Prior law enforcement experience</li> <li>d. Other job related experience</li> <li>e. Drug enforcement/ evaluation experience:</li> </ul>	<p>area of drugs.</p> <ul style="list-style-type: none"> <li>o list dates, instructor, subject(s) covered, credits, etc.</li> <li>o list dates, length, major topics covered, etc. Highlight classes which provided knowledge or skills in the area of drugs.</li> <li>o list dates, length, instructor(s), subject(s) covered, etc. Highlight training which provided knowledge or skills in the area of drugs.</li> <li>o list dates, length, instructor(s), subject(s) covered, etc. Highlight training which provided knowledge or skills in the area of drugs.</li> <li>o list dates, division, duties, etc., include loans to specialized units.</li> <li>o list agencies, dates, assignments, etc.</li> <li>o list employer, dates, duties, assignments, etc. which provided experience in the area of drugs.</li> </ul> <p>Point out that it is important to maintain accurate records of all enforcement activities;</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>o total vehicle stops</li> <li>o total DWI investigations</li> <li>o total DWI arrests</li> <li>o total drug evaluations</li> <li>o total filings</li> <li>o total convictions</li> <li>f. Prior testimony:               <ul style="list-style-type: none"> <li>o municipal court</li> <li>o superior court</li> <li>o number of times qualified as an expert in drug cases</li> <li>o number of times qualified as an expert in other cases</li> </ul> </li> <li>4. Outside readings and studies               <ul style="list-style-type: none"> <li>a. Drug related texts read</li> <li>b. Departmental training bulletins</li> <li>c. Journals</li> <li>d. Research papers</li> <li>e. Drug related videos viewed</li> </ul> </li> <li>5. Training or research conducted (if applicable)</li> </ul>	<p>documentation of the ratio of stops to investigations and investigations to arrests is essential. Not all stops result in arrests; demonstrates that the officer is fair and impartial and that each case is decided on individual merits.</p> <ul style="list-style-type: none"> <li>o list date, court, judge, charge, area qualified, etc.</li> <li>o list title(s), author(s), subject(s), etc.</li> <li>o list classes, briefings, training officer assignments, etc. where you served as an instructor or coach, etc. or conducted or participated in research, e.g. Alcohol workshop.</li> </ul>

Aids	Lesson Plan	Instructor Notes
 <p><b>15 Minutes</b></p>	<p>6. Published Works (if applicable)</p> <p>D. Guidelines for Curriculum Vitae Preparation and Maintenance</p> <ol style="list-style-type: none"> <li>1. List information in chronological order.</li> <li>2. Review and update Curriculum Vitae frequently and record date of review.</li> </ol>	<p>o list all relevant writings that you authored or co-authored, including departmental briefing papers, training manuals/bulletins, magazines articles, books, etc.</p> <p>Refer students to sample Curriculum Vitae's in their manuals and review steps for preparing the Curriculum Vitae and keeping it up to date.</p> <p>Review the sample Curriculum Vitae's <u>briefly</u> with the students.</p>

## Session XXIII

### Curriculum Vitae Preparation and Maintenance



XXIII-1

### Curriculum Vitae Preparation and Maintenance

Upon successfully completing this session the student will be able to:

- Describe and discuss the purpose of the DRE Curriculum Vitae
- Identify the elements of a DRE Curriculum Vitae
- Prepare a basic Curriculum Vitae summarizing relevant training, education, experience and accomplishments to date
- Update and extend the Curriculum Vitae as relevant achievements continue to expand

Drug Evaluation &amp; Classification Training

XXIII-2

### Witness

- Generally can testify only to personal knowledge - facts which they observed or witnessed
- Cannot give an opinion



Drug Evaluation &amp; Classification Training

XXIII-3

### Expert Witness

- Basic rule - person skilled in some art, trade, science, or profession, having knowledge of matters not within knowledge of persons of average education, learning and experience
- May assist jury in arriving at a verdict by expressing an opinion on a state of facts shown by the evidence and based upon their special knowledge

Drug Evaluation &amp; Classification Training

XXIII-4A

### Expert Witness

**ONLY the court can determine whether a witness is qualified to testify as an expert**

Drug Evaluation &amp; Classification Training

XXIII-4B

### Voir Dire:

To seek the truth  
(Literally, "To see, to say")

Drug Evaluation &amp; Classification Training

XXIII-5

## Expertise/Qualifications

Based on:

- Formal Education and Training
- Experience
- Outside readings and studies



Drug Evaluation & Classification Training

XXIII-6

## Curriculum Vitae Content

- Formal education
- Formal training
- Experience
- Prior testimony
- Outside readings and studies
- Training/research conducted
- Published works

Drug Evaluation & Classification Training

XXIII-7

# QUESTIONS?

Drug Evaluation & Classification Training

SAMPLE CURRICULUM VITAE NUMBER ONE

SHELTON POLICE DEPARTMENT

Traffic Division

The Curriculum Vitae of:

SERGEANT DAVID CARROLL REGAN  
Drug Recognition Expert

Latest update: 3/17/XX

## Sgt. David C. Regan

### Introduction

Sergeant David Carroll Regan is a supervisor in the Traffic Division, Shelton Police Department. He currently commands the special Impaired Driving Enforcement Activities Squad (IDEAS), a unit he was instrumental in forming. Sgt. Regan is a 15 year veteran of law enforcement. Prior to joining the Shelton Police Department ten years ago, he served for five years as a deputy with the Fairfield County Sheriff's Department.

Sergeant Regan has been assigned to the Traffic Division since his promotion to sergeant on 11/18/YY. His duties have included coordination of speed and DWI enforcement activities, the Joint Shelton-Derby Task Force for Sobriety Checkpoints, the Officer Friendly Program, the Motorcycle Safety Education Project, and general supervision of Traffic Division officers. He also serves as the Department's principal instructor for radar speed measurement, Standardized Field Sobriety Testing and Drug Recognition Expert training.

Sergeant Regan holds a Bachelor's Degree in the Administration of Justice from Fairfield University, and currently is a candidate for a Master's Degree in Police Science and Administration at the University of Stratford. He also holds an Instructor Certificate from the State Law Enforcement Training Board.

Sergeant Regan has served on two committees of the Governor's Task Force to Prevent Drunk Driving: The Standardized Field Sobriety Tests Committee and The Paperwork Reduction Committee. The one page Standard Notetaking Guide for Field Sobriety Testing that is employed by all departments statewide was designed by him.

### Law Enforcement Experience

11/18/YY to Present	Sergeant, Traffic Division Shelton Police Department Supervisor, IDEAS Unit Drug Recognition Expert Program Coordinator
7/8/ZZ to 11/17/YY	Patrol Officer First Class Training and Operations Shelton Police Department Unit Supervisor, Traffic Law Enforcement Training Branch
9/11/XX to 7/7/ZZ	Patrol Officer Third Precinct, Motorcycle Shelton Police Department

**Sgt. David C. Regan**Law Enforcement Experience (continued)

11/5/MM to 9/10/XX	Patrol Officer First Precinct Shelton Police Department
10/10/NN to 11/4/MM	Deputy Traffic Patrol Fairfield County Sheriff's Department

Special Police Training

10/XX	NHTSA/IACP <b>DRE Instructor Training</b> (Certified as a DRE Instructor on 11/12/XX)
8/XX	Drug Enforcement Administration <b>Drug Interdiction Seminar</b>
11/YY	NHTSA/IACP <b>Drug Evaluation and Classification Training: DRE School</b> (Certified as a DRE on 1/28/XX)
10/YY	NHTSA/IACP <b>Drug Evaluation and Classification Training: PRE School</b>
3/YY	Southeastern University Institute of Police Technology <b>Special Conference: Managing DWI Squads</b>
4/ZZ	International Association of Chiefs of Police <b>Instructor Training in Horizontal Gaze Nystagmus and Divided Attention Field Sobriety Tests</b>
10/MM	University of Stanford, Northern Police Institute <b>Standardized Field Sobriety Testing</b>
6/NN	Acme Scientific Instruments, Inc. (Certified to perform inspection and repair of the Intoxotector J2Z breath testing instrument on 6/22/NN)

**Sgt. David C. Regan****Court Qualification Record**

8/VV	Qualified as Drug Recognition Expert in a case involving Phencyclidine impairment. (Judge Sally Grey, 8th District)
11/WW	Qualified as Drug Recognition Expert in a case involving a combination of CNS Stimulant and Narcotic Analgesic. (Judge Lewis Buchanan, Superior Court)
3/WW	Qualified as Drug Recognition Expert in a case involving Cannabis impairment. (Judge Sally Grey, 8th District)
9/UU	Qualified as Drug Recognition Expert in a case involving Narcotic Analgesic impairment. (Judge Jerome Byrnes, 8th District)

**Specialized Readings**

<u>Title</u>	<u>Author</u>
<b>Drug and Alcohol Abuse</b>	Marc A. Schuckit, M.D.
<b>A Primer of Drug Action</b>	Jerome Jaffee, Robert Petersen and Ray Hodgson
<b>The Practitioner's Guide to Psychoactive Drugs</b>	Ellen L. Bassuk, M.D. and Stephen C. Schoonover, M.D.
<b>Drug Abuse: A Manual for Law Enforcement Officers</b>	Smith, Kline & French (pub.)
<b>Licit and Illicit Drugs</b>	Edward M. Brecher
<b>Chocolate to Morphine</b>	Andrew Weil, M.D. and Winifred Rosen
<b>Cocaine Addiction</b>	U.S. Department of Health and Human Services
<b>Marijuana Alert</b>	Peggy Mann

SAMPLE Curriculum Vitae NUMBER TWO

TRUMBULL POLICE DEPARTMENT

The Curriculum Vitae of:

OFFICER ANN MARIE REED  
Drug Recognition Expert

Latest Update: 4/25/YY

## Officer Ann M. Reed

### Introduction

Officer Ann Marie Reed is an eight year veteran with the Trumbull Police Department. She is currently assigned to the Special Operations Branch of the Administrative Division, where she serves as a Narcotics Enforcement Officer. Previously, she has served in the same Branch as a Vice Enforcement Officer, and as a patrol officer in the Department's first and second precincts.

Officer Reed is a graduate of Monroe College, with the Bachelor's Degree in Police Science and Administration. She is currently a candidate for the JD Degree at the Law School of the University of Bridgeport.

### Law Enforcement Experience

5/12/VV to Present	Narcotics Enforcement Officer and Drug Recognition Expert Special Operations Branch Trumbull Police Department
3/26/WW to 5/11/VV	Vice Enforcement Officer Special Operations Branch Trumbull Police Department
9/23/XX to 3/25/WW	Patrol Officer First Precinct Trumbull Police Department
8/28/NN to 9/22/XX	Patrol Officer Second Precinct Trumbull Police Department
5/15/NN to 8/25/NN	Trainee Fairfield County Regional Police Academy (Graduated 8/25/NN)

### Special Police Training

2/YY	University of Norwalk, Police Science Institute <b>Seminar: Packaging and Transport of Illicit Drugs</b>
10/VV	University of Norwalk, Police Science Institute <b>Seminar: Suppression of Drug-related Crime</b>
3/VV	NHTSA/IACP <b>Drug Evaluation and Classification Training: DRE School</b> (Certified as a DRE on 5/22/VV)

## Officer Ann M. Reed

### Special Police Training (Continued)

2/VV            Fairfield County Regional Police Academy  
**Drug Evaluation and Classification Training: PRE-School**

10/WW        Fairfield County Regional Police Academy  
**Standardized Field Sobriety Testing**

### Publications Authored

Reed, Ann M. and Cockroft, Robert S., "Narcotics Enforcement Tactics for the Medium-sized Department"; The Police Chief. January 17, 19XX.

Reed, Ann M., Procedures for Requesting Drug Recognition Expert Services; Training Bulletin for the Trumbull Police Department. 6/VV.

Reed, Ann M., Recognizing the Heroin Addict; Training Bulletin for the Trumbull Police Department. 1/VV.

### Court Qualification Record

11/WW        Qualified as an expert witness for identification of Heroin impairment.  
(Judge Michael Adkins, 7th District)

3/WW        Qualified as a Drug Recognition Expert in a case involving a  
combination of CNS Stimulant and Narcotic Analgesic. (Judge  
Roberta Mayer, 7th District)

9/ZZ        Qualified as an expert witness for identification of "track" marks.  
(Judge Charles Peltier, 7th District)

### Specialized Readings

<u>Title</u>	<u>Author</u>
Signs and Symptoms Handbook	Barbara McVan, M.D.
Drugs From A to Z	Richard R. Lingeman
Guide to Psychoactive Drugs	Richard Seymour and David E. Smith, M.D.
Addictions: Issues and Answers	Robert M. Julien, M.D.
Report on Synthetic China White: Fentanyl	Det. James Miller, LAPD

One Hour and Fifty Minutes

**SESSION XXIV**  
**DRUG COMBINATIONS**

## SESSION XXIV DRUG COMBINATIONS

Upon successfully completing this session the students will be able to:

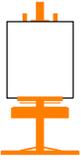
- o Explain the prevalence of polydrug use among drug impaired subjects and identify common combinations of drugs abused by those subjects.
- o Describe the possible effects that combinations of drugs can produce on the major indicators of drug impairment.
- o Define the terms "Null", "Overlapping", "Additive" and "Antagonistic" as they relate to polydrug effects.
- o Identify the specific effects that are most likely to be observed in persons under the influence of particular drug combinations.

### Content Segments

### Learning Activities

- |    |  |   |                              |
|----|--|---|------------------------------|
| A. | The Prevalence of Polydrug Use                           | o | Instructor Led Presentations |
| B. | Possible Effects of Drug Combinations                    | o | Interactive Discussions      |
| C. | Identifying Expected Indicators of Specific Combinations | o | Workbook Exercise            |
|    |  | o | Video Presentations          |

Aids	Lesson Plan	Instructor Notes
 <p><b>10 Minutes</b></p>  <p><b>XXIV-1</b> (Title)</p>  <p><b>XXIV-2A&amp;B</b> (Objectives)</p>  <p><b>XXIV-3</b> (Prevalence of Polydrug Use)</p>	<p><b>DRUG COMBINATIONS</b></p> <p><b>A. The Prevalence of Polydrug Use</b></p> <ol style="list-style-type: none"> <li>1. Polydrug use means ingesting drugs from two or more drug categories.</li> <li>2. It is actually more common for a DRE to encounter polydrug users than single drug users. <ol style="list-style-type: none"> <li>a. In the Los Angeles Field Study (1985), 72% of the suspects had two or more drugs in them.</li> <li>b. In that study, alcohol was often found in combination with one or more other drugs.</li> <li>c. But even if we discount alcohol, nearly half (45%) of the Field Study suspects had two or more other drugs in them.</li> </ol> </li> </ol>	<p>Total Lesson Time: Approximately 110 Minutes</p> <p>Display Session Title</p> <p>Briefly review the objectives, content and learning activities of this session.</p> <p>Point out that 81 of the 173 suspects (47%) in the Los Angeles Field Study had alcohol in combination with one or more other drugs.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XXIV-4</b> (PIRE Data)</p>	<p>d. Data collected from the national DRE database from DREs throughout the U.S. indicates that approximately 25% of all cases with toxicology resulted in two or more drug categories detected.</p>	<p>Source: Pacific Institute of Research and Evaluation (PIRE), 2005.</p> <p>Emphasize: Not all states are represented in the database. The 25% may be low. DRE's nationwide need to be entering their evaluations in the national DRE database. Contact your state coordinator.</p>
 <p><b>XXIV-5</b> (Common Combinations)</p>	<p>3. Common combinations of drugs.</p> <p>a. Cocaine and Cannabis. b. Cocaine and Heroin. c. PCP and Cannabis.</p> <p>4. Many of the suspects you examine will be exhibiting the effects of two or more drugs acting together.</p>	<p>Point out that virtually any possible drug combinations may be encountered by the DRE.</p> <p>Solicit students' comments and questions about the prevalence of polydrug use.</p>
 <p><b>65 Minutes</b></p>	<p><b>B. Possible Effects of Drug Combinations</b></p> <p>1. Let us examine the possible ways in which two drugs might interact.</p>	
		<p><b>NOTE: AT THIS TIME DRAW THE FOLLOWING MATRIX ON THE DRY ERASE BOARD:</b></p>

Aids	Lesson Plan	Instructor Notes
Pupil Size	Possible Effects of Drug Number 1 normal dilated constricted	Possible Effects of Drug Number 2 normal dilated constricted
 <p><b>XXIV-6</b> (Situation #1)</p>  <p><b>XXIV-7</b> (Null Effect)</p>	<p>2. Our specific example will focus on pupil size; there are four situations that could occur.</p> <p>a. Situation #1: Neither drug affects pupil size.</p> <ul style="list-style-type: none"> <li>o drug #1 leaves pupil size in the normal range.</li> <li>o drug #2 also leaves pupil normal.</li> <li>o the combination also will leave pupil size normal.</li> </ul> <p>b. Situation #1 is called the Null Effect.</p> <p>c. Specific examples of the Null Effect:</p> <ul style="list-style-type: none"> <li>o Pupil Size: Neither PCP nor Valium affects pupil</li> </ul>	<p>Point out a general principle: If neither drug affects a major indicator, the combination of those two drugs also will not affect that indicator.</p> <p>Clarification of "Null Effect": The combination of no action plus no action equals no action.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XXIV-8</b> (Situation #2)</p>	<p>size; the combination of PCP and Valium will not affect pupil size.</p> <ul style="list-style-type: none"> <li>o Body Temp: Neither Alcohol nor Marijuana usually affects body temperature; the combination of Alcohol and Marijuana usually leaves body temperature normal.</li> <li>o HGN: Neither Cocaine nor Heroin will cause Nystagmus; the combination of Cocaine and Heroin also will not cause Nystagmus.</li> </ul> <p>d. Situation #2: one drug affects pupil size, but the other does not.</p> <ul style="list-style-type: none"> <li>o one possibility: drug #1 dilates pupils, drug #2 leaves pupil size alone.</li> <li>o another possibility:</li> </ul>	<p>Ask students to suggest a specific combination of drugs that will exhibit the Null Effect on Horizontal Gaze Nystagmus.</p> <p>Solicit students' questions about the Null Effect.</p> <p>Redirect the students' attention to our example of pupil size: point to the matrix on the board or flip-chart.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XXIV-9</b> (Overlapping Effect)</p>	<p>drug #2 constricts pupils, drug #1 leaves pupil size alone.</p> <p> e. Situation #2 is called the Overlapping Effect. <ul style="list-style-type: none"> <li>o One example: PCP doesn't affect pupil size, but Cocaine dilates pupils; a subject who has taken a combination of PCP and Cocaine will usually exhibit dilated pupils.</li> <li>o Another example: Valium won't affect pupil size, but heroin will constrict pupils; a subject under the combined influence of Valium and Heroin usually will have constricted pupils.</li> </ul> f. Other examples of the "Overlapping Effect": <ul style="list-style-type: none"> <li>o Alcohol will cause HGN, but Marijuana will not cause HGN; a person under the combined influence of alcohol and Marijuana will usually have HGN.</li> <li>o Xanax will not affect temperature, but Demerol will lower temperature; a subject impaired by a</li> </ul> </p>	<p>Clarification of "overlapping Effect": action plus no action equals action.</p> <p>Ask a student to give an example of a specific combination of drugs that will produce an "Overlapping Effect" on Horizontal Gaze Nystagmus.</p> <p>Ask a student to give an example of a specific combination of drugs that will produce an "Overlapping Effect" on body temperature.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XXIV-10</b> (Situation #3)</p>	<p>combination of Xanax and Demerol usually will have a lower temperature.</p> <p>g. Situation #3: The two drugs affect pupil size in the same way.</p> <ul style="list-style-type: none"> <li>o One possibility: both drugs dilate the pupils.</li> <li>o Another possibility: both drugs constrict the pupils.</li> </ul>	<p>Redirect the students' attention to the example of pupil size. Point to the matrix on the dry erase board.</p> <p>Example: Both Methamphetamine and LSD will dilate the pupils. Therefore, a person under the combined influence of Methamphetamine and LSD will have dilated pupils.</p> <p>Example: Both Morphine and Demerol are Narcotic Analgesics, so both constrict the pupils; someone under the combined influence of Morphine and Demerol will have constricted pupils.</p>
 <p><b>XXIV-11</b> (Additive Effect)</p>	<p>h. Situation #3 is called the Additive Effect.</p> <ul style="list-style-type: none"> <li>o One example: a CNS Stimulant plus an Hallucinogen will produce an additive effect on pupil size.</li> <li>o Example: a CNS Depressant plus PCP will cause an additive effect on HGN.</li> </ul>	<p>Clarification of the "Additive Effect": action plus the same action reinforces the action.</p> <p>Ask a student to give an example of a drug combination that will cause an additive effect on Nystagmus.</p> <p>Ask a student to give an example of a drug combination that will produce an additive effect on blood pressure.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XXIV-12</b> (Situation #4)</p>	<ul style="list-style-type: none"> <li>o Example: PCP plus Cannabis will produce an additive effect on blood pressure.</li> <li>i. Situation #4: The two drugs affect pupil size in exactly opposite ways.               <ul style="list-style-type: none"> <li>o Either drug #1 constricts the pupils while drug #2 dilates them.</li> <li>o Or, drug #1 dilates the pupils while drug #2 constricts them.</li> </ul> </li> </ul>	<p>Redirect students' attention to our example of pupil size; point to the matrix on the dry erase board.</p> <p>Ask students for an example of a drug combination in which one drug dilates while the other constricts.</p>
 <p><b>XXIV-13</b> (Antagonistic Effect)</p>	<ul style="list-style-type: none"> <li>j. Situation #4 is called the Antagonistic Effect.</li> <li>k. When two drugs produce an "Antagonistic Effect", they tend to try to cancel each other out.               <ul style="list-style-type: none"> <li>o possibility #1: the effects might actually cancel out; e.g., the speedballer's pupils might be normal of size, as the Heroin's constriction cancels out the Cocaine's dilation.</li> <li>o possibility #2: the Heroin might be exerting the stronger</li> </ul> </li> </ul>	<p>Clarification of "Antagonistic Effect": action versus opposite action: can't predict the outcome.</p> <p>Example: When a suspect takes a "speedball" (Heroin plus Cocaine), the two drugs try to cancel out their effects on pupil size.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>IV-14</b> (Effects of Drug Combos)</p>  <p><b>XXIV-15</b> (Cannabis &amp; Stimulant)</p>	<p>effect at some given moment; in this case, the pupils might be constricted, but possibly not as much as they would be if the Cocaine were not present.</p> <ul style="list-style-type: none"> <li>o possibility #3: the Cocaine might be exerting the stronger effect, and the pupils might be dilated, but maybe not as much as if the Heroin weren't present.</li> <li>o With an "Antagonistic Effect", we just can't predict what we will see.</li> </ul> <p>3. To summarize, when drugs from two or more drug categories are taken together, they tend to produce a combination of Null Effects, Overlapping Effects, Additive Effects and Antagonistic Effects.</p> <p>4. A specific Example: Consider a person who is under the influence of a combination of Cannabis and a CNS Stimulant.</p> <ul style="list-style-type: none"> <li>a. Neither Cannabis nor a Stimulant causes HGN. <ul style="list-style-type: none"> <li>o This is a case of no action plus no action</li> </ul> </li> </ul>	<p>Solicit students' questions about the Null, Overlapping, Additive and Antagonistic Effects.</p> <p>Display only the title of XXIV-15 ("Cannabis and a Stimulant in Combination"); you will reveal this visual one line at a time.</p> <p>Ask students: "Will you see HGN with this particular combination?"</p> <p>Reveal the first line of the Visual.</p> <p>Point out that the combination of Cannabis and Stimulant</p>

Aids	Lesson Plan	Instructor Notes
	<p>equals no action.</p> <ul style="list-style-type: none"> <li>o We will not see HGN with this combination</li> </ul>	<p>produces a Null Effect on HGN.</p> <p>Ask students: "Will we see Vertical Gaze Nystagmus?"</p>
<p><b>XXIV-15A</b></p>	<ul style="list-style-type: none"> <li>b. Neither Cannabis nor a stimulant causes Vertical Gaze Nystagmus.</li> </ul>	<p>Reveal the second line of the Visual.</p>
	<ul style="list-style-type: none"> <li>o This is another Null Effect.</li> <li>o We won't see Vertical Gaze Nystagmus.</li> </ul>	<p>Ask students: "Will we see a Lack of Convergence?"</p>
	<ul style="list-style-type: none"> <li>c. Cannabis causes Lack of Convergence; a CNS Stimulant does not.</li> </ul>	<p>Reveal the third line of the Visual.</p>
<p><b>XXIV-15B</b></p>	<ul style="list-style-type: none"> <li>o This is a case of action plus no action equals action.</li> </ul>	<p>Point out that the combination of Cannabis and Stimulant produces an Overlapping Effect on Lack of Convergence.</p>
	<ul style="list-style-type: none"> <li>o We will see Lack of Convergence with this combination.</li> </ul>	<p>Ask students: "What will we see when we examine pupil size?"</p>
	<ul style="list-style-type: none"> <li>d. CNS Stimulants dilate pupils; Cannabis either dilates pupils or leaves them alone.</li> </ul>	<p>Reveal the fourth line of the Visual.</p>
<p><b>XXIV-15C</b></p>		

Aids	Lesson Plan	Instructor Notes
 <p><b>XXIV-15D</b></p>	<ul style="list-style-type: none"> <li>o This may be a case of action plus no action equals action.</li> <li>o Or it may be a case of action plus same action reinforces action.</li> <li>o In either case, we should see dilated pupils with this combination.</li> </ul> <p>e. CNS Stimulants slow the pupils' reaction to light; Cannabis usually doesn't affect the pupils' reaction.</p> <ul style="list-style-type: none"> <li>o Here we have another Overlapping Effect.</li> </ul>	<p>Point out that the combination of Cannabis and Stimulant produces either an Additive Effect or an Overlapping Effect on pupil size.</p> <p>Ask students: "What should we see when we examine the pupils' reaction to light?"</p> <p>Reveal the fifth line of the Visual.</p>
 <p><b>XXIV-15E</b></p>	<ul style="list-style-type: none"> <li>o We should observe a slowed reaction of the pupils.</li> </ul> <p>f. Both Cannabis and CNS Stimulants usually elevate pulse rate.</p>	<p>Ask students: "What should we see when we measure this person's pulse rate?"</p> <p>Reveal the sixth line on the Visual.</p>
 <p><b>XXIV-15F</b></p>	<ul style="list-style-type: none"> <li>o This is an Additive Effect.</li> <li>o We will see a pulse rate higher than normal.</li> </ul> <p>g. Cannabis usually causes blood pressure to be above normal; so does a CNS Stimulant.</p> <ul style="list-style-type: none"> <li>o This is another Additive Effect.</li> </ul>	<p>Ask students: "What should we see when we measure this person's blood pressure?"</p> <p>Reveal the seventh line on the Visual.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XXIV-15G</b></p>	<ul style="list-style-type: none"> <li>o We should see a higher than normal blood pressure.</li> <li>h. Cannabis usually does not affect body temperature. But CNS Stimulants usually elevate temperature. <ul style="list-style-type: none"> <li>o This is another case of action plus no action equals action.</li> <li>o We can expect to see an elevated temperature with this combination.</li> </ul> </li> </ul>	<p>Ask students: "What can we expect to find when we check this person's temperature?"</p> <p>Reveal the eighth line on the Visual.</p> <p>Point out that Cannabis in combination with CNS Stimulant produces an Overlapping Effect on body temperature.</p> <p>Solicit students' comments and questions about the Cannabis/ CNS Stimulant combination.</p> <p>Point out that this particular combination produces no Antagonistic Effects.</p>
 <p><b>XXIV-16</b> (PCP &amp; Heroin)</p>	<p>5. Another specific example: Consider a person under the influence of a combination of PCP and Heroin.</p> <ul style="list-style-type: none"> <li>a. PCP causes HGN, Heroin does not.</li> </ul>	<p>Display only the title on XXIV-16 ("PCP and Heroin")</p> <p>Ask students: "What will we see when we examine this person for HGN?"</p>
 <p><b>XXIV-16A</b></p>	<ul style="list-style-type: none"> <li>o This is an Overlapping Effect.</li> <li>o We can expect to see HGN with this suspect.</li> </ul>	<p>Reveal the first line of the Visual.</p> <p>Ask Students: Can we expect to see Vertical Gaze Nystagmus?</p>

Aids	Lesson Plan	Instructor Notes
 <b>XXIV-16B</b>	<p>b. PCP may cause Vertical Gaze Nystagmus, especially at high doses; Heroin will not cause Vertical Gaze Nystagmus.</p> <ul style="list-style-type: none"> <li>o This is another Overlapping Effect.</li> <li>o We may see Vertical Gaze Nystagmus in this suspect.</li> </ul>	<p>Reveal the second line of the Visual.</p> <p>Ask students: "Can we expect to see a Lack of Convergence?"</p>
 <b>XXIV-16C</b>	<p>c. PCP causes Lack of Convergence; Heroin doesn't.</p> <ul style="list-style-type: none"> <li>o Another Overlapping Effect.</li> <li>o We can expect to see Lack of Convergence.</li> </ul>	<p>Reveal the third line of the Visual.</p> <p>Ask students: "What are we likely to see when we check the size of this subject's pupils?"</p>
 <b>XXIV-16D</b>	<p>d. PCP doesn't affect pupil size, but Heroin constricts pupils.</p> <ul style="list-style-type: none"> <li>o This is yet another Overlapping Effect.</li> <li>o We can expect to see constricted pupils with this subject.</li> </ul>	<p>Reveal the fourth line of the Visual.</p> <p>Ask students: "What are we likely to observe when we check the reaction of this subject's pupils to light?"</p>
 <b>XXIV-16F</b>		

Aids	Lesson Plan	Instructor Notes
 <p><b>XXIV-16G</b></p>	<ul style="list-style-type: none"> <li>e. PCP doesn't affect pupils' reaction to light; but Heroin usually produces "little to no" reaction to light. <ul style="list-style-type: none"> <li>o This, too, is an Overlapping Effect.</li> <li>o We can expect "little to no" reaction in this suspect's pupils.</li> </ul> </li>   <li>f. PCP usually causes pulse rate to be above normal; Heroin usually produces a below normal pulse rate. <ul style="list-style-type: none"> <li>o This is our first Antagonistic Effect.</li> <li>o We cannot predict what this subject's pulse rate will be.</li> <li>o The pulse rate could be above normal, or below normal, or within the normal range.</li> </ul> </li>   <li>g. This subject's pulse rate will depend on many factors, including: <ul style="list-style-type: none"> <li>o How much of each drug was taken.</li> <li>o How and when each drug was taken.</li> <li>o How tolerant the subject is of each drug.</li> </ul> </li> </ul>	<p>Reveal the fifth line of the Visual.</p> <p>Point out that the combination of PCP and Heroin produces Overlapping Effects on all major eye indicators of drug impairment.</p> <p>Ask students: "What can we expect to find when we check this subject's pulse rate?"</p> <p>Reveal the sixth line of the Visual.</p> <p>Ask students: "What are we likely to find when we check this subject's blood pressure?"</p>

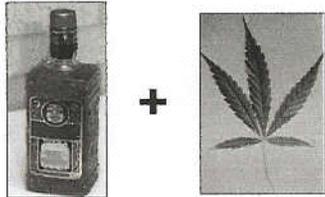
Aids	Lesson Plan	Instructor Notes
 <p><b>XXIV-16H</b></p>	<p>h. PCP usually elevates blood pressure; Heroin usually lowers blood pressure.</p> <ul style="list-style-type: none"> <li>o This is another Antagonistic Effect.</li> <li>o We can't predict what the blood pressure will be.</li> <li>o It could be above normal, below normal or within the normal range.</li> </ul> <p>i. PCP usually elevates temperature; Heroin usually lowers it.</p> <ul style="list-style-type: none"> <li>o This, too, is an Antagonistic Effect.</li> <li>o The temperature could be above normal, or below normal or within the normal range.</li> </ul>	<p>Reveal the seventh line of the Visual.</p> <p>Ask students: "What are we likely to find when we check this subject's temperature?"</p> <p>Reveal the eighth line of the Visual.</p> <p>Point out that the combination of PCP and Heroin produces Antagonistic Effects on all three vital signs.</p> <p>Solicit students' comments and questions about the combination of Heroin and PCP.</p> <p><u>Show</u> the video of subjects under the influence of specific drug combinations. Point out the Null, Overlapping, Additive and Antagonistic Effects exhibited by those suspects.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>35 Minutes</b></p>	<p><b>C. Identifying Expected Indicators of Specific Combinations</b></p> <ol style="list-style-type: none"> <li>1. Cumulative Drug Symptomatology Matrix.           <ol style="list-style-type: none"> <li>a. The Matrix outlines the expected results of the drug recognition examination for each category.</li> <li>b. We will refer to the Matrix to help us interpret what we are likely to see when we examine drug combinations.</li> </ol> </li> <li>2. Worksheet Exercises           <ol style="list-style-type: none"> <li>a. Worksheet #1: Ketamine and LSD</li> <li>b. Worksheet #2: Cannabis and CNS Depressant</li> <li>c. Worksheet #3: CNS Depressant and CNS Stimulant</li> </ol> </li> </ol>	<p>Direct the students' attention to the Cumulative Drug Symptomatology Matrix, found in Section XXIV of their Student's Manual. A copy also appears at the end of these lesson plans, for your reference.</p> <p>Remind students that we "never say never": and we "always avoid saying always" when it comes to signs and symptoms of drugs. The Matrix summarizes what we usually see but doesn't guarantee we will always see exactly that.</p> <p>Assign the students to work in three-member teams.</p> <p>Direct the students' attention to the three worksheets in their Student's Manual.</p> <p>Instruct the teams that they have only 15 minutes to fill out all three worksheets (5 minutes per worksheet).</p> <p>Solicit students' questions about this assignment.</p>

<b>Aids</b>	<b>Lesson Plan</b>	<b>Instructor Notes</b>
	3. Discussion of Worksheets	<p>Tell the teams to start working. Terminate their work after fifteen minutes.</p> <p>For each worksheet, select a team to lead the discussion. Critique and correct the students' analyses of the drug combinations, as appropriate.</p> <p>Solicit students' comments and questions about drug combinations.</p>

## Session XXIV

### Drug Combinations



XXIV-1

### Drug Combinations

Upon successfully completing this session the students will be able to:

- Explain the prevalence of polydrug use among drug impaired subjects and identify common combinations of drugs abused by those subjects
- Describe the possible effects that combinations of drugs can produce on the major indicators of drug impairment

Drug Evaluation &amp; Classification Training

XXIV-2A

### Drug Combinations (Continued)

- Define the terms “Null”, “Overlapping”, “Additive” and “Antagonistic” as they relate to polydrug effects
- Identify specific effects that are most likely to be observed in persons under the influence of particular drug combinations

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XXIV-2B

### Prevalence of Polydrug Use

Los Angeles Field Validation Study (1985):

- 72% of suspects had two or more drug categories in them (including alcohol)
- 45% had two or more drugs other than alcohol

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XXIV-3

### Prevalence of Polydrug Use

- P.I.R.E.\* DRE database indicates that 25% of all DRE reported cases revealed two or more drug categories detected (2005)

\*Pacific Institute of Research and Evaluation

Drug Evaluation &amp; Classification Training

XXIV-4

### Common Combinations of Drugs



- Cocaine and Cannabis



- Cocaine and Heroin



- PCP and Cannabis



- Alcohol and practically anything else

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XXIV-5

## Two Drugs in Combination: How Do they Affect Pupil Size?

### Situation #1:

- Neither drug affects pupil size
- *Example: PCP and Valium*  
(Neither one affects the size of the pupils)
- The combination will also not affect pupil size

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XXIV-6

## Null Effect

- No action plus no action equals no action
- If neither drug affects a particular indicator of impairment, their combination also will not affect that indicator

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XXIV-7

## Two Drugs in Combination: How Do They Affect Pupil Size?

### Situation #2:

- One drug affects the pupil size, but the other does not
- *Example: PCP and Cocaine*  
(Cocaine dilates pupils, PCP doesn't affect pupils)
- The combination will affect pupil size

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XXIV-8

## Overlapping Effect

- Action plus no action equals action
- If one drug affects a particular indicator of impairment, and another drug has no effect on that indicator, the combination of those two drugs will affect the indicator, in the same way as the first drug alone

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XXIV-9

## Two Drugs in Combination: How Do They Affect Pupil Size?

### Situation #3:

- The two drugs affect pupil size in the same way
- *Example: LSD and Cocaine*  
(Cocaine dilates pupils, and so does LSD)
- The combination will affect pupil size

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XXIV-10

## Additive Effect

- Action plus the same action produces reinforced action
- If two drugs independently affect some indicator in the same way, their use in combination will also affect the indicator and the effect may be reinforced

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XXIV-11

### Two Drugs in Combination: How Do They Affect Pupil Size?

**Situation #4:**

- The two drugs affect pupil size in exactly opposite ways
- *Example: Heroin and Cocaine*  
(Cocaine dilates pupils, Heroin constricts pupils)
- We can't predict how the combination will affect pupil size

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### Antagonistic Effect

- Action versus opposite action: can't predict the outcome
- If two drugs affect some indicator in exactly opposite ways, their use in combination could affect that indicator in any possible way

Drug Evaluation & Classification Training XXIV-13

### The Effects of Drug Combinations

- Null Effect
- Overlapping Effect
- Additive Effect
- Antagonistic Effect

Drug Evaluation & Classification Training XXIV-14

### Cannabis and Stimulant in Combination

Impairment Indicator	Effect Due to Cannabis	Effect Due to Stimulant	Type of Combined Effect	What will We See?
HGN	None	None	Null	None
VGN	None	None	Null	None
Lack of Convergence	Present	None	Overlapping	Present
Pupil Size	Dilated (1)	Dilated	Overlapping or Additive	Dilated
Reaction to Light	Normal	Slow	Overlapping	Slow
Pulse Rate	Up	Up	Additive	Up
Blood Pressure	Up	Up	Additive	Up
Body Temperature	Normal	Up	Overlapping	Up

(1) Pupil size possibly normal

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### Phencyclidine and Heroin in Combination

Impairment Indicator	Effect Due to Phencyclidine	Effect Due to Heroin	Type of Combined Effect	What will We See?
HGN	Present	None	Overlapping	Present
VGN	Present	None	Overlapping	Present
Lack of Convergence	Present	None	Overlapping	Present
Pupil Size	Normal	Constricted	Overlapping	Constricted
Reaction to Light	Normal	Little or None Visible	Overlapping	Little or None Visible
Pulse Rate	Up	Down	Antagonistic	Down/Normal/Up
Blood Pressure	Up	Down	Antagonistic	Down/Normal/Up
Body Temperature	Up	Down	Antagonistic	Down/Normal/Up

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# QUESTIONS?

Drug Evaluation & Classification Training

**CANNABIS AND STIMULANT  
IN COMBINATION**

<b>IMPAIRMENT INDICATOR</b>	<b>EFFECT DUE TO CANNABIS</b>	<b>EFFECT DUE TO STIMULANT</b>	<b>TYPE OF COMBINED EFFECT</b>	<b>WHAT WILL WE SEE</b>
<b>HORIZONTAL GAZE NYSTAGMUS</b>	<b>NONE</b>	<b>NONE</b>	<b>NULL</b>	<b>NONE</b>
<b>VERTICAL GAZE NYSTAGMUS</b>	<b>NONE</b>	<b>NONE</b>	<b>NULL</b>	<b>NONE</b>
<b>LACK OF CONVERGENCE</b>	<b>PRESENT</b>	<b>NONE</b>	<b>OVERLAPPING</b>	<b>PRESENT</b>
<b>PUPIL SIZE</b>	<b>DILATED OR NORMAL</b>	<b>DILATED</b>	<b>OVERLAPPING OR ADDITIVE</b>	<b>DILATED</b>
<b>REACTION TO LIGHT</b>	<b>NORMAL</b>	<b>SLOW</b>	<b>OVERLAPPING</b>	<b>SLOW</b>
<b>PULSE RATE</b>	<b>UP</b>	<b>UP</b>	<b>ADDITIVE</b>	<b>UP</b>
<b>BLOOD PRESSURE</b>	<b>UP</b>	<b>UP</b>	<b>ADDITIVE</b>	<b>UP</b>
<b>BODY TEMPERATURE</b>	<b>NORMAL</b>	<b>UP</b>	<b>OVERLAPPING</b>	<b>UP</b>

**PHENCYCLIDINE AND HEROIN  
IN COMBINATION**

<b>IMPAIRMENT INDICATOR</b>	<b>EFFECT DUE TO PHENCYCLIDINE</b>	<b>EFFECT DUE TO HEROIN</b>	<b>TYPE OF COMBINED EFFECT</b>	<b>WHAT WILL WE SEE</b>
<b>HORIZONTAL GAZE NYSTAGMUS</b>	<b>PRESENT</b>	<b>NONE</b>	<b>OVERLAPPING</b>	<b>PRESENT</b>
<b>VERTICAL GAZE NYSTAGMUS</b>	<b>PRESENT</b>	<b>NONE</b>	<b>OVERLAPPING</b>	<b>PRESENT</b>
<b>LACK OF CONVERGENCE</b>	<b>PRESENT</b>	<b>NONE</b>	<b>OVERLAPPING</b>	<b>PRESENT</b>
<b>PUPIL SIZE</b>	<b>NORMAL</b>	<b>CONSTRICTE D</b>	<b>OVERLAPPING</b>	<b>CONSTRICTED</b>
<b>REACTION TO LIGHT</b>	<b>NORMAL</b>	<b>LITTLE OR NONE VISIBLE</b>	<b>OVERLAPPING</b>	<b>LITTLE OR NONE VISIBLE</b>
<b>PULSE RATE</b>	<b>UP</b>	<b>DOWN</b>	<b>ANTAGONISTIC</b>	<b>DOWN/ NORMAL/UP</b>
<b>BLOOD PRESSURE</b>	<b>UP</b>	<b>DOWN</b>	<b>ANTAGONISTIC</b>	<b>DOWN/ NORMAL/UP</b>
<b>BODY TEMPERATURE</b>	<b>UP</b>	<b>DOWN</b>	<b>ANTAGONISTIC</b>	<b>DOWN/ NORMAL/UP</b>

Forty-Five Minutes

**SESSION XXV**

**PRACTICE: TEST INTERPRETATION**

**SESSION XXV    PRACTICE: TEST INTERPRETATION**

Upon successfully completing this session the student will be able to:

- o     Analyze the results of completed drug influence evaluations and identify the category or categories of drugs affecting the individual examined.
  
- o     Describe the basis for the drug category identification.

Content Segments

- A.    Interpretation Demonstrations
- B.    Interpretation Practice

Learning Activities

- o     Instructor Led Demonstrations
- o     Small Group Practice
- o     Participant Led Presentations

Aids	Lesson Plan	Instructor Notes
 <b>20 Minutes</b>  <b>XXV-1 (Title)</b>  <b>XXV-2 (Objectives)</b>	<p><b>PRACTICE: TEST INTERPRETATION</b></p> <p><b>A. Interpretation Demonstrations</b></p> <ol style="list-style-type: none"> <li>1. Case #1: "Subject Allen" <ol style="list-style-type: none"> <li>a. Preliminary Examination.</li> <li>b. Eye Examinations.</li> </ol> </li> </ol>	<p>Total Lesson Time: Approximately 45 Minutes</p> <p>Display Session Title</p> <p>Point out the "Test Interpretation" wall chart.</p> <p>Briefly review the objectives, content and activities of this session.</p> <p>Direct students to review the "Subject Allen" exemplar in Section XXV of their manual.</p> <p>Review the results of the Preliminary Examination of Subject Allen.</p> <p><u>Ask</u> students: "What category or categories of drugs would produce preliminary examination results consistent with this exemplar?" <u>Probe</u> to draw out the basis for students' responses.</p> <p>Review the results of the Eye Examinations of Subject Allen.</p>

Aids	Lesson Plan	Instructor Notes
	<p>c. Psychophysical Tests.</p> <p>d. Vital Signs Examinations.</p> <p>e. Dark Room Examinations.</p> <p>f. Other evidence.</p>	<p><u>Ask</u> students to discuss the category or categories of drugs that would cause these eye examination results.</p> <p>Review the results of the Psychophysical Tests of Subject Allen.</p> <p>Ask students to discuss the category or categories of drugs that would produce these psychophysical test results.</p> <p>Review the results of the Vital Signs Examinations of Subject Allen.</p> <p>Ask students to discuss the category or categories of drugs that would produce these results.</p> <p>Review the results of the Dark Room Examinations of Subject Allen.</p> <p>Ask students to discuss the category or categories of drugs that would produce these results.</p> <p>Review the results of the examinations for injection sites and muscle rigidity, and of the final interview of Subject Allen.</p> <p>Ask students to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.</p>

Aids	Lesson Plan	Instructor Notes
	<p>g. Opinions of evaluator.</p> <p>2. Case #2: "Subject Brown".</p> <p>a. Preliminary Examination.</p> <p>b. Eye Examinations.</p> <p>c. Psychophysical Tests.</p>	<p><u>Point out</u> that the evidence indicates that Subject Allen is under the influence of Cannabis.</p> <p>Solicit students' questions concerning this demonstration.</p> <p>Direct students to review the "Subject Brown" exemplar.</p> <p>Review the results of the Preliminary Examination of Subject Brown.</p> <p><u>Ask</u> students: "What category or categories of drugs would produce preliminary examination results consistent with this exemplar?" <u>Probe</u> to draw out the basis for students' responses.</p> <p>Review the results of the Eye Examinations of Subject Brown.</p> <p><u>Ask</u> students to discuss the category or categories of drugs that would cause these eye examination results.</p> <p>Review the results of the Psychophysical Tests of Subject Brown.</p> <p>Ask students to discuss the category or categories of drugs that would produce these psychophysical test results.</p>

Aids	Lesson Plan	Instructor Notes
	<p>d. Vital Signs Examinations.</p> <p>e. Dark room examinations.</p> <p>f. Other evidence.</p> <p>g. Opinions of evaluator.</p>	<p>Review the results of the Vital Signs Examinations of Subject Brown.</p> <p>Ask students to discuss the category or categories of drugs that would produce these results.</p> <p>Review the results of the Dark Room Examinations of Subject Brown.</p> <p>Ask students to discuss the category or categories of drugs that would produce these results.</p> <p>Review the results of the examinations for injection sites and muscle tone, and of the final interview of Subject Brown.</p> <p>Ask students to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.</p> <p><u>Point out</u> that the evidence indicates that Subject Brown is under the influence of a Dissociative Anesthetic and Cannabis.</p> <p>Solicit students' questions concerning this demonstration.</p>

Aids	Lesson Plan	Instructor Notes
 <b>25 Minutes</b>	<p><b>B. Interpretation Practice</b></p> <ol style="list-style-type: none"> <li>1. Team practice.           <ol style="list-style-type: none"> <li>a. Review and discussion of exemplars by teams.</li> <li>b. Feedback of results.               <ol style="list-style-type: none"> <li>o Subject Cole</li> <li>o Subject Davis</li> <li>o Subject Elliott</li> </ol> </li> </ol> </li> <li>2. Session wrap up.</li> </ol>	<p>Assign students to work in teams of 3 or 4 members.</p> <p>Tell teams that they are to review three exemplars (Subjects Cole, Davis, and Elliott). Team members are to discuss the evidence among themselves and reach a conclusion concerning the category or categories of drugs, <u>if any</u>.</p> <p>Teams will present their conclusions to the entire class.</p> <p>Allow teams approximately 15 minutes to review the three exemplars and reach their conclusions.</p> <p>Poll the teams to determine their conclusions concerning the category or categories of drugs present in each subject.</p> <p>Offer appropriate comments concerning the teams' performance.</p> <p>Solicit students' comments and questions concerning this practice session.</p>

**DRUG CATEGORIES FOR INTERPRETATION PRACTICE**

<u>SUBJECT</u>	<u>CATEGORY(IES)</u>
Allen	Cannabis
Brown	Dissociative Anesthetics (PCP) <u>and</u> Cannabis
Cole	Inhalants
Davis	Narcotic Analgesic
Elliott	Hallucinogen

## Session XXV

### Practice: Test Interpretation



XXV-1

### Practice: Test Interpretation

Upon successfully completing this session the student will be able to:

- Analyze the results of completed drug influence evaluations and identify the category or categories of drugs affecting the individual examined
- Describe the basis for the drug category identification

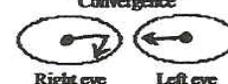
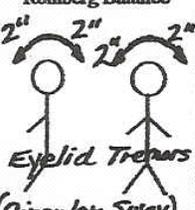
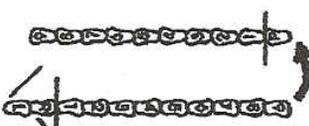
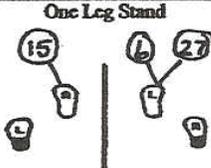
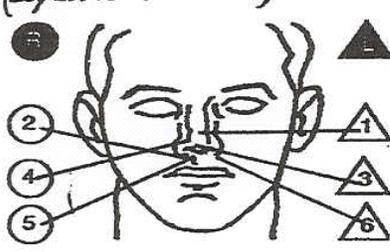
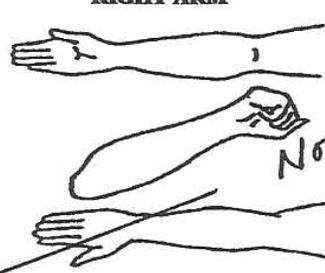
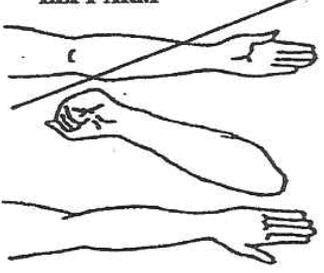
Drug Evaluation & Classification Training

XXV-2

# QUESTIONS?

Drug Evaluation & Classification Training

## DRUG INFLUENCE EVALUATION

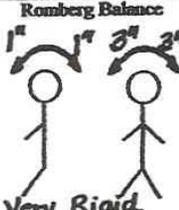
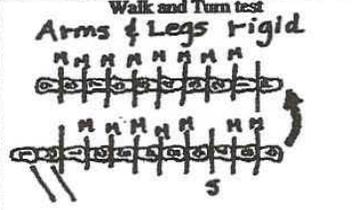
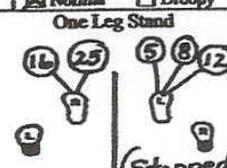
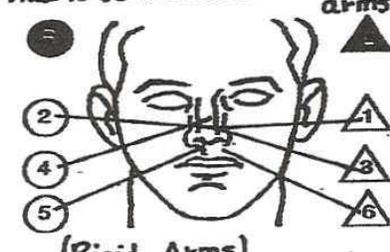
Evaluater <b>Tpr. Chris Erickson, M.S.P.</b>		DRE No. <b>5661</b>	Rolling Log No. <b>05-079</b>	Session XXV-I-#1		
Recorder/Witness <b>Tpr. Beth Stanton, M.S.P.</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>05-779445</b>		
Arrestee's Name (Last, First MI) <b>Allen, Thomas E.</b>		DOB <b>9-03-78</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID No.) <b>Tpr. Beth Stanton, M.S.P.</b>	
Date Examined/Time/Location <b>03/21/05, 2030 hrs, Dakota Co. Jail</b>		Breath Results: <input type="checkbox"/> Refused Instrument # <b>44773 .00%</b>	Chemical Test <input type="checkbox"/> Refused <input type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood			
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Cookies "Few hours ago"</b>		When?	What have you been drinking? How much? <b>Coffee 2 cups</b>	Time of last drink? <b>N/A</b>	
By: <b>Tpr. Stanton</b>	When did you last sleep? <b>"No idea"</b>	How long? <b>"Don't remember"</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <b>Cooperative, slow, disinterested</b>		Coordination: <b>Disoriented, unsteady</b>		
Speech: <b>Slow, Thick</b>		Breath: <b>Stale odor</b>		Face: <b>Normal</b>		
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery	Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)	Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pulse and time 1. <b>112 120/40</b> 2. <b>114 120/56</b> 3. <b>112 121/10</b>	HGN Lack of smooth pursuit Maximum deviation Angle of onset		Left Eye <b>No</b> Right Eye <b>No</b> Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Convergence 		
Romberg Balance  <b>(Circular Sway)</b>	Walk and Turn test  <b>(Lower body tremors)</b>		Cannot keep balance <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Onc Leg Stand 		
Internal clock <b>43</b> Est. as 30 seconds	Describe Turn <b>As instructed, but slow</b>		Cannot do test (explain) <b>N/A</b>		Type of footwear: <b>Sandals</b>	
Draw lines to spots touched <b>(Eyelid Tremors)</b> 		Pupil Size Left <b>5.5</b> Right <b>5.5</b>	Room Light <b>7.0</b>	Darkness <b>7.0</b>	Direct <b>5.0</b> <b>5.0</b>	
Blood pressure <b>140/100</b>		Temperature <b>98.6°F</b>		Oral cavity: <b>Brownish, green coating on tongue</b>		
Muscle tone: <input checked="" type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Reaction to Light: <b>Normal</b>		RIGHT ARM 		LEFT ARM 		
Comments:		None				
What medication or drug have you been using? How much? <b>"Nothing" N/A</b>		Time of use? <b>No answer</b>	Where were the drugs used? (location) <b>No answer</b>			
Date/Time of Arrest <b>03/21/05, 2010 hrs.</b>	Time DRE Notified <b>2030 hrs.</b>	Evaluation Start Time <b>2030 hrs.</b>	Time Completed <b>2140 hrs.</b>			
DRE Signature (Ink/Block rank) <b>Chris Erickson</b>	ID # <b>5661</b>	Reviewed by <b>[Signature]</b>				
Opinion of evaluator:	<input type="checkbox"/> Rule Out	<input type="checkbox"/> Alcohol	<input type="checkbox"/> CNS Stimulant	<input type="checkbox"/> Dissociative Anesthetic	<input type="checkbox"/> Inhalant	
	<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic	<input checked="" type="checkbox"/> Cannabis	

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Allen, Thomas E.

1. **LOCATION:** The evaluation of Thomas Allen took place in the interview room at the Dakota County Jail.
2. **WITNESSES:** Arresting officer, Trooper Beth Stanton of the Minnesota State Patrol witnessed and recorded the evaluation.
3. **BREATH ALCOHOL TEST:** Trooper Stanton administered a breath test to Allen with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was on duty when contacted by Tpr. Stanton requesting a drug evaluation. Writer met Tpr. Stanton at the Dakota County Jail and she advised that she had arrested Allen for DUI after observing his vehicle without headlights and driving 15 mph under the posted speed limit. The suspect seemed disoriented and had slow, unsteady movements. He had poor balance and coordination and was unable to perform the SFST's as directed.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the interview room at the jail. He was seemed disinterested in what was going on around him. He had poor coordination and balance. His speech was slow and thick.
6. **MEDICAL PROBLEMS AND TREATMENT:** None noted or stated.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect had an approximate 2" circular sway and estimated 30 seconds in 43 seconds. Walk & Turn: Suspect lost his balance during the instructions stage and raised his arms for balance. He also had lower body tremors when performing the test. One Leg Stand: Suspect swayed while balancing, used his arms for balance and put his foot down. Finger to Nose: Suspect missed the tip of his nose on five of the six attempts and exhibited eyelid tremors.
8. **CLINICAL INDICATORS:** Suspect had a Lack of Convergence. His pupils were dilated in room light and direct light. His pulse and blood pressure were above the normal ranges.
9. **SIGNS OF INGESTION:** The suspect had a brownish-green coating on his tongue.
10. **SUSPECT'S STATEMENTS:** Suspect denied using drugs.
11. **DRE'S OPINION:** In my opinion Allen is under the influence of Cannabis and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a blood sample.
13. **MISCELLANEOUS:** Suspect had eyelid and body tremors throughout the evaluation.

## DRUG INFLUENCE EVALUATION

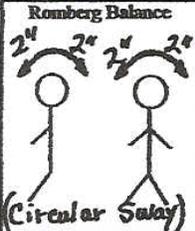
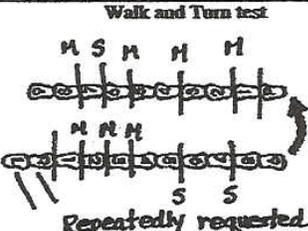
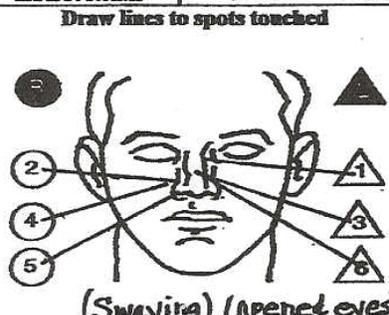
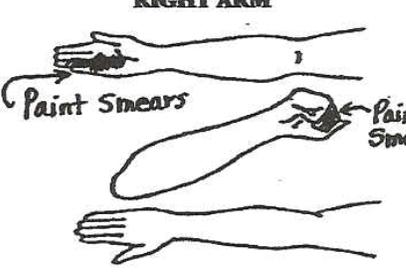
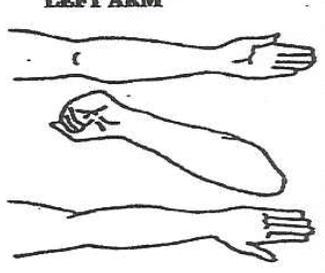
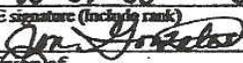
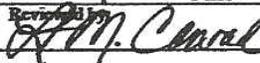
Evaluator <b>Petrona Cummings, LAPD</b>		DRE No. <b>10176</b>	Rolling Log No. <b>05-08-15</b>	Session <b>XXV-I-#2</b>	
Recorder/Witness <b>Sgt. Mike Delgadillo</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>05-776810</b>	
Arrestee's Name (Last, First MI) <b>Brown, Jerome A.</b>		DOB <b>4-06-77</b>	Sex <b>M</b>	Race <b>B</b>	Arresting Officer (Name, ID No.) <b>Ofc. Helen Pallares, LAPD</b>
Date Examined/Time/Location <b>08/21/05, 2210, Parker Center</b>		Breath Results: Instrument # <b>451130</b> .00 %	Chemical Test <input type="checkbox"/> Refused <input checked="" type="checkbox"/> Urine <input type="checkbox"/> Blood		
Miranda Warning Given: <input type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? By: <b>Ofc. Pallares</b> <b>No response</b>	When? <b>No response</b>	What have you been drinking? How much? <b>No response</b>	Time of last drink? <b>N/A</b>
Time now? <b>No response</b>	When did you last sleep? <b>"Eat? I had a hot dog"</b>	How long? <b>"Nothing"</b>	Are you sick or injured? <input type="checkbox"/> Yes <input type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>No response</b>	Do you have any physical defects? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>I didn't drink anything"</b>	Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>No response</b>			
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Answered, "No" very slow</b>		Attitude: <b>Passive, Non-responsive</b>	Coordination: <b>Very poor, staggering</b>		
Speech: <b>Slow, repetitive at times</b>		Breath: <b>Odor of marijuana</b>	Face: <b>Sweaty, Blank stare</b>		
Consecutive lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery	Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Popul size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy	
Pulse and time 1. <b>108 / 2218</b> 2. <b>110 / 2230</b> 3. <b>108 / 2242</b>	HGN Lack of smooth pursuit Maximum deviation Angle of onset		Left Eye <b>Yes</b> <b>Yes</b> <b>30°</b>	Right Eye <b>Yes</b> <b>Yes</b> <b>30°</b>	Vertical Nystagmus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	Romberg Balance  <b>Very Rigid</b>		Walk and Turn test <b>Arms &amp; Legs rigid</b>  <b>5</b>		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon: <input type="checkbox"/> 1 <sup>st</sup> Nine <input type="checkbox"/> 2 <sup>nd</sup> Nine
Internal clock <b>55</b> Est. as 30 seconds	Describe Turn <b>Did not leave front-foot stationary</b>		Cannot do test (explain) <b>N/A</b>		One Leg Stand  <b>(Stopped)</b>
Draw lines to spots touched <b>Had to be reminded to lower arms</b>  <b>(Rigid Arms)</b>		Pupil Size	Room Light	Darkness	Direct
Blood pressure <b>148/102</b>		Temperature <b>99.8 °f</b>		Reaction to Light: <b>Normal</b>	
Muscle tone: <input type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Comments:		RIGHT ARM		LEFT ARM	
What medication or drug have you been using? How much? <b>No response (Blank stare)</b>		Time of use? <b>No response</b>		Where were the drugs used? (location) <b>"I'm not saying"</b>	
Date/Time of Arrest <b>08/21/05 2130 hrs.</b>	Time DRE Notified <b>2:45</b>	Evaluation Start Time <b>2:10</b>	Time Completed <b>2:305</b>		
DRE signature (include rank) <b>P. Cummings</b>	ID # <b>10176</b>	Reviewed by <b>Mike Delgadillo</b>			
Opinion of evaluator:	<input type="checkbox"/> Rule Out	<input type="checkbox"/> Alcohol	<input type="checkbox"/> CNS Stimulant	<input checked="" type="checkbox"/> Dissociative Anesthetic	<input type="checkbox"/> Inhalant
	<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic	<input checked="" type="checkbox"/> Cannabis

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Brown, Jerome A.

1. **LOCATION:** The evaluation was conducted in the interview room at Parker Center.
2. **WITNESSES:** Sgt. Mike Delgadillo of the LAPD DRE Unit witnessed the evaluation.
3. **BREATH ALCOHOL TEST:** The arresting officer, Officer Helen Pallares of the LAPD administered a breath test to Brown with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was contacted by telephone by Officer Pallares requesting a drug evaluation. Writer and Sgt. Delgadillo contacted Officer Pallares at Parker Center where it was determined that the suspect had nearly hit an officer working a sobriety checkpoint detail. The suspect was non-responsive when contacted. He had a blank stare and was sweating profusely. He performed very poorly on the SFST's and was arrested for DUI.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the Parker Center interview room. He was looking straight ahead with a blank stare. When asked questions he was slow to respond and at times did not respond at all. He was perspiring heavily and his speech was slow. When he stood, he would stagger and nearly fell several times.
6. **MEDICAL PROBLEMS AND TREATMENT:** None noted or stated.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect had an approximate 3" side to side sway and estimated 30 seconds in 55 seconds. Walk & Turn: Suspect lost his balance during the instructions, stopped once while walking, missed heel to toe on every step and used his arms for balance. One Leg Stand: On the right foot the suspect lost his balance and nearly fell and the test was stopped. He also swayed and used his arms for balance. Finger to Nose: Suspect missed the tip of his nose on each attempt and kept his finger in contact with his face on each attempt.
8. **CLINICAL INDICATORS:** Suspect had HGN, VGN, Lack of Convergence and Rebound Dilation. His pulse, blood pressure and temperature were above the normal ranges.
9. **SIGNS OF INGESTION:** Suspect had a marijuana odor on his breath and green vegetable material in his teeth.
10. **SUSPECT'S STATEMENTS:** Suspect denied using any medication or drugs.
11. **DRE'S OPINION:** In my opinion Brown is under the influence of a Dissociative Anesthetic and Cannabis and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a urine sample.

## DRUG INFLUENCE EVALUATION

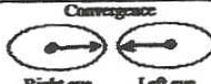
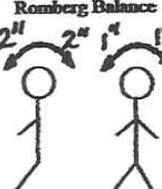
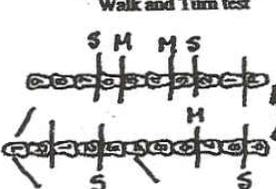
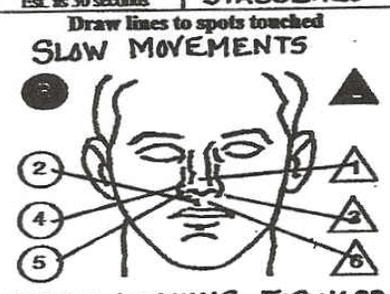
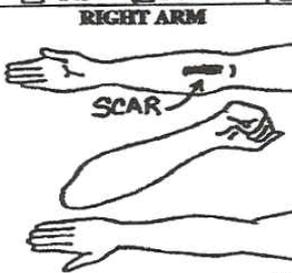
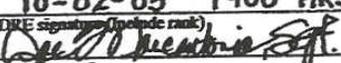
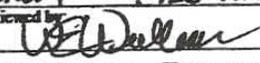
Evaluator <b>Ofc. Jon Gonzales, Los Alamos PD</b>		DRE No. <b>4184</b>	Rolling Log No. <b>05-05-010</b>	Session XXV-I-#3	
Recorder/Witness <b>Lt. Murray Conrad, A.P.D.</b>		Cause: <input type="checkbox"/> Fatal <input checked="" type="checkbox"/> None <input type="checkbox"/> Injury <input type="checkbox"/> Property	Case # <b>05-05-74480</b>		
Arrestee's Name (Last, First MI) <b>Cole, Ricky L.</b>		DOB <b>6-04-88</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID No.) <b>Ofc. Christine Frank, APD #3500</b>
Date Examined/Time/Location <b>05-07-05, 0200, Albuquerque P.D.</b>		Breath Results: Instrument # <b>45704</b> <b>0.00%</b>	Chemical Test <input type="checkbox"/> Refused <input type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood		
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? By: <b>Ofc. Frank</b> <b>Sandwich</b>	When? <b>"Don't Remember"</b>	What have you been drinking? How much? <b>Mountain Dew 1</b>	Time of last drink? <b>N/A</b>	
Time now? <b>9 pm</b>	When did you last sleep? <b>Last night</b>	How long? <b>All night</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <b>Withdrawn, Passive</b>	Coordination: <b>Poor, stumbling</b>		
Breath: <b>Chemical odor</b>		Face: <b>Flushed</b>			
Speech: <b>Slow, slurred, raspy</b>		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery	Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Corrective lens: <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)	Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy
Pulse and time 1. <b>102 / 0210</b> 2. <b>104 / 0222</b> 3. <b>104 / 0232</b>	HGN <b>Lack of smooth pursuit</b> Maximum deviation Angle of onset		Left Eye <b>yes</b>	Right Eye <b>yes</b>	Vertical Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Romberg Balance  <b>(Circular Sway)</b>	Walk and Turn test  <b>Repeatedly requested instructions</b>		Cannot keep balance Starts too soon: <input checked="" type="checkbox"/> <input type="checkbox"/>		One Leg Stand  <b>(Nearly fell)</b>
Internal clock <b>90</b> Est. as 30 seconds	Describe Turn <b>Very slow, stiff movements</b>		Cannot do test (explain) <b>N/A</b>		Type of footwear: <b>Flat shoes</b>
Draw lines to spots touched  <b>(Swaying) (open/closed eyes)</b>		Pupil Size Left <b>5.0</b> Right <b>5.0</b>	Room Light <b>6.5</b>	Darkness <b>6.5</b>	Direct <b>4.5</b>
Blood pressure <b>142 / 98</b>		Temperature <b>98.8 °F</b>		Reaction to Light: <b>Normal</b>	
Muscle tone: <input checked="" type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Comments: <b>"Nothing"</b>		RIGHT ARM 		LEFT ARM 	
What medication or drug have you been using? How much? <b>"Nothing" No answer</b>		Time of use? <b>No Answer</b>	Where were the drugs used? (location) <b>No answer</b>		
Date/Time of Arrest <b>05-07-05 0130 hrs.</b>	Time DRE Notified <b>0145</b>	Evaluation Start Time <b>0200 hrs.</b>	Time Completed <b>0250 hrs.</b>		
DRE signature (Ink/ID rank) 	ID # <b>4184</b>	Reviewed by 			
Opinion of evaluator: <input type="checkbox"/> Rule Out <input type="checkbox"/> Medical	<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant	<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic	<input checked="" type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis	

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Cole, Ricky L.

1. **LOCATION:** The evaluation of Ricky Cole was conducted in the interview room at the Albuquerque Police Department.
2. **WITNESSES:** Lt. Murray Conrad of the Albuquerque Police Department.
3. **BREATH ALCOHOL TEST:** The arresting officer, Christine Frank of the Albuquerque Police Department administered a breath test to Cole with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer and Lt. Conrad were conducting DRE certification training at A.P.D. when contacted by Officer Frank requesting a drug evaluation. Officer Frank advised she detained the suspect after observing him fail to stop at a red traffic light at Central Ave. and University Blvd. The suspect's speech was slow and slurred. He had gold paint on his hands and clothing. He performed poorly on the SFST's and was arrested for DUI.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the interview room at A.P.D. He appeared passive and withdrawn. He had poor balance and coordination. He swayed as he stood and stumbled several times when walking. Gold paint smears were visible on his hands, face and shirt.
6. **MEDICAL PROBLEMS AND TREATMENT:** None noted or stated.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: The suspect swayed approximately 2" in a circular motion and estimated 30 seconds in 90 seconds. When asked how he estimated the 30 seconds the suspect stated, "I don't know." Walk & Turn: The suspect lost his balance twice during the instructions, stopped walking and missed heel to toe. One Leg Stand: The suspect was unable to maintain his balance and the test was stopped for safety reasons. Finger to Nose: The suspect was unable to touch the end of his nose on any of the six attempts, repeatedly opened his eyes and swayed noticeably.
8. **CLINICAL INDICATORS:** The suspect had HGN, Vertical Gaze Nystagmus and Lack of Convergence. His pulse and blood pressure were above the normal range.
9. **SIGNS OF INGESTION:** The suspect had a chemical-like odor on his breath and paint smears on his hands and face.
10. **SUSPECT'S STATEMENTS:** Suspect denied using any medication or drugs.
11. **DRE'S OPINION:** In my opinion Cole is under the influence of an Inhalant and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a blood sample.

### DRUG INFLUENCE EVALUATION

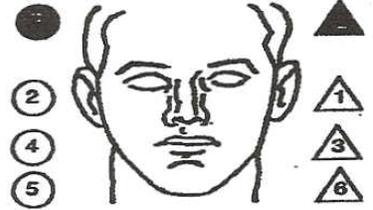
Evaluating: <b>SGT. JOE MARCANTONIO, E.B.P.D.</b>		DRE No. <b>4429</b>	Rolling Log No. <b>05-10-042</b>	Session <b>XXV-I-#4</b>																			
Recorder/Witness: <b>OFF. J. ANGERMEIR, E.B.P.D.</b>		Case: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>05-47745</b>																			
Arrestee's Name (Last, First MI): <b>DAVIS, PAUL M.</b>		DOB: <b>01-21-75</b>	Sex: <b>M</b>	Race: <b>W</b>	Arresting Officer (Name, ID No.): <b>OFF. J. ANGERMEIR, E.B.P.D.</b>																		
Date Examined/Time/Location: <b>10-02-05 1925 EAST BRUNSWICK P.D.</b>		Breath Results: <input type="checkbox"/> Refused Instrument # <b>4-3210</b>	<b>0.00%</b>	Chemical Test: <input type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood																			
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? <b>PANCAKES</b>	When? <b>7 AM</b>	What have you been drinking? How much? <b>NOTHING</b>	Time of last drink? <b>N/A</b>																		
By: <b>ANGERMEIR</b>		Time now? <b>MIDNIGHT</b>		When did you last sleep? <b>I DONT REMEMBER</b>																			
How long? <b>I FEEL SICK</b>		Are you sick or injured? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																			
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																			
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"I'M CLEAN"</b>		Attitude: <b>COOPERATIVE, SLOW</b>		Coordination: <b>POOR, UNSTABLE</b>																			
Speech: <b>SLOW, LOW, RASPY</b>		Breath: <b>NORMAL</b>		Face: <b>APPEARS DROWSY</b>																			
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye																			
Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal Eye lids: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> DROOPY <b>VERY</b>																			
Pulse and time: 1. <b>56 / 1935</b> 2. <b>60 / 1950</b> 3. <b>56 / 2005</b>		HGN: <b>Lack of smooth pursuit</b> Maximum deviation Angle of onset		Vertical Nystagmus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Convergence: 																			
Romburg Balance: 		Walk and Turn test: 		One Leg Stand: <b>TEST STOPPED</b> 																			
Internal clock: <b>58</b> Est. as 30 seconds		Describe Turn: <b>LOST BALANCE, STAGGERED TO RIGHT</b>		Cannot keep balance: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Starts too soon: <table border="1" style="font-size: small;"> <tr><td></td><td>1<sup>st</sup> Nine</td><td>2<sup>nd</sup> Nine</td></tr> <tr><td>Stops walking</td><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr> <tr><td>Misses heel to toe</td><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr> <tr><td>Steps off line</td><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr> <tr><td>Raises arms</td><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr> <tr><td>Actual # steps</td><td><b>9</b></td><td><b>9</b></td></tr> </table>			1 <sup>st</sup> Nine	2 <sup>nd</sup> Nine	Stops walking	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Misses heel to toe	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Steps off line	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Raises arms	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Actual # steps	<b>9</b>	<b>9</b>
	1 <sup>st</sup> Nine	2 <sup>nd</sup> Nine																					
Stops walking	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																					
Misses heel to toe	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																					
Steps off line	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																					
Raises arms	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																					
Actual # steps	<b>9</b>	<b>9</b>																					
Draw lines to spots touched: <b>SLOW MOVEMENTS</b> 		Pupil Size: <table border="1" style="font-size: small;"> <tr><td></td><td>Room Light</td><td>Darkness</td><td>Direct</td></tr> <tr><td>Left</td><td><b>1.5</b></td><td><b>1.5</b></td><td><b>1.5</b></td></tr> <tr><td>Right</td><td><b>1.5</b></td><td><b>1.5</b></td><td><b>1.5</b></td></tr> </table>			Room Light	Darkness	Direct	Left	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>	Right	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>	Nasal area: <b>CLEAR</b>							
	Room Light	Darkness	Direct																				
Left	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>																				
Right	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>																				
Blood pressure: <b>110 / 60</b>		Temperature: <b>97.5°f</b>		Oral cavity: <b>CLEAR</b>																			
Muscle tone: <input type="checkbox"/> Near normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: <b>NONE VISIBLE</b>																			
Comments: <b>KEPT LEANING FORWARD</b>		RIGHT ARM: 		LEFT ARM: 																			
What medication or drug have you been using? How much? <b>"I'M NOT USING"</b>		Time of use? <b>NO ANSWER</b>		Where were the drugs used? (location) <b>NO ANSWER</b>																			
Date/Time of Arrest: <b>10-02-05 1900 HRS.</b>		Time DRE Notified: <b>1915 HRS.</b>		Evaluation Start Time: <b>1925 HRS.</b>																			
DRE signature (include rank): 		ID #: <b>4429</b>		Reviewed by: 																			
Time Completed: <b>2030 HRS.</b>		Diagnosis of evaluator: <input type="checkbox"/> Rule Out <input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant <input type="checkbox"/> Medical <input type="checkbox"/> CNS Depressant <input type="checkbox"/> Hallucinogen <input checked="" type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis																					

## DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Davis, Paul M.

1. **LOCATION:** The evaluation of Paul Davis took place in the interview room at the East Brunswick Police Department.
2. **WITNESSES:** Officer James Angermeir of the East Brunswick Police Department.
3. **BREATH ALCOHOL TEST:** A/O Angermeir administered a breath test to Davis with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** Writer was contacted by radio and advised to contact Officer Angermeir for a drug evaluation. Officer Angermeir advised that he had located the suspect slumped over behind the steering wheel of his vehicle parked along the shoulder of E. Main Street. The vehicle was in drive and his foot was on the brake. The suspect's speech was slow, low and raspy. His coordination was poor and he was very unstable on his feet. He performed poorly on the SFST's and was arrested for DUI.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the interview room at E.B.P.D. He appeared drowsy and was having difficulty keeping his eyes open. His head was nodding forward and he had very droopy eyelids. His voice was slow, low and raspy and his pupils appeared to be constricted.
6. **MEDICAL PROBLEMS AND TREATMENT:** The suspect said he felt sick.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect swayed approximately 1" side to side, 2" front to back and estimated 30 seconds in 58 seconds. Walk & Turn: Suspect lost his balance during the instructions, stopped walking, missed heel to toe, stepped off the line and used his arms for balance. One Leg Stand: Suspect was unable to perform the test and it was terminated for safety. Finger to Nose: Suspect missed the tip of his nose on each attempt and his movements were slow and his head was leaning forward towards his chest.
8. **CLINICAL INDICATORS:** Suspect's pupils were constricted and showed no visible reaction to light. His pulse, blood pressure and temperature were below the normal ranges.
9. **SIGNS OF INGESTION:** Subject had several old track marks on both arms and had three fresh oozing puncture wounds on the back of his left hand.
10. **SUSPECT'S STATEMENTS:** The suspect made several references to being "clean."
11. **DRE'S OPINION:** In my opinion Davis is under the influence of a Narcotic Analgesic and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a blood sample.

### DRUG INFLUENCE EVALUATION

Evaluator <b>SGT. JON BONAR, FT. WAYNE PD.</b>		DRE No. <b>1550</b>	Rolling Log No. <b>05-017</b>	Session <b>XXV-I-#5</b>	
Recorder/Witness <b>RICHE TUCKER, W.P.D.</b>		Cause: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>98445-05</b>	
Arrestee's Name (Last, First MI) <b>ELLIOTT, JOHN B.</b>		DOB <b>06-1-88</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID No.) <b>SGT. FRED ILNICKI I.P.D.</b>
Date Examined/Time/Location <b>11-05-05 2100 HRS.</b>		Breath Results: Instrument # <b>51547</b> .00 %	Chemical Test <input type="checkbox"/> Refused <input checked="" type="checkbox"/> Urine <input type="checkbox"/> Blood		
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? By: <b>SGT. ILNICKI</b> <b>TACOS LUNCH</b>	When? <b>"I DON'T DRINK"</b>	What have you been drinking? How much? <b>N/A</b>	Time of last drink? <b>N/A</b>
Time now? <b>"DON'T KNOW"</b>	When did you last sleep? <b>TODAY</b>	How long? <b>2 HRS.</b>	Are you sick or injured? <b>"I'M OKAY"</b>	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <b>EMOTIONAL CHANGES (LAUGHING/CRY)</b>		Coordination: <b>POOR, STUMBLING</b>	
Speech: <b>MUMBLED, INCOHERENT</b>		Breath: <b>NORMAL</b>		Face: <b>FLUSHED, SWEATY</b>	
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery	Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye	Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <b>WIDE OPEN</b> <input type="checkbox"/> Normal <input type="checkbox"/> Droopy	
Posture and time 1. <b>116 / 2110</b> 2. <b>108 / 2130</b> 3. <b>112 / 2145</b>	HGN Lack of smooth pursuit Maximum deviation Angle of onset	Left Eye <b>NO</b>	Right Eye <b>NO</b>	Vertical Nystagmus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	One Leg Stand <b>TEST STOPPED</b>
Romberg Balance 	Walk and Turn test <b>TEST STOPPED - COULD NOT STAND HEEL TO TOE</b>	Cannot keep balance Starts too soon: <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		L R <input checked="" type="checkbox"/> <input type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input type="checkbox"/> Uses arms to balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input type="checkbox"/> Puts foot down	
Internal clock <b>N/A</b> Est. as 30 seconds	Describe Turn <b>N/A</b>	Cannot do test (explain) <b>LOST BALANCE 3 TIMES</b>		Type of footwear: <b>COMBAT BOOTS</b>	
Draw lines to spots touched		Pupil Size	Room Light	Darkness	Direct
		Left <b>6.5</b>	<b>6.5</b>	<b>8.5</b>	<b>6.0</b>
<b>TEST STOPPED - NEARLY FELL</b>		Right <b>6.5</b>	<b>6.5</b>	<b>8.5</b>	<b>6.0</b>
Blood pressure <b>156/102</b>	Temperature <b>99.8 °f</b>	Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Rebound dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Muscle tone: <input checked="" type="checkbox"/> Near normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid	Reaction to Light: <b>NORMAL</b>		Oral cavity: <b>CLEAR</b>		
What medication or drug have you been using? How much? <b>NO ANSWER, STARTING LAUGHING</b>		Time of use? <b>NO ANSWER</b>		Where were the drugs used? (location) <b>NO ANSWER - LAUGHING</b>	
Date/Time of Arrest <b>11-05-05 2030 HRS.</b>	Time DRE Notified <b>2045</b>	Evaluation Start Time <b>2100</b>	Time Completed <b>2210</b>		
DRE Signature (Print Name) <b>J. Bonar</b>		ID # <b>1550</b>	Reviewer Signature <b>[Signature]</b>		<b>[Signature]</b>
Opinion of evaluator: <input type="checkbox"/> Rule Out <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant	<input type="checkbox"/> CNS Stimulant <input checked="" type="checkbox"/> Hallucinogen	<input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant	<input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis

**DRUG INFLUENCE EVALUATION NARRATIVE**

Suspect: Elliott, John B.

1. **LOCATION:** The evaluation of John Elliott was conducted at the Adult Processing Center (APC) in Indianapolis.
2. **WITNESSES:** Deputy Chief Richie Tucker of the Winchester Police Department.
3. **BREATH ALCOHOL TEST:** Sergeant Fred Inicki of the Indianapolis Police Department administered a breath test to Elliott with a 0.00% result.
4. **NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** The writer was on-duty and assisting with DRE field certifications at the A.P.C. when contacted by Sergeant Inicki requesting a drug evaluation. According to Sergeant Inicki, the suspect had just left a concert at the RCA Dome and was stopped for driving without headlights and for failure to yield the right of way. The suspect was acting very strange. He was highly emotional and his speech was incoherent at times. He performed poorly on the SFST's and was arrested for DUI.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the interview room at A.P.C. He had very poor balance and stumbled when he walked. He appeared to be very emotional. At times he was laughing uncontrollably and then would start to cry. His speech was mumbled and mostly incoherent. His pupils appeared dilated.
6. **MEDICAL PROBLEMS AND TREATMENT:** None noted or stated.
7. **PSYCHOPHYSICAL TESTS:** Romberg Balance: Suspect was swaying approximately 2" front to back and 4" side to side until losing his balance and the test was stopped for safety reasons. Walk & Turn and One Leg Stand: Suspect was unable to perform the tests. Both were terminated for the suspect's safety. Finger to Nose: The suspect was unable to complete this test and it was also stopped for safety reasons.
8. **CLINICAL INDICATORS:** The suspect's pupils were dilated in all three lighting conditions. His pulse, blood pressure and temperature were above the normal ranges.
9. **SIGNS OF INGESTION:** None noted or stated.
10. **SUSPECT'S STATEMENTS:** When asked about drug use, the suspect started laughing.
11. **DRE'S OPINION:** In my opinion Elliott is under the influence of a Hallucinogen and unable to operate a vehicle safely.
12. **TOXICOLOGICAL SAMPLE:** The suspect provided a urine sample.
13. **MISCELLANEOUS:**

**SESSION XXVI**  
**PREPARING THE NARRATIVE REPORT**

**SESSION XXVI PREPARING THE NARRATIVE REPORT**

Upon successfully completing this session the student will be able to:

- o Discuss the essential elements of the drug influence evaluation report.
- o Prepare a clear and concise narrative description of the results of the drug influence evaluation.

**Content Segments****Learning Activities**

- |   |                                |
|---|--------------------------------|
| A. Importance of Documentation              | o Instructor Led Presentations |
| B. Components of the Drug Evaluation Report | o Interactive Discussion       |
| C. Drug Evaluation Narrative Report Format  |                                |
| D. Sample Report                            |                                |

Aids	Lesson Plan	Instructor Notes
 <p><b>10 Minutes</b></p>  <p><b>XXVI-1</b> (Title)</p>  <p><b>XXVI-2</b> (Objectives)</p>	<p><b>PREPARING THE NARRATIVE REPORT</b></p> <p><b>A. The Importance of Documentation</b></p> <ol style="list-style-type: none"> <li>1. Successful prosecution depends on how clearly, completely and convincingly the DRE presents their observations, measurements and conclusions.</li> <li>2. A well written, clear and convincing drug evaluation report increases the likelihood that the suspect will be convicted. <ol style="list-style-type: none"> <li>a. Prosecutor is more likely to press the charge if the evidence is organized, clearly documented and compelling.</li> </ol> </li> </ol>	<p>Total Lesson Time: Approximately 50 Minutes</p> <p>Display Session Title</p> <p>Briefly review session objectives, content and learning activities.</p> <p>Point out that prosecutor's decision generally is based on the offense/arrest report and, consequently, if they cannot find the information they need, they are more likely to plea bargain or dismiss the charge.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XXVI-3</b> (Sample Face Sheet)</p>	<p>b. Defense is less likely to contest the charge when the report is descriptive, detailed and complete.</p> <p><b>B. Components of the Drug Influence Evaluation Report</b></p> <p>1. The Drug Influence Evaluation Face Sheet is <u>part</u> of your drug evaluation report; but it is <u>not</u> the entire report.</p> <p>a. The Face Sheet contains some very important information.</p> <p>b. But the Face Sheet does not contain <u>all</u> of the important information that is available concerning this suspect.</p>	<p>Point out that evidence gathered during the drug evaluation is rarely challenged because it is well documented on the evaluation form, backed up by a narrative report.</p> <p>Point out some of the key information on the sample Face Sheet.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>o Suspect's pulse rate was below normal on all three measurements.</li> <li>o Suspect's eyes failed to converge.</li> <li>o Suspect's pupils were constricted.</li> </ul> <p>Remind students that to assist with the interpretation of the information on the face sheet, boxes on the face sheet should not be left blank. It is recommended that "N/A" or "None Observed" be used.</p> <p>Ask students to suggest some important information that might be available that wouldn't ordinarily appear on the Face Sheet.</p>

Aids	Lesson Plan	Instructor Notes
	<p>4. Most importantly, the Drug Influence Evaluation Face Sheet is a <u>Technical Document</u>.</p> <ul style="list-style-type: none"> <li>a. Trained DREs know how to complete and interpret the Face Sheet.</li> <li>b. But many prosecutor, judges, and jurors won't know how to interpret it.</li> </ul> <p>5. It is up to you to take all of the information you work so hard to obtain, and to put it into a clear, plain English, written report so that the prosecutor, the judge and the jury will understand what you observed and what it means.</p> <ul style="list-style-type: none"> <li>a. As a DRE, you have a special ability to secure powerful, scientific evidence that can make the difference between success and failure in court.</li> <li>b. It would be a shame to waste that special ability by submitting an inadequate written report.</li> </ul>	<p>Examples:</p> <ul style="list-style-type: none"> <li>o Information obtained during the interview of the arresting officer.</li> <li>o Elaborate or lengthy statements made by the suspect.</li> <li>o Paraphernalia found in suspect's possession.</li> </ul> <p>Remind students of the K.I.S.S. principle- (Keep It Simple Stupid). While using very technical terminology is OK, the DRE must remember that it does no good to have a report that no one but them can understand.</p>

Aids	Lesson Plan	Instructor Notes
	<p>6. To ensure that the information contained on the Face Sheet is systematic and standardized the results of the tests should be recorded as follows:</p> <p>Lack of Convergence</p> <p>a. A dot should be made where the pupil is and draw an arrow to indicate the movement and where the pupil stops.</p> <p>Romberg Balance</p> <p>a. The first figure indicates the sway from front to back and should be estimated in inches from center.</p> <p>b. The second figure indicates the sway from side to side and is estimated in inches from center.</p> <p>c. Record actual elapsed time.</p> <p>Walk and Turn</p> <p>a. The first two categories, cannot keep balance and starts too soon, are observed during the instruction stage.</p> <p>o On the lines indicate the number of times each clue is observed.</p> <p>b. Indicate by a check the number of times the suspect stops, misses heel to toe, steps off line or raises arms.</p>	<p>Show the students an example. Remind them that in their student manuals is a complete description of the correct way to mark their evaluations.</p> <p>Show the students an example. Remember to have them put the approximate number of inches from center the subject sways on either end of the arrows.</p> <p>Demonstrate how each clue is to be documented using dry erase board or flip-charts.</p>

Aids	Lesson Plan	Instructor Notes
	<p>c. Record the actual number of steps taken.</p> <p>d. If the suspect stops walking, indicate where with a vertical slash mark and an "S" under that mark.</p> <p>e. If the suspect steps off the line, indicate with half of a slash mark at an angle in the direction the step was off the line.</p> <p>f. If the suspect misses heel-to-toe, indicate with a vertical slash mark and an "M" under that mark.</p> <p>g. Describe turn.</p> <p>One Leg Stand</p> <p>a. Indicate above the feet the number they were counting when they put their foot down.</p> <p>b. Check marks should be made to indicate the number of times the suspect swayed, used arms, hopped or put foot down.</p> <p>c. Indicate how far the subject counted in 30 seconds in the top area of the box above the foot raised.</p> <p>Finger to Nose</p> <p>a. A line should be drawn to the appropriate triangle or circle to indicate where the suspect touched their nose.</p>	<p>Demonstrate how each clue is to be documented using flip charts or dry erase board.</p> <p>Demonstrate how each cue is to be documented using a flip chart or dry erase board.</p>

Aids	Lesson Plan	Instructor Notes
<p><b>20 Minutes</b></p>  <p><b>XXVI-4A</b> (Components 1-4)</p>	<p><b>C. Drug Evaluation Narrative Report Format</b></p> <ol style="list-style-type: none"> <li>1. The typical Drug Evaluation Narrative Report Format contains 13 major components.</li> <li>2. First item: the Location (i.e. where the evaluation was conducted).</li> <li>3. Second item: Witnesses. <ol style="list-style-type: none"> <li>a. List the person who served as the evaluator and the recorder with the complete agency name spelled out.</li> <li>b. Other officers who helped to conduct the evaluation.</li> <li>c. Others who observed the evaluation.</li> </ol> </li> <li>4. Third item: The Breath Alcohol Test. <ol style="list-style-type: none"> <li>a. Indicate BAC.</li> <li>b. Who administered the breath alcohol test.</li> <li>c. Time the test was administered.</li> </ol> </li> </ol>	<p>Instructor's Note: Suggestion: If the DRE draws the line from the place where the subject touches to the triangle it enables them to draw a straighter line.</p> <p>Solicit students' comments and questions about the Narrative Report.</p> <p>Include any instructors who witnessed the evaluation</p>

Aids	Lesson Plan	Instructor Notes
	<ol style="list-style-type: none"><li>5. Fourth item: The Notification and Interview of the Arresting Officer.<ol style="list-style-type: none"><li>a. When were you first notified of the request for a drug evaluation?</li><li>b. Summarize the information you were given at that time.</li><li>c. Document any information provided by the arresting officer.</li><li>d. Summary of your interview with the arresting officer and other witnesses.</li></ol></li><li>6. Fifth item: Initial Observation of the Suspect.<ol style="list-style-type: none"><li>a. Where you first saw the suspect.</li><li>b. Noteworthy aspects of your initial observations.</li><li>c. Findings of the Preliminary Examination of the Suspect.</li></ol></li><li>7. Sixth item: Medical Problems and Treatment.<ol style="list-style-type: none"><li>a. Your observations of any apparent injury or illness affecting the suspect.</li><li>b. Suspect's statements of injury or illness.</li><li>c. Summary of any medical treatment provided to the suspect.</li></ol></li></ol>	

**Aids****Lesson Plan****Instructor Notes**

**XXVI-4B**  
(Components  
5-9)

8. Seventh item: Psychophysical Indicators of Impairment.
  - a. Briefly summarize performance of the Romberg, Walk and Turn, One Leg Stand and Finger to Nose tests.
  - b. Include any relevant behaviors on the tests that are not included on the face sheet.
9. Eighth item: Clinical Indicators of Impairment.
  - a. Eye signs.
    - o Briefly summarize your observations of HGN, Vertical Gaze Nystagmus, Lack of Convergence, pupil size, reaction to light and appearance of the suspect's eyes.
    - o Document any observations of eyelid tremors
  - b. Vital signs.
    - o Briefly summarize the suspect's pulse rate, blood pressure and temperature.

Aids	Lesson Plan	Instructor Notes
 <p><b>XXVI-4C</b> (Components 10-13)</p>	<ul style="list-style-type: none"> <li>c. Document if body, leg or eyelid tremors were present.</li> </ul> <p>10. Ninth item: Signs of Ingestion.</p> <ul style="list-style-type: none"> <li>a. Results of examinations of oral and nasal cavities.</li> <li>b. Results of examinations for injection marks.</li> <li>c. Odors detected on suspect's breath, hands, clothing, etc.</li> <li>d. Physical debris of drugs or drug paraphernalia found on suspect's person.</li> </ul> <p>11. Tenth item: Suspect's Statements.</p> <ul style="list-style-type: none"> <li>a. "Miranda" waiver and responses.</li> <li>b. Volunteered or spontaneous statements.</li> <li>c. Statements made as a result of your interview. <ul style="list-style-type: none"> <li>o Include admission or denial of drug use, time and location drugs were used, statements relating to the suspect's perception of their impairment if applicable.</li> </ul> </li> </ul>	<p>Remind students to contact their local prosecutor's office for information on when to give Miranda during the evaluation.</p>

Aids	Lesson Plan	Instructor Notes
	<p>12. Eleventh item: DRE's Opinion.</p> <ul style="list-style-type: none"> <li>a. State the category or categories of drugs that you believe is/are affecting the subject.</li> <li>b. State your opinion concerning the subject's ability to operate a motor vehicle safely, if applicable to this case.</li> </ul> <p>13. Twelfth item: Toxicological Sample.</p> <ul style="list-style-type: none"> <li>a. State the type of sample (urine, blood, etc.) obtained from the subject.</li> <li>b. State who drew the sample or observed the collection of the sample.</li> <li>c. State where the sample was taken and to whom it was given.</li> <li>d. If the subject refused to provide a sample, state that fact.</li> </ul> <p>14. Thirteenth item: Miscellaneous.</p> <ul style="list-style-type: none"> <li>a. Any other pertinent information such as, drugs or drug paraphernalia found in the subject's possession</li> </ul>	<p><b>Note: Remind the students that anytime they have a positive BAC reading, they must list alcohol (ETOH) as part of the opinion.</b></p> <p>Suggestion: If available, show students a copy of a toxicology request form that they will be using.</p> <p>Remind the students that if they have a tracking number on the toxicology request form, that they should also include that number in the report.</p>

Aids	Lesson Plan	Instructor Notes
 <b>20 Minutes</b>	<b>D. Sample Report</b>	<p>Direct the students' attention to the Sample Drug Evaluation Report (Richardson) in Session XXVI of their Student Manual.</p> <p>A copy of this report is found at the end of this lesson plan, for your reference.</p> <p>Briefly review all thirteen items of the report with the students.</p> <p>Solicit their comments and questions about the report.</p>

## DRUG INFLUENCE EVALUATION

Evaluator <b>Det. Jeff Riddle, Phoenix P.D.</b>		DRE No.	Rolling Log No. <b>05-10-024</b>		Session <b>XXVI</b>	
Recorder/Witness <b>Sgt. Paul White, Maricopa Co.</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Case # <b>05-10-17654</b>		
Arrestee's Name (Last, First MI) <b>Richardson, John M.</b>		DOB <b>9-06-74</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID No.) <b>Ofc. Darren Nielsen, Phoenix PD</b>	
Date Examined/Time/Location <b>10-21-05, 9:30 p.m. Maricopa Co. Jail</b>		Breath Results: <input type="checkbox"/> Refused Instrument # <b>474501</b>		0.00 % Chemical Test <input type="checkbox"/> Refused <input checked="" type="checkbox"/> Urine <input type="checkbox"/> Blood		
Miranda Warning Given: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? By: <b>Ofc. Nielsen</b> <b>Burger</b>		When? <b>5 p.m.</b>	What have you been drinking? How much? <b>Nothing N/A</b>	
Time now? <b>About 7pm</b>		When did you last sleep? <b>Last night</b>	How long? <b>4 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(Long pause before answering)</i>		Attitude: <b>Cooperative/withdrawn</b>		Coordination: <b>Poor, trouble standing</b>		
Speech: <b>Low, Slow, Raspy</b>		Breath: <b>Normal</b>		Face: <b>Pale</b>		
Corrective lens: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left Eye <input type="checkbox"/> Right Eye		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal
		Pupil size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal, (explain)		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy
Pulse and time 1. <b>58 / 9:42pm</b> 2. <b>56 / 9:54pm</b> 3. <b>58 / 10:07pm</b>		HGN Lack of smooth pursuit Maximum deviation Angle of onset		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		One Leg Stand 
Romberg Balance 		Walk and Turn test <b>Raised arms almost continuously</b> 		Cannot keep balance Starts too soon: 1 <sup>st</sup> Nine 2 <sup>nd</sup> Nine		L R <input checked="" type="checkbox"/> Sways while balancing (Continuously) <input checked="" type="checkbox"/> Uses arms to balance <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> Puts foot down
Internal clock <b>52</b> Est. as 30 seconds		Describe Turn <b>Pivoted - Nearly fell</b>		Cannot do test (explain) <b>N/A</b>		
Draw lines to spots touched (Slow movements) 		Pupil Size Left <b>2.0</b> Right <b>2.0</b>		Room Light <b>2.0</b> Darkness <b>2.0</b> Direct <b>2.0</b>		Oral cavity: <b>Dry Lips, Clear</b>
Blood pressure <b>114/68</b>		Temperature <b>97.8 °f</b>		Hippus: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: <b>None visible</b>
Muscle tone: <input type="checkbox"/> Near normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments: <b>Arms cool to touch</b>		RIGHT ARM 		LEFT ARM <b>Old track marks</b>  <b>3 fresh puncture wounds</b> 
What medication or drug have you been using? How much? <b>"I don't do drugs"</b>		Time of use? <b>No answer</b>		Where were the drugs used? (location) <b>No answer</b>		
Date/Time of Arrest <b>10-21-05 9:05 pm</b>		Time DRE Notified <b>9:20 pm</b>		Evaluation Start Time <b>9:30 pm</b>		Time Completed <b>10:20 pm</b>
DRE signature (Include rank) <i>Jeff Riddle</i>		ID #		Reviewed by <i>Paul White</i>		
Opinion of evaluator:		<input type="checkbox"/> Rule Out <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant		<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen
		<input type="checkbox"/> Dissociative Anesthetic <input checked="" type="checkbox"/> Narcotic Analgesic		<input type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis		

## DRUG INFLUENCE EVALUATION NARRATIVE

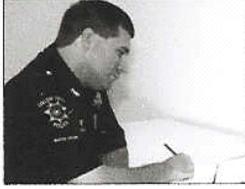
1. **LOCATION:** The evaluation was conducted in the DRE room at the Maricopa County Jail, Phoenix, Arizona.
2. **WITNESSES:** The entire evaluation was witnessed and recorded by Sergeant Paul White of the Maricopa County Sheriff's Office.
3. **BREATH ALCOHOL TEST:** The arresting officer, Officer Darren Nielsen of the Phoenix Police Department obtained an 0.00 BrAC reading from the suspect at 9:20 p.m., using the Intoxilyzer 5000, Serial #474501.
4. **THE NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER:** At approximately 9:20 p.m., the writer was contacted by dispatch and requested to conduct a DRE evaluation for Officer Nielsen. Writer contacted Officer Nielsen at the Maricopa County Jail where it was determined that Richardson (DOB 09/06/74) had been observed driving slowly and failed to stop at a red light. Officer Nielsen stated Richardson appeared sleepy and was "on the nod." Officer Nielsen also stated the suspect's voice was low in volume, raspy in tone and slow in tempo. His balance and coordination was poor and he was arrested for DUI after performing poorly on the SFST's.
5. **INITIAL OBSERVATION OF SUSPECT:** Writer first observed the suspect in the M.C.S.O. DRE room. He moved very slowly, was unstable on his feet and when he walked across the room he stumbled and nearly fell. His head nodded forward repeatedly and he appeared to be "on the nod." When he answered questions from Officer Nielsen, his words were slow and slurred. His eyelids were droopy and his pupils appeared to be constricted. His first pulse was checked at 58 BPM.
6. **MEDICAL PROBLEMS AND TREATMENT:** The suspect claimed no illness or injury. No evidence of injury or illness was observed during the evaluation.
7. **PSYCHOPHYSICAL:** The suspect exhibited impairment throughout all portions of the psychophysical tests. Romberg Balance: The suspect exhibited a 2" front to back sway and a 3" side to side sway. The suspect had a slow internal clock estimating 30 seconds in 52 seconds and his head repeatedly dropped forward towards his chest during the test. Walk and Turn: The suspect lost his balance during the instruction stage, missed heel to toe three times during the first nine steps and three times on the second nine steps. He turned incorrectly with a pivot and nearly fell. He also raised his arms almost continuously throughout the test. One Leg Stand: The suspect counted very slowly throughout the test making it to 1012 in 30 seconds while standing on his left foot and 1015 in 30 seconds while standing on his right foot. He also put is foot down three times while standing on his left foot and twice while standing on his right foot. Additionally, he swayed while trying to balance and

used his arms for balance throughout both tests. Finger to Nose: The suspect responded to commands very slowly and used the wrong hands on attempts #5 and #6. He did not touch the tip of his nose on any of the six attempts.

8. CLINICAL INDICATORS: EYES: No clues of HGN or VGN were observed. Lack of Convergence was observed. The suspect's pupils were constricted in all three lighting conditions, there was no visible reaction to light and his eyelids were droopy. VITAL SIGNS: The suspect's pulse rates were below the normal range (58, 56, 58 BPM). His blood pressure was also below the normal range at 114/68.
9. SIGNS OF INGESTION: Three fresh puncture wounds were located on the suspect's left forearm. Numerous scar lines ("track marks") were observed on his left inside forearm. (Photographs attached) Muscle tone was flaccid and the suspect's arms felt cool to the touch.
10. SUSPECT'S STATEMENTS: The suspect repeatedly denied using drugs stating, "I told you, I don't do drugs." He stated he was right-handed and the puncture wounds on his left forearm were thorn scratches from gardening.
11. DRE'S OPINION: In my opinion, Richardson is under the influence of a Narcotic Analgesic and is unable to operate a vehicle safely.
12. TOXICOLOGICAL SAMPLE: A urine sample was obtained from the suspect at 10:35 p.m., witnessed by the writer and Sgt. White. The sample was delivered to the Evidence Property Room pending analysis by the Forensic Laboratory.
13. MISCELLANEOUS: Three syringes with needles were located by Officer Nielsen in Richardson's vehicle.

## Session XXVI

### Preparing the Narrative Report



XXVI-1

### Preparing the Narrative Report

Upon successfully completing this session the student will be able to:

- Discuss the essential elements of the drug influence evaluation report
- Prepare a clear and concise narrative description of the results of the drug influence evaluation

Drug Evaluation &amp; Classification Training

XXVI-2

### Sample Drug Influence Evaluation Face Sheet

Drug Evaluation &amp; Classification Training

XXVI-3

### Components on the Drug Evaluation Narrative Report

1. Location
2. Witnesses
3. Breath Alcohol Test
4. Notification and Interview of Arresting Officer

Drug Evaluation &amp; Classification Training

XXVI-4A

### Components on the Drug Evaluation Narrative Report

5. Initial observations of the suspect
6. Medical problems and treatment
7. Psychophysical indicators of impairment
8. Clinical indicators of impairment
9. Signs of ingestion

Drug Evaluation &amp; Classification Training

XXVI-4B

### Components on the Drug Evaluation Narrative Report

10. Suspect's statements
11. DRE officer's opinion
12. Toxicological sample
13. Miscellaneous

Drug Evaluation &amp; Classification Training

XXVI-4C



One Hour and Thirty Minutes

**SESSION XXVII**

**PRACTICE: TEST ADMINISTRATION**

## **SESSION XXVII PRACTICE: TEST ADMINISTRATION**

Upon successfully completing this session the participants will be able to:

- o Administer selected portions of the battery of examinations that constitute the drug influence evaluation.
- o Describe the examination procedures.
- o Document the results of the evaluations.

### Content Segments

- A. Procedures for This Session
- B. Hands On Practice
- C. Session Wrap Up

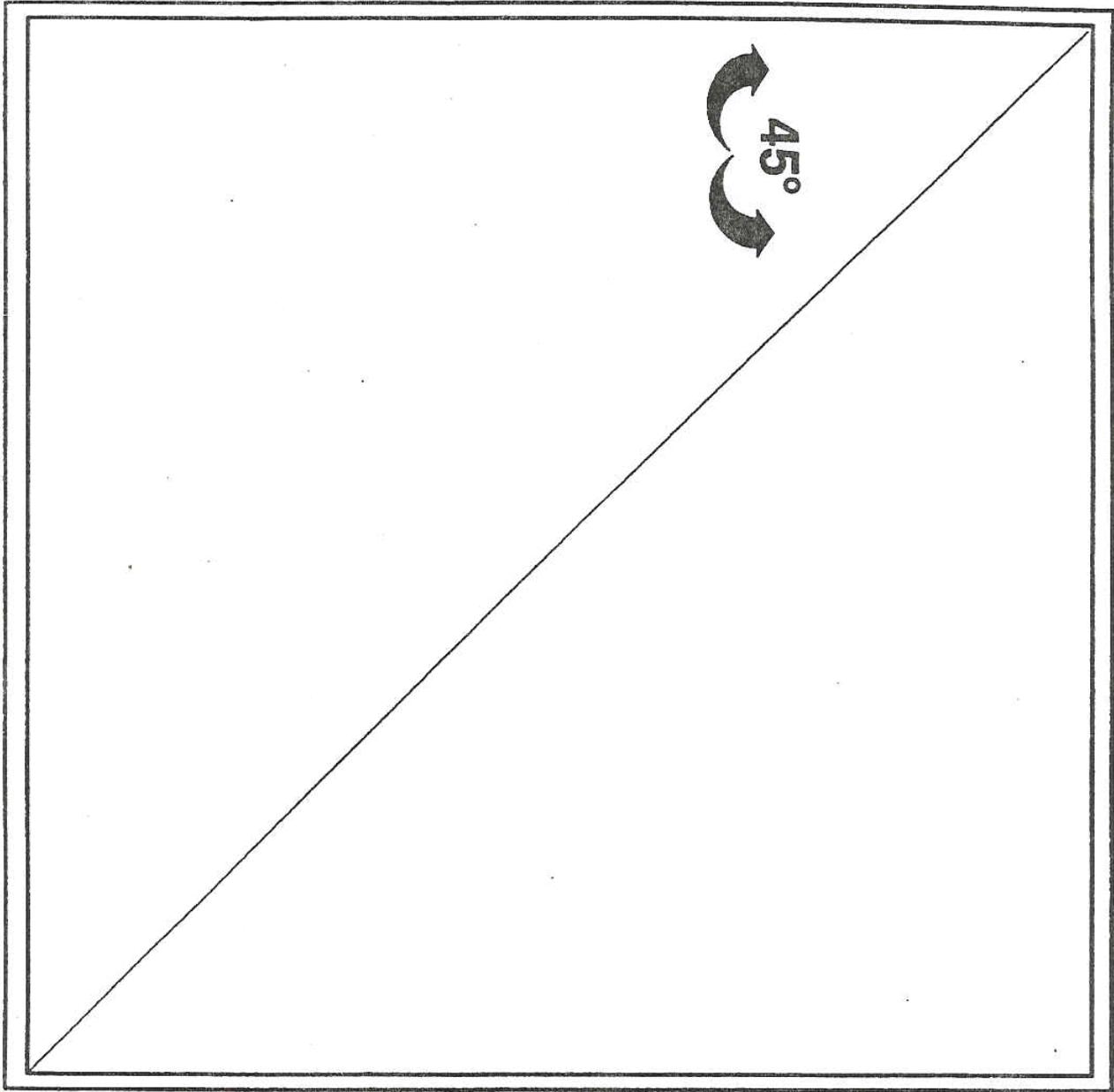
### Learning Activities

- o Participants' Hands On Practice
- o Instructor Led Coaching
- o Participant Led Coaching

Aids	Lesson Plan	Instructor Notes
 <b>15 Minutes</b>    <b>XXVII-1</b> (Title)    <b>XXVII-2</b> (Objectives)	<p><b>PRACTICE: TEST ADMINISTRATION</b></p> <p><b>A. Procedures for this Session</b></p> <ol style="list-style-type: none"> <li>1. Students will work in two or three member teams.           <ol style="list-style-type: none"> <li>a. At any given time, one member of the team will be engaged in conducting and recording examinations of another member.</li> <li>b. The third member of the team will help coach and critique the student who is conducting the examinations.</li> </ol> </li> </ol>	<p>Total Lesson Time: Approximately 90 Minutes</p> <p>Display Session Title</p> <p>Point out "Practice Session" wall chart.</p> <p>Briefly review the objectives, content and activities of this session.</p> <p><u>NOTE:</u> Three member teams are preferable. However, no four member teams should be constructed. Thus, for example, if the class has 25 students, assign 7 three member teams and 2 two member teams.</p> <p><u>Make</u> team assignments.</p> <p><u>Emphasize</u> that students can help each other learn by pointing out errors of omission or commission.</p>

Aids	Lesson Plan	Instructor Notes
	<p>c. Students will take turns serving as test administrator, test subject and coach.</p> <p>2. For this practice session, each student will conduct a <u>complete</u> drug influence evaluation.</p> <p>a. Begin with the Preliminary Examination.</p> <ul style="list-style-type: none"> <li>o <u>Ask</u> all of the prescribed questions.</li> <li>o <u>Conduct</u> the initial check of the eyes.</li> <li>o <u>Check</u> the pulse for the first time.</li> </ul> <p>b. Conduct the tests of Horizontal Gaze Nystagmus, Vertical Gaze Nystagmus and Lack of Convergence.</p> <p>c. Administer the four divided attention psychophysical tests.</p> <ul style="list-style-type: none"> <li>o Romberg Balance test</li> <li>o Walk and Turn test</li> <li>o One Leg Stand test</li> <li>o Finger to Nose test</li> </ul>	<p><u>Instruct</u> students to review the standardized drug influence evaluation form in their manual.</p> <p>For practical purposes, not all 12 steps will be completed in this Session. Instructors should provide information to students regarding steps one and two.</p> <p><u>Point out</u> that the student who is "coaching" should simultaneously take the subject's pulse along with the test administrator.</p> <p><u>Point out</u> that, when conducting the HGN test, the "coach" should check the student administrator's ability to estimate angles of 30, 40 and 45 degrees. A template should be used for this check.</p> <p><u>Point out</u> that it will <u>not</u> be necessary for the student (<u>subject</u>) actually to perform these tests (except for Finger to Nose). It will suffice for the student (<u>administrator</u>) simply to give the test instructions accurately and completely.</p>

Aids	Lesson Plan	Instructor Notes
 <b>60 Minutes</b>	<p>d. Check the vital signs.</p> <ul style="list-style-type: none"> <li>o Blood Pressure</li> <li>o Temperature</li> <li>o Check the pulse for the <u>second</u> time.</li> </ul> <p>e.. Conduct the dark room examinations.</p> <p>f. Check for muscle rigidity.</p> <p>g. Examine the student (subject's) neck, arms and ankles for signs of injection.</p> <ul style="list-style-type: none"> <li>o <u>Check the pulse for the third time.</u></li> </ul> <p><b>B. Hands On Practice</b></p>	<p><u>Point out</u> that, for this practice session, these examinations will <u>not</u> actually be given in the dark.</p> <p><u>Solicit</u> students' questions concerning procedures for this practice session.</p> <p><u>Instruct</u> students to begin their practice.</p> <p><u>Monitor</u> the teams, and offer encouragement and constructive criticism, as appropriate.</p> <p><u>Make sure</u> each student serves as the test administrator for at least one complete drug influence evaluation.</p>
 <b>15 Minutes</b>	<p><b>C. Session Wrap Up</b></p>	<p><u>Offer</u> appropriate comments and observations about the students' performance.</p> <p><u>Solicit</u> students' comments concerning this practice session.</p>



# Session XXVII

## Practice: Test Administration



XXVII-1

## Practice: Test Administration

Upon successfully completing this session the student will be able to:

- Administer selected portions of the battery of examinations that constitute the drug influence evaluation
- Describe the examination procedures
- Document the results of the examinations

Drug Evaluation & Classification Training

XXVII-2

# QUESTIONS?

Drug Evaluation & Classification Training

One Hour and Thirty Minutes

**SESSION XXVIII**  
**CASE PREPARATION AND TESTIMONY**

**SESSION XXVIII****CASE PREPARATION AND TESTIMONY**

Upon successfully completing this session the student will be able to:

- o Conduct a thorough pre-trial review of all evidence and prepare for testimony.
- o Provide clear, accurate and descriptive direct testimony concerning drug influence evaluations.
- o Respond effectively and appropriately to cross examination in Drug Evaluation and Classification cases.

**Content Segments**

- A. Guidelines for Case Preparation
- B. Guidelines for Direct Testimony
- C. Typical Defense Tactics

**Learning Activities**

- o Instructor Led Presentations
- o Instructor Led Demonstrations
- o Reading Assignments

Aids	Lesson Plan	Instructor Notes
 <b>10 Minutes</b>	<p><b>CASE PREPARATION AND TESTIMONY</b></p>	<p>Total Session Time: Approximately 90 Minutes</p>
 <b>XXVIII-1</b> (Title)		<p>Display Session Title</p>
 <b>XXVIII-2</b> (Objectives)		<p>Overview session objectives, content segments and learning activities.</p>
 <b>XXVIII-3</b> (Case Preparation)	<p><b>A. Guidelines for Case Preparation</b></p> <p>1. Preparation</p> <p>a. Preparation to present your case in court begins during your initial investigation.</p> <p>o The quality of your investigation and documentation will ultimately determine your ability to accurately present information during trial.</p> <p>b. When you receive the trial notice you should:</p> <p>o Review all records and reports associated with the case.</p> <p>o Review all evidence and your conclusion.</p>	<p><u>Point out</u> That it is especially important to take complete and accurate notes of your investigation and observations. Complete documentation of this information is essential.</p>
		<p>Schedule a pre-trial conference with the prosecutor.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>o Review notes with arresting officer.</li> <li>o Review any weak areas.</li> <li>o Clarify or resolve any discrepancies.</li> <li>o Review questions the prosecutors will be asking.</li> <li>o Review tactics the prosecutors expects the defense to use.</li> <li>o Review your resume and credentials.</li> </ul> <p>2. If a pre trial conference is not possible, identify the main points of the case and discuss them with the prosecutor during the few minutes before the trial.</p> <p>3. Contact the DEC Program Agency Coordinator to discuss any new findings regarding drug categories.</p>	<p>Note: It is very important to meet with prosecutors that have never been exposed to the DEC Program before trial to explain that it can not be treated like a typical DUI trial. You must explain that there are different protocols for DUI versus DRE cases.</p> <p>Excellent resources for prosecutors can be obtained through the National Traffic Law Center.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>45 Minutes</b></p>  <p><b>XXVIII-4</b> (Direct Testimony)</p>	<p><b>B. Guidelines for Direct Testimony</b></p> <ol style="list-style-type: none"> <li>1. Direct testimony           <ol style="list-style-type: none"> <li>a. Although knowledge only greater than what the public has is required to qualify as an "expert", your testimony will carry much more <u>weight</u> if you have good credentials.</li> <li>b. Qualifications will be established during Voir Dire:               <ol style="list-style-type: none"> <li>o When testifying, relate <u>training and experience</u> to the type of arrest being tried (e.g. DWI, Methamphetamine, Cocaine, etc.)</li> <li>o Being qualified as an expert in the past does not automatically qualify you as an expert in a particular court or case.</li> </ol> </li> </ol> </li> </ol>	<p><u>Point out</u> that officer's resume is invaluable in establishing credibility.</p> <p>Voir Dire is a french expression literally meaning "to see, to say". Loosely, this would be rendered in English as "To seek the truth", or "to call it as you see it". In a law or court context, one application of voir dire is to question a witness to assess his or her qualifications to be considered an expert in some matter pending before the court.</p> <p><u>Highlight fact</u> that you were <u>selected</u> to attend specialized DRE training, not just assigned randomly.</p> <p><u>Point out</u> that officers should document all previous cases where they were qualified as an expert.</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XXVIII-5</b> (New Scientific Principle)</p>	<ul style="list-style-type: none"> <li>o If possible, do not allow the defense to stipulate that you are an expert.</li> <li>o Document and record all evaluations conducted. Establish ratio of evaluations that resulted in a finding that the subject was <u>not</u> under the influence.</li> <li>o Highlight the number of times you have seen a person under the influence of the drug(s) in question and have observed the symptomatology, etc.</li> <li>o Ability to answer specific questions with confidence, skill and exactness will bolster a professional image in the eyes of the judge and/or jury.</li> </ul> <p>2. New Scientific Principle</p> <ul style="list-style-type: none"> <li>o The scientific principles are unfamiliar to the jury or judge.</li> <li>o Your task is to establish that your hard work through training will be acceptable in the court.</li> <li>o American courts employ either the Frye or the Daubert standards for</li> </ul>	<p><u>Point out</u> that if your credentials are good you should always try to get your specific qualifications in front of the jury.</p> <p><u>Point out</u> that if evaluation is properly conducted officers will be able to determine source of impairment accurately.</p> <p>It is essential to demonstrate to the jury that you are fair and impartial, and that you look at each case individually.</p> <p><u>Point out</u> that this is critical in establishing credibility.</p> <p><u>Point out</u> that minor details are important.</p> <p><u>Point out</u> that they aren't really new just not within the common realm of knowledge of the average person.</p> <p>Discuss the appropriate rule of evidence for your jurisdiction.</p>

Aids	Lesson Plan	Instructor Notes
	<p>determining the admissibility of scientific evidence.</p> <ul style="list-style-type: none"> <li>o The landmark case "Frye vs. U.S."</li> <li>o Frye requires that the scientific principle or theory used to support "evidence" be in conformity with a generally accepted explanatory theory, if the "evidence" is to be admissible.</li> <li>o In Daubert, courts serve as a gatekeeper for all scientific evidence.</li> <li>o Courts assess evidence by considering four factors: <ul style="list-style-type: none"> <li>1. Opinions are testable</li> <li>2. Methods/principles have been subject to peer review</li> <li>3. Known error rate can be identified</li> <li>4. Opinions rest on methodology that is generally accepted within the relevant scientific/technical community</li> </ul> </li> </ul>	<p>"Frye vs. U.S." 293F 1013 (D.C. Cir. 1923).</p> <p><u>Point out</u> it is not enough that qualified experts testify that a particular scientific technique is valid. The technique must be generally accepted by the relevant scientific community.</p> <p>Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993)</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XXVIII-6</b> (General Guidelines)</p>	<p>2. General guidelines.</p> <p>a. Basic job is to prove that the subject was under the influence of a drug or some combination of drugs.</p> <p>b. Don't be afraid to say "I don't know".</p> <p>c. Avoid contact with the defense attorney if possible.</p> <p>d. Don't be upset if prosecutor and defense attorney appear friendly to each other.</p> <p>e. Jury focuses on an officer's demeanor more than content of testimony.</p> <p>f. Do <u>not</u> bring manuals or articles into court for reference.</p> <p>g. Explain technical terms in layman's language.</p>	<p>Keep this in mind at all times.</p> <p><u>Point out</u> that the officer is not expected to be an expert on <u>all</u> aspects of <u>all</u> drugs. Testify to only what you know. Remember, an expert witness can rely on hearsay to develop his or her expertise.</p> <p>Remind students that both sides have a specific role to play in the case at hand, but that does not preclude a personal or professional relationship.</p> <p>Point out that an officer should be polite and courteous during testimony. Do not become agitated as a result of defense questions. Do not take personal issue with defense statements, stick to the facts.</p> <p>Review materials before court to become familiar with contents.</p> <p>For example, HGN means an involuntary jerking of the eyes occurring as the eyes gaze to</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XXVIII-7</b> (Defense Tactics)</p>  <p><b>45 Minutes</b></p>	<p>h. Pay attention to what evidence or testimony can be and is excluded.</p> <p>i. When describing subject's performance on SFST's, explicitly describe exactly what the subject did or neglected to do: <u>don't</u> use the terms "pass" or "fail."</p> <p>j. If defense attorney asks a "why" question, take the opportunity to explain in great detail if appropriate.</p> <p><b>C. Typical Defense Tactics</b></p> <p>1. The defense relies on several factors to "impeach" or discredit your testimony.</p> <p>a. The defense will challenge your observations and interpretations. They will attempt to show that the</p>	<p>the side.</p> <p>Point out that if the officer testifies on subject matter that was excluded, it could result in a mistrial.</p> <p>Point out that the terms "pass" or "fail" should not be used. Describe actual performance. The defense will try to trip you up on this point...there are no passing or failing marks.</p> <p>Results of subject's performance are describable evidence.</p> <p>Be sure to emphasize that <u>all</u> evidence is taken into account before forming an opinion.</p> <p>Point out that this suggestion does not mean that the officer should embellish his or her testimony...be careful not to open any doors for the defense.</p> <p>Note: See attachment for typical defense questions.</p> <p><u>Point out</u> that the defense attorney's job is to try to create a "reasonable doubt". Don't take it personally.</p>

Aids	Lesson Plan	Instructor Notes
	<p>signs, symptoms and behaviors observed have other explanations.</p> <p>b. Defense will challenge your credentials...a bona fide expert has both formal training resulting in a high degree of knowledge and experience in applying that knowledge, resulting in a skill.</p> <p>o By demonstrating the officer lacks depth of knowledge in the drug field by contrasting his or her knowledge with the defense expert's knowledge.</p> <p>c. By challenging your credibility:</p> <p>o inconsistencies</p> <p>o comparison with past testimony</p>	<p><u>Point out</u> that if the defense can discredit your training and/or experience your testimony will have little "weight" with the jury.</p> <p>The trial tactic is to show that the officer does not have the expertise to accurately diagnose the cause of intoxication/impairment because of inadequate <u>formal training</u> which lessens the value of his/her field experience and increases likelihood that he/she is mistaken in his/her conclusion.</p> <p>Arresting officer's and examining officer's testimony must be complimentary. Any differences <u>must</u> be explained.</p> <p>Get your facts straight and stick to them.</p> <p>Try to get copies of transcripts of previous trials to review your strong/ weak points. If possible, review your testimony with the prosecutor.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>o testimony that is at odds with other established experts</li> <li>o lack of recall</li> <li>o by demonstrating that the officer incorrectly performed part of the evaluation, resulting in an erroneous conclusion.</li> </ul> <p>4. Role of defense expert.</p> <ul style="list-style-type: none"> <li>a. To impeach credibility of the arresting officer and/or the prosecution expert.</li> <li>b. To present alternative conditions and states that could have produced the same or similar symptoms.</li> </ul> <p>5. Typical defense questions.</p> <ul style="list-style-type: none"> <li>a. Pupillary examination in a drug case: <ul style="list-style-type: none"> <li>o Where the examination took place.</li> <li>o How dark was the examining room.</li> <li>o The size or power of the flashlight.</li> <li>o Where the defendant was placed in relationship to the examiner.</li> </ul> </li> </ul>	<p>Do your homework...review the literature. Explain any differences if possible.</p> <p>Try to be prepared, but don't be afraid to say "I don't know". Be honest.</p> <p><u>Point out</u> that the evaluation should be performed "by the book" each and every time it is conducted.</p> <p>My expert v. your expert. Usually they are 180 degrees apart in their opinions.</p> <p>The instructor should develop this section based on his or her personal experiences. The sample questions concerning a heroin case are based on "How To Use The Expert Witness In A Narcotic Case" by Donald M. Trookman, MD. It may be beneficial to conduct a role play cross examination to demonstrate typical questions.</p>

Aids	Lesson Plan	Instructor Notes
	<ul style="list-style-type: none"> <li>o Where the flashlight was directed during the examination.</li> <li>o Where the defendant was looking during the examination.</li> <li>o How many times each pupil was checked.</li> <li>b. Describe the difference between a fresh puncture wound and an old puncture wound.</li> <li>c. Are there any physical illnesses or conditions that manifest the same signs as heroin intoxication, and describe a few.</li> <li>d. How long does an occasional heroin user remain under the influence of the drug after injection?</li> </ul>	<p><u>Point out</u> that a fresh puncture wound is defined as under 12 hours after injection.</p> <p>Solicit students' comments and questions concerning case preparation and testimony.</p> <p><u>Point out</u> that the list of possible answers is almost interminable.</p> <p><b><u>SUGGESTED ROLE PLAY TO DISCUSS THE FOLLOWING QUESTIONS.</u></b></p> <p>What is a DRE?</p> <p>What is involved in the DEC training program?</p> <p>How do you properly identify the categories or category?</p> <p>How do you explain the opinion?</p> <p>What are the components of a drug influence evaluation?</p>

**ATTACHMENT A****DRE DEFENSE CROSS EXAMINATION QUESTIONS**

The following are representative of questions the defense may use to challenge the DRE's in court. (The defendant is identified as Miss Alicia Ann Ace.)

**Missing Symptoms/Normals**

*This line of questions attempts to elicit the fact that the defendant did not have all of the expected signs or symptoms of the drug (s) in question.*

Officer, you were taught that bruxism or grinding of the teeth is a sign of CNS Stimulant influence, isn't it? Miss Ace didn't have that sign, did she?

*The defense may also focus on those signs or symptoms that were normal, and were therefore, not consistent with the drug in question.*

Officer, you learned the normal range of temperature in DRE training, didn't you? And that range is 98.6 plus or minus one degree, isn't it? What was Miss Ace's temperature? (98) 98 is within normal ranges, isn't it? Miss Ace's temperature was normal, wasn't it? CNS Stimulants cause elevated temperature, don't they? Miss Ace's was not elevated, was it?

**Alternative Explanations**

*The defense elicits alternative explanations for the signs and symptoms of the drug (s) in question. These alternative explanations usually deal with medical conditions, stress, a traffic crash, etc.*

Officer, an elevated pulse rate can be caused by things other than drugs, can't it? Excitement may cause it? Stress may cause it? Being involved in a traffic crash is stressful, isn't it? And being involved in a traffic crash may cause elevated pulse, right? Being interviewed in the early morning by three police officers is stressful? And that may also cause the pulse to be elevated, can't it?

**Defendant's Normals**

*The defense attempts to emphasize the fact that not everyone is so-called normal, that normal is subjective.*

Officer, you were taught the normal range for pulse in DRE training, weren't you? And you agree that not all people fall in that normal range, don't you? That there are people with pulse rates above normal that aren't on drugs, right? A person's pulse changes over time, doesn't it? You don't know what Miss Ace's normal pulse is, do you? It could be in the normal range, right? But it could be above or below the normal range - normally for her, isn't that so?

**Doctor Cop**

*The line of questioning challenges the credibility of the officer's teachers - that they are police officers, rather than medical professionals.*

Officer, the teachers in this DRE school weren't doctors, were they? They weren't nurses either? Toxicologists? Pharmacologists? Paramedics? They were police officer, right?

**Just a Cop**

*This line of questioning challenges the DRE's credentials - that they are "just a cop." This infers that the DRE evaluation is actually a medical evaluation that should be undertaken only by a medical professional.*

Officer, you're not a doctor, are you? A toxicologist? A pharmacologist? A nurse? A physiologist? You don't have a degree in chemistry, do you? You're a police officer, right?

**The Unknown**

*By causing the officer to state that they don't know how a sign or symptom is caused, the defense attacks the officer's credibility. This line of questioning challenges the officer's expertise, by implying that a real expert would know these things.*

Officer, you don't know how CNS Stimulants dilate the pupil, do you? You don't know how alcohol supposedly causes Nystagmus, do you? You don't know how CNS Stimulants supposedly elevate the heart rate, do you?

**Guessing Game**

*This tactic attacks the DRE's opinion as a subjective guess, a belief, rather than objective. Guesses can be wrong.*

Officer, your opinion in a DRE case is subjective, isn't it? It's a belief on your part? You've made these beliefs in DRE cases in the past, haven't you? A sometimes toxicology didn't find the drug you predicted, isn't that so? And, in fact, sometimes, toxicology didn't find any drug, isn't that so? And so, sometimes your opinion is not correct, right? Sometimes, you guess wrong?

Four Hours

**SESSION XXIX**  
**CLASSIFYING A SUSPECT (ROLE PLAY)**

**SESSION XXIX CLASSIFYING A SUSPECT (ROLE PLAY)**

Upon successfully completing this session the student will be able to:

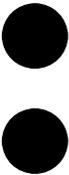
- o Conduct a complete drug influence evaluation using the systematic and standardized 12 step process.
- o Compile a complete, clear and accurate report documenting the results of a drug influence evaluation using the 13 component narrative report format.

**Content Segments**

- A. Scenarios: Simulated Examinations
- B. Report Preparation Practice
- C. Report Review and Critique

**Learning Activities**

- o Interviewing Practice
- o Note taking Practice
- o Small Group Work session
- o Instructor led Presentations
- o Participant led Presentations
- o Participant led Critiques

Aids	Lesson Plan	Instructor Notes
 <p><b>120 Minutes</b> (Approximately)</p>  <p><b>XXIX-1</b> (Title)</p>  <p><b>XXIX-2</b> (Objectives)</p>	<p><b>CLASSIFYING A SUSPECT (ROLE PLAY)</b></p> <p><b>A. Scenarios: Simulated Examinations</b></p> <ol style="list-style-type: none"> <li>1. Team assignments</li> <li>2. Procedures</li> </ol>	<p>Total Lesson Time: Approximately 240 Minutes</p> <p>Display Session Title</p> <p>Briefly review the objectives, content and activities of this session.</p> <p><u>Assign</u> the students to teams of 3-4 members.</p> <p><u>Note:</u> the total number of student teams should not be more than the number of "role players" participating in this session. Otherwise, one or more teams would be unoccupied during major portions of this segment.</p> <p><u>Explain</u> procedures to the students.</p>

Aids	Lesson Plan	Instructor Notes
	<p>a. Each team will examine as many as possible of the "role players", until the time scheduled for this segment elapses.</p> <p>b. Each examination will be carried out <u>fully</u>: nothing will be omitted <u>except</u> for the breath alcohol test.</p> <p>c. At certain points in the examination, the "role player" will inform the team what to record.</p> <p>d. All data will be recorded on the standard Drug Influence Evaluation Form.</p> <p>e. Some "role players" will be simulating the signs and symptoms of exactly one category of drugs.</p> <p>f. Some "role players" may be simulating the signs and symptoms of two or more categories in combination.</p> <p>g. It is possible that one or more "role players" may be simulating persons who are <u>not</u> under the influence of any drugs.</p> <p>h. At the completion of each examination, the team will discuss the evidence obtained and reach a consensus concerning the</p>	<p><u>Solicit</u> students' questions concerning the procedures.</p> <p><u>Example</u>: The "role players" will instruct the teams concerning the evidence to be recorded from the Horizontal Gaze Nystagmus test.</p> <p><u>Clarification</u>: "Role player Alpha" might be simulating a person who is under the influence of a CNS Stimulant only. "Role Player Delta" might be simulating a person under the influence of an Inhalant only.</p> <p>"Role Player Bravo" might be simulating someone who is under the influence of both PCP and Marijuana.</p>

Aids	Lesson Plan	Instructor Notes
	<p>category or categories of drugs present.</p> <p>i. Subsequently, each team will be assigned the responsibility of preparing and presenting a complete narrative report on one "role player".</p> <p>j. All students will participate in critiquing the reports.</p> <p>3. Drug Evaluation and Classification practice.</p>	<p><u>Verify</u> that all teams understand the procedures.</p> <p>Make sure that teams have sufficient copies of the Drug Evaluation Form.</p> <p><u>Assign</u> a "role player" to each team.</p> <p>Example:  "Alpha" to team #1  "Bravo" to team #2  "Charlie" to team #3, etc.</p> <p>As each team completes the entire evaluation, the team will hand over its "role player" to the next team. That is, team #1 hand off to team #2, team #2 to team #3, etc.</p> <p><u>Make sure</u> that each team member fully participates, and conducts some portion of the evaluation of each "role player".</p> <p>Allow the practice to continue for approximately 2 hours, or until each team has completed the evaluation of at least three "role players" (whichever occurs <u>later</u>).</p>

Aids	Lesson Plan	Instructor Notes
  <b>60 Minutes</b>	<p><b>B. Report Preparation Practice</b></p> <ol style="list-style-type: none"> <li>1. Team assignments</li> <li>2. Group writing exercise</li> </ol>	<p><u>Instruct</u> each team to prepare a report based on the <u>third</u> "role player" evaluated by the team.</p> <p><u>Verify</u> that each team understands who is to be the subject of the report.</p> <p><u>Note:</u> team members may divide the report writing work among themselves in any way they see fit.</p>
  <b>60 Minutes</b>	<p><b>C. Report Review and Critique</b></p> <ol style="list-style-type: none"> <li>1. Report presentation</li> <li>2. Report critique</li> </ol>	<p>Each team should appoint a speaker to read its report. The speaker should explain exactly what led the team to its conclusion concerning the category or categories of drugs.</p> <p>Solicit questions and comments from students concerning the report they have heard.</p> <p><u>Inquire</u> whether other teams that evaluated this same "role player" reached a different conclusion about the drug category or categories.</p> <p>In turn, present and critique the other teams' reports.</p>

**Aids****Lesson Plan****Instructor Notes**

Note: If necessary, this segment can be conducted simultaneously in two separate classrooms, with half of the teams present in each classroom, to allow all reports to be presented and critiqued within the allotted time.

**ROLE PLAY SCENARIOS**

<u>SUBJECT</u>	<u>DRUG CATEGORY</u>
Alpha	Drug-free
Bravo	Cannabis
Charlie	Dissociative Anesthetic (PCP)
Delta	Narcotic Analgesic
Echo	Narcotic Analgesic <u>and</u> CNS Depressant
Foxtrot	Cannabis
Golf	CNS Stimulant
Hotel	Dissociative Anesthetic <u>and</u> Cannabis
India	Inhalant
Juliet	Alcohol (ETOH) only (BAC = 0.06)
Kilo	Narcotic Analgesic <u>and</u> ETOH (BAC = 0.05)
Lima	CNS Stimulant <u>and</u> ETOH (BAC = 0.03)

## Session XXIX

### Classifying a Suspect (Role Play)



XXIX-1

### Classifying a Suspect (Role Play)

Upon successfully completing this session the student will be able to:

- Conduct a complete drug influence evaluation using the systematic and standardized 12-step process
- Compile a complete, clear and accurate report documenting the results of a drug influence evaluation using the 13-step component narrative report format

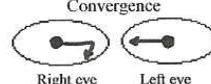
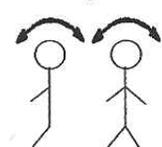
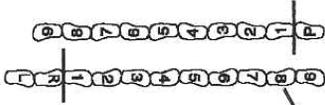
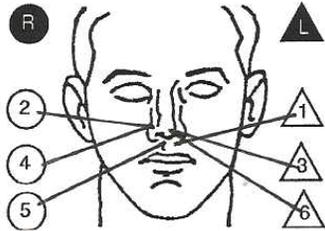
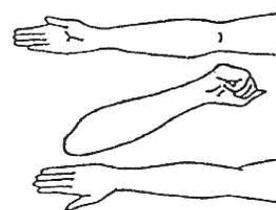
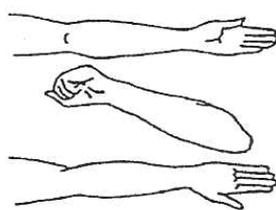
Drug Evaluation & Classification Training

XXIX-2

## QUESTIONS?

Drug Evaluation & Classification Training

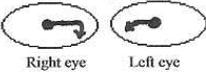
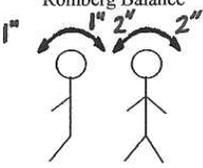
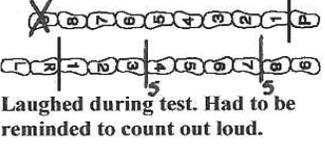
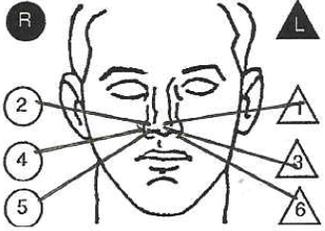
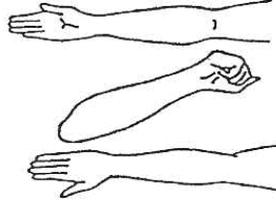
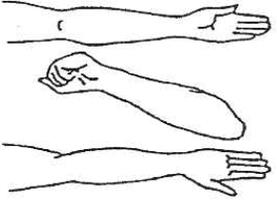
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					IACP#: <b>XXIX-1</b>						
					REPORT NUMBER:						
TYPE OF EVALUATION:					WITNESS:						
ARRESTEE'S NAME (Last, First, Middle) <b>ALPHA</b>			Date of Birth	Age	Sex	Race	Arresting Officer (Name, ID#)				
Date Examined / Time / Location			Breath Results: Results: <b>0.00</b>		Test Refused <input type="checkbox"/> Instrument #: <b>1234</b>		Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Test or tests refused <input type="checkbox"/>				
Miranda Warning Given Given By:		<input type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? When? <b>"Nothing today"</b>		What have you been drinking? How much? <b>"Just coffee"</b>		Time of last drink? <b>N/A</b>			
Time now/ Actual		When did you last sleep? How long <b>"Two days ago"</b>		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Attitude: <b>Passive, Cooperative</b>			Coordination: <b>Slow, Unsteady at times</b>					
Speech: <b>Normal</b>			Breath Odor: <b>Normal</b>			Face: <b>Flushed</b>					
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft			Eyes: <input type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery			Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal			
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)			Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy			
Pulse and time		HGN		Right Eye	Left Eye	Convergence		ONE LEG STAND			
1. <b>80</b> / _____		Lack of Smooth Pursuit		<b>No</b>	<b>No</b>						
2. <b>76</b> / _____		Maximum Deviation		<b>No</b>	<b>No</b>			<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing			
3. <b>76</b> / _____		Angle of Onset		<b>None</b>	<b>None</b>			<input checked="" type="checkbox"/> <input type="checkbox"/> Uses arms to balance			
Romberg Balance		Walk and turn test		Cannot keep balance <input checked="" type="checkbox"/>				<input type="checkbox"/> <input type="checkbox"/> Hopping			
				Starts too soon _____				<input type="checkbox"/> <input type="checkbox"/> Puts foot down			
				Stops walking _____							
				Misses heel-toe _____							
				Steps off line _____							
				Raises arms <input checked="" type="checkbox"/>							
				Actual steps taken <b>9</b>							
Internal clock 27 estimated as 30 seconds		Describe Turn: <b>Correct, Slow</b>			Cannot do test (explain) <b>N/A</b>			Type of footwear: <b>Lace-up shoes</b>			
<b>Draw lines to spots touched</b> 			PUPIL SIZE	Room light	Darkness	Direct	Nasal area: <b>Clear</b>				
			Left Eye	<b>4.5</b>	<b>6.5</b>	<b>3.5</b>	Oral cavity: <b>Clear</b>				
			Right Eye	<b>4.5</b>	<b>6.5</b>	<b>3.5</b>					
			HIPPIUS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		REBOUND DILATION <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		REACTION TO LIGHT: <b>Normal</b>				
			<b>RIGHT ARM</b>		<b>LEFT ARM</b>						
			<b>No Visible Marks</b>								
Blood pressure <b>128/84</b>		Temperature <b>98.7°</b>		Muscle tone: <input checked="" type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid							
Comments: What drugs or medications have you been using? <b>"Nothing, I just need some sleep."</b>			How much? <b>N/A</b>		Time of use? <b>N/A</b>		Where were the drugs used? (Location) <b>N/A</b>				
Date / Time of arrest:		Time DRE was notified:		Evaluation start time:		Evaluation completion time:		Precinct/Station:			
Opinion of Evaluator:			<input type="checkbox"/> Depressant <input type="checkbox"/> Stimulant		<input type="checkbox"/> Hallucinogen <input type="checkbox"/> Dissoc. Anesthetic		<input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Inhalant		<input type="checkbox"/> Cannabis <input type="checkbox"/> Alcohol		<input type="checkbox"/> Medical Rule Out <input type="checkbox"/> No Opinion
Officer's Signature:			Felony Offense:		Misdemeanor Offense:		Reviewed/approved by / date:				

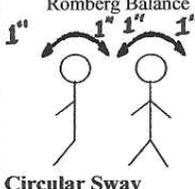
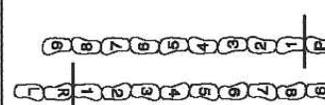
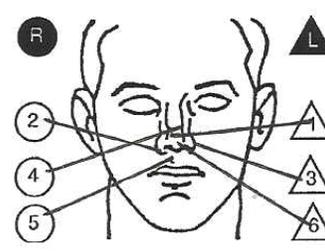
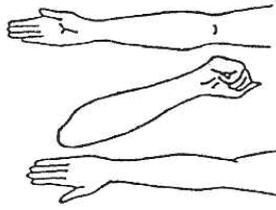
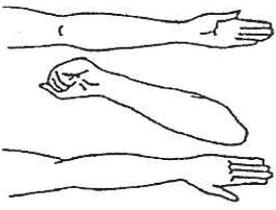
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	REPORT NUMBER:				IACP#: <b>XXIX-2</b>						
	TYPE OF EVALUATION:				SCRIBE:						
ARRESTEE'S NAME (Last, First, Middle) <b>BRAVO</b>				Date of Birth	Age	Sex	Race	Arresting Officer (Name, ID#)			
Date Examined / Time /Location		Breath Results: Results: <b>0.00</b>		Test Refused <input type="checkbox"/> Instrument #: <b>1234</b>		Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Test or tests refused <input type="checkbox"/>					
Miranda Warning Given Given By:	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When? "Sandwich" "Noon"	What have you been drinking? How much "Nothing"	Time of last drink? N/A							
Time now/ Actual /	When did you last sleep? How long "Last night" "About 8 hrs"	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <b>Carefree, Cooperative</b>		Coordination: <b>Fair, Unsteady at times</b>							
Speech: <b>Normal</b>		Breath Odor: <b>Normal</b>		Face: <b>Normal</b>							
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal					
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy					
Pulse and time		HGN	Right Eye	Left Eye	Convergence		ONE LEG STAND				
1. <b>120</b> /		Lack of Smooth Pursuit	<b>No</b>	<b>No</b>			 L R <input type="checkbox"/> <input type="checkbox"/> Sways while balancing <input type="checkbox"/> <input type="checkbox"/> Uses arms to balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input type="checkbox"/> <input type="checkbox"/> Puts foot down  <b>Counted fast/No clues observed</b>				
2. <b>116</b> /		Maximum Deviation	<b>No</b>	<b>No</b>							
3. <b>118</b> /		Angle of Onset	<b>None</b>	<b>None</b>							
Romberg Balance		Walk and turn test		Cannot keep balance _____							
				Starts too soon <input checked="" type="checkbox"/>							
Eyelid Tremors				Stops walking							
				Misses heel-toe							
				Steps off line							
				Raises arms							
				Actual steps taken		<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td>1<sup>st</sup> Nine</td> <td>2<sup>nd</sup> Nine</td> </tr> <tr> <td style="text-align: center;"><b>9</b></td> <td style="text-align: center;"><b>11</b></td> </tr> </table>		1 <sup>st</sup> Nine	2 <sup>nd</sup> Nine	<b>9</b>	<b>11</b>
1 <sup>st</sup> Nine	2 <sup>nd</sup> Nine										
<b>9</b>	<b>11</b>										
Internal clock 17 estimated as 30 seconds		Describe Turn: <b>Proper</b>		Cannot do test (explain) N/A		Type of footwear: <b>Tennis Shoes</b>					
Draw lines to spots touched 		PUPIL SIZE	Room light	Darkness	Direct	Nasal area: <b>Clear</b>					
		Left Eye	<b>6.5</b>	<b>8.5</b>	<b>5.5</b>	Oral cavity: <b>Green Coating on Tongue</b>					
		Right Eye	<b>6.5</b>	<b>8.5</b>	<b>5.5</b>	REACTION TO LIGHT: <b>Normal</b>					
		HIPPIUS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		REBOUND DILATION <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							
		<b>RIGHT ARM</b>		<b>LEFT ARM</b>							
											
		<b>No Visible Marks</b>									
Blood pressure <b>168/100</b>		Temperature <b>98.6°</b>									
Muscle tone: <input checked="" type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid											
Comments:		What drugs or medications have you been using? "Nothing man, it's all good."		How much? N/A		Time of use? N/A					
		Where were the drugs used? (Location) N/A									
Date / Time of arrest:		Time DRE was notified:		Evaluation start time:		Evaluation completion time:					
						Precinct/Station:					
Opinion of Evaluator:		<input type="checkbox"/> Depressant <input type="checkbox"/> Stimulant		<input type="checkbox"/> Hallucinogen <input type="checkbox"/> Dissoc. Anesthetic		<input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Inhalant					
						<input type="checkbox"/> Cannabis <input type="checkbox"/> Alcohol					
Officer's Signature:		Felony Offense:		Misdemeanor Offense:		Reviewed/approved by / date:					

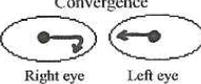
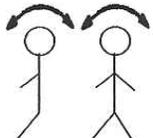
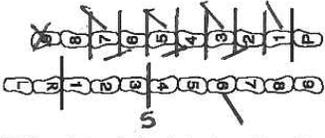
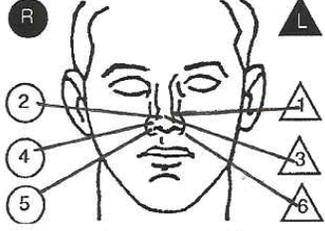
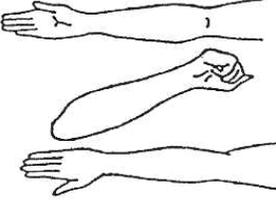
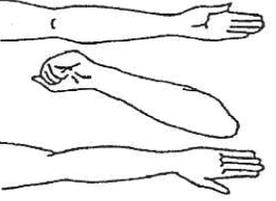
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	REPORT NUMBER:				IACP#: <b>XXIX-3</b>			
	TYPE OF EVALUATION:				SCRIBE:			
ARRESTEE'S NAME (Last, First, Middle) <b>CHARLIE</b>				Date of Birth	Age	Sex	Race	Arresting Officer (Name, ID#)
Date Examined / Time / Location		Breath Results: Results: <b>0.00</b>		Test Refused <input type="checkbox"/> Instrument #: <b>1234</b>		Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Test or tests refused <input type="checkbox"/>		
Miranda Warning Given Given By:	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When? <b>Today? (Long Pause) "No"</b>	What have you been drinking? How much <b>"Drink?" "No"</b>	Time of last drink? <b>N/A</b>				
Time now/ Actual	When did you last sleep? How long <b>"This morning" "4 hours"</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"I'm hot"</b>		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <b>Dazed, Confused</b>		Coordination: <b>Slow, Rigid movements</b>				
Speech: <b>Slow to respond, Confused</b>		Breath Odor: <b>Normal</b>		Face: <b>Sweaty</b>				
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal		
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Vertical Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy		
Pulse and time 1. <b>104</b> / _____ 2. <b>106</b> / _____ 3. <b>108</b> / _____		HGN	Right Eye	Left Eye	Convergence  Right eye      Left eye		ONE LEG STAND  L R <input type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms to balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down <b>Reminded twice to count out loud</b>	
 Romberg Balance <b>Circular Sway. Test stopped after 90 seconds</b>		Walk and turn test  <b>Stopped after first 9 steps. Had to be reminded to continue walking.</b>		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon _____ Stops walking <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Misses heel-toe _____ Steps off line <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Raises arms _____ Actual steps taken <b>9</b> <b>9</b>				
Internal clock <b>90</b> estimated as 30 seconds		Describe Turn: <b>Did not leave foot on line when making turn.</b>		Cannot do test (explain) <b>N/A</b>		Type of footwear: <b>Lace-up boots</b>		
Draw lines to spots touched 		PUPIL SIZE Left Eye: Room light <b>4.0</b> , Darkness <b>6.5</b> , Direct <b>3.5</b> Right Eye: Room light <b>4.0</b> , Darkness <b>6.5</b> , Direct <b>3.5</b>		Nasal area: <b>Clear</b> Oral cavity: <b>Clear</b>				
Blood pressure: <b>170/98</b> Temperature: <b>100.6°</b>		HIPPIUS: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No REBOUND DILATION: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No REACTION TO LIGHT: <b>Normal</b>		RIGHT ARM 		LEFT ARM 		
Muscle tone: Near Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid <input checked="" type="checkbox"/> Comments: <b>Arms very rigid</b>		<b>No Visible Marks</b>						
What drugs or medications have you been using? <b>"Drugs? ... Nothing man"</b>		How much? <b>N/A</b>		Time of use? <b>N/A</b>		Where were the drugs used? (Location) <b>N/A</b>		
Date / Time of arrest:		Time DRE was notified:		Evaluation start time:		Evaluation completion time:		Precinct/Station:
Opinion of Evaluator:		<input type="checkbox"/> Depressant <input type="checkbox"/> Stimulant		<input type="checkbox"/> Hallucinogen <input type="checkbox"/> Dissoc. Anesthetic		<input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Inhalant		<input type="checkbox"/> Cannabis <input type="checkbox"/> Alcohol <input type="checkbox"/> Medical Rule Out <input type="checkbox"/> No Opinion
Officer's Signature:		Felony Offense:		Misdemeanor Offense:		Reviewed/approved by / date:		

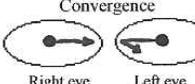
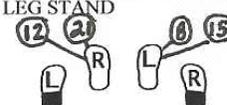
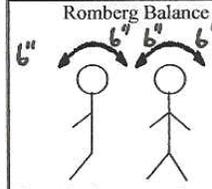
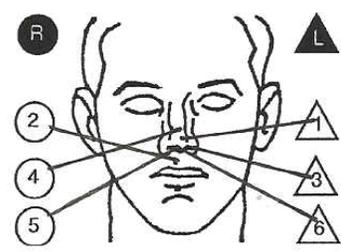
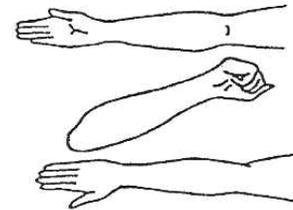
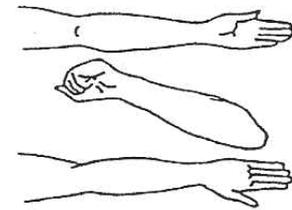
	<b>DRUG INFLUENCE EVALUATION</b>				EVALUATOR:			
	REPORT NUMBER:				IACP#: <b>XXIX-4</b>			
	TYPE OF EVALUATION:				SCRIBE:			
ARRESTEE'S NAME (Last, First, Middle) <b>DELTA</b>				Date of Birth	Age	Sex	Race	Arresting Officer (Name, ID#)
Date Examined / Time /Location		Breath Results: Results: <b>0.00</b>		Test Refused <input type="checkbox"/> Instrument #: <b>1234</b>		Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Test or tests refused <input type="checkbox"/>		
Miranda Warning Given Given By:	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When? <b>"I didn't eat today"</b>	What have you been drinking? How much <b>"Nothing, No alcohol today"</b>	Time of last drink? N/A				
Time now/ Actual	When did you last sleep? How long <b>"I don't remember"</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"I'm clean"</b>		Attitude: <b>Passive, Uncaring</b>		Coordination: <b>Slow, Sluggish, Unstable</b>				
Speech: <b>Slow to respond, Low</b>		Breath Odor: <b>Normal</b>		Face: <b>Red marks; Continually rubbed his face</b>				
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input checked="" type="checkbox"/> Normal Bloodshot Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal		
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Vertical Nystagmus Yes <input checked="" type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy		
Pulse and time		HGN	Right Eye	Left Eye	Convergence		ONE LEG STAND	
1. <b>52</b> /		Lack of Smooth Pursuit	<b>No</b>	<b>No</b>				
2. <b>56</b> /		Maximum Deviation	<b>No</b>	<b>No</b>			L R <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> Uses arms to balance <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> Puts foot down <b>Counted slowly, very unsteady</b>	
3. <b>54</b> /		Angle of Onset	<b>None</b>	<b>None</b>				
Romberg Balance  <b>Circular Sway. Test stopped after 90 seconds</b>		Walk and turn test		Cannot keep balance: <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Starts too soon: _____ Stops walking: _____ Misses heel-toe: _____ Steps off line: _____ Raises arms: <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Actual steps taken: <b>9</b> <b>9</b>				
Internal clock <b>90</b> estimated as 30 seconds		Describe Turn: <b>Slow, unstable</b>		Cannot do test (explain) N/A		Type of footwear: <b>Tennis Shoes</b>		
Draw lines to spots touched 		PUPIL SIZE Left Eye: <b>2.0</b> Room light: <b>2.5</b> Darkness: <b>2.0</b> Direct: <b>2.0</b> Right Eye: <b>2.0</b> Room light: <b>2.5</b> Darkness: <b>2.0</b> Direct: <b>2.0</b>		Nasal area: <b>Clear</b> Oral cavity: <b>Clear</b>		HIPPUS: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No REBOUND DILATION: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No REACTION TO LIGHT: <b>Slow</b>		
Blood pressure: <b>108/60</b> Temperature: <b>97.0°</b>		Muscle tone: Near Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		RIGHT ARM 		LEFT ARM <b>Scabs</b>  <b>Four fresh puncture wounds on left forearm.</b>		
What drugs or medications have you been using? <b>"Honest man, I'm clean"</b>		How much? <b>N/A</b>		Time of use? <b>N/A</b>		Where were the drugs used? (Location) <b>N/A</b>		
Date / Time of arrest:		Time DRE was notified:		Evaluation start time:		Evaluation completion time:		Precinct/Station:
Opinion of Evaluator:		<input type="checkbox"/> Depressant <input type="checkbox"/> Stimulant		<input type="checkbox"/> Hallucinogen <input type="checkbox"/> Dissoc. Anesthetic		<input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Inhalant		<input type="checkbox"/> Cannabis <input type="checkbox"/> Alcohol <input type="checkbox"/> Medical Rule Out <input type="checkbox"/> No Opinion
Officer's Signature:		Felony Offense:		Misdemeanor Offense:		Reviewed/approved by / date:		



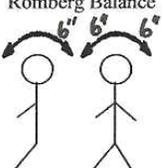
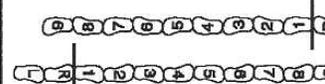
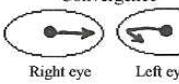
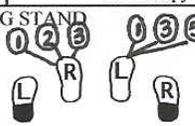
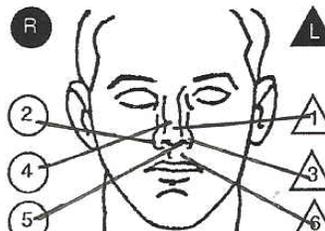
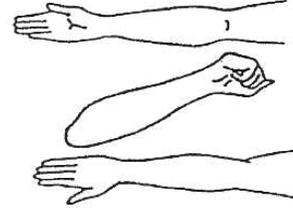
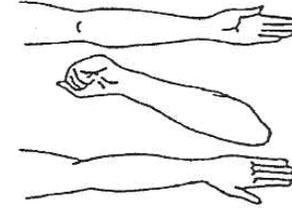
	<b>DRUG INFLUENCE EVALUATION</b>				EVALUATOR:													
	REPORT NUMBER:				IACP#: <b>XXIX-6</b>													
	TYPE OF EVALUATION:				SCRIBE:													
ARRESTEE'S NAME (Last, First, Middle) <b>FOXTROT</b>		Date of Birth	Age	Sex	Race	Arresting Officer (Name, ID#)												
Date Examined / Time / Location		Breath Results: Results: <b>0.00</b>		Test Refused <input type="checkbox"/> Instrument #: <b>1234</b>		Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Test or tests refused <input type="checkbox"/>												
Miranda Warning Given Given By:	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When? <b>"Chips &amp; Cookies" "10 am"</b>	What have you been drinking? How much <b>"Nothing"</b>		Time of last drink? <b>N/A</b>													
Time now/ Actual	When did you last sleep? How long <b>"Last night" "Three hrs"</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No														
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No														
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "Not now"		Attitude: <b>Cooperative, Mellow</b>		Coordination: <b>Relaxed, Unsteady</b>														
Speech: <b>Talkative</b>		Breath Odor: <b>Normal</b>		Face: <b>Normal</b>														
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva Normal <input checked="" type="checkbox"/> Bloodshot Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal												
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Vertical Nystagmus Yes <input checked="" type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy												
Pulse and time	HGN	Right Eye	Left Eye	Convergence		ONE LEG STAND												
1. <b>112</b> /	Lack of Smooth Pursuit	<b>No</b>	<b>No</b>			 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input type="checkbox"/> <input type="checkbox"/> Uses arms to balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input type="checkbox"/> <input type="checkbox"/> Puts foot down  <b>Leg tremors</b>												
2. <b>110</b> /	Maximum Deviation	<b>No</b>	<b>No</b>															
3. <b>110</b> /	Angle of Onset	<b>None</b>	<b>None</b>															
Romberg Balance 	Walk and turn test 		Cannot keep balance _____ Starts too soon _____ Stops walking _____ Misses heel-toe _____ Steps off line _____ Raises arms _____ Actual steps taken															
<b>Eyelid Tremors</b>	<b>Laughed during test. Had to be reminded to count out loud.</b>		<table border="1"> <tr> <td>1<sup>st</sup> Nine</td> <td>2<sup>nd</sup> Nine</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td><b>9</b></td> <td><b>8</b></td> </tr> </table>		1 <sup>st</sup> Nine	2 <sup>nd</sup> Nine	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>							<b>9</b>	<b>8</b>		
1 <sup>st</sup> Nine	2 <sup>nd</sup> Nine																	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																	
<b>9</b>	<b>8</b>																	
Internal clock <b>25</b> estimated as 30 seconds	Describe Turn: <b>Abrupt swivel</b>		Cannot do test (explain) <b>N/A</b>		Type of footwear: <b>Sandals</b>													
<b>Draw lines to spots touched</b>  <b>Eyelid tremors. Used first pad of fingers</b>		<table border="1"> <tr> <td>PUPIL SIZE</td> <td>Room light</td> <td>Darkness</td> <td>Direct</td> </tr> <tr> <td>Left Eye</td> <td><b>5.0</b></td> <td><b>8.5</b></td> <td><b>3.0 - 5.5</b></td> </tr> <tr> <td>Right Eye</td> <td><b>5.0</b></td> <td><b>8.5</b></td> <td><b>3.0 - 5.5</b></td> </tr> </table>		PUPIL SIZE	Room light	Darkness	Direct	Left Eye	<b>5.0</b>	<b>8.5</b>	<b>3.0 - 5.5</b>	Right Eye	<b>5.0</b>	<b>8.5</b>	<b>3.0 - 5.5</b>	Nasal area: <b>Clear</b> Oral cavity: <b>Clear</b>		
PUPIL SIZE	Room light	Darkness	Direct															
Left Eye	<b>5.0</b>	<b>8.5</b>	<b>3.0 - 5.5</b>															
Right Eye	<b>5.0</b>	<b>8.5</b>	<b>3.0 - 5.5</b>															
Blood pressure <b>160/98</b> Temperature <b>98.6°</b>		HIPPIUS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No REBOUND DILATION <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No REACTION TO LIGHT: <b>Slow</b>		<b>RIGHT ARM</b>  <b>LEFT ARM</b>  <b>No visible marks</b>														
Muscle tone: <input checked="" type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:																
What drugs or medications have you been using? <b>"None"</b>		How much? <b>N/A</b>		Time of use? <b>N/A</b>														
Where were the drugs used? (Location) <b>N/A</b>		Date / Time of arrest:		Time DRE was notified:														
Evaluation start time:		Evaluation completion time:		Precinct/Station:														
Opinion of Evaluator: <input type="checkbox"/> Depressant <input type="checkbox"/> Stimulant		<input type="checkbox"/> Hallucinogen <input type="checkbox"/> Dissoc. Anesthetic		<input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Inhalant														
<input type="checkbox"/> Medical Rule Out <input type="checkbox"/> No Opinion		Officer's Signature:		Felony Offense:														
Misdemeanor Offense:		Reviewed/approved by / date:																

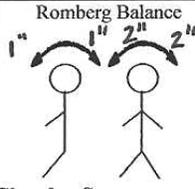
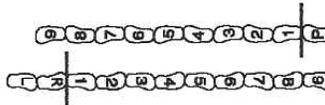
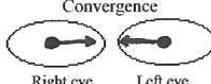
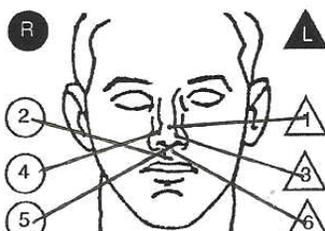
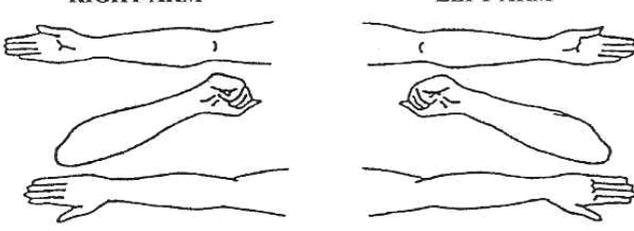
	<b>DRUG INFLUENCE EVALUATION</b>					EVALUATOR:									
	REPORT NUMBER:					IACP#: <b>XXIX-7</b>									
	TYPE OF EVALUATION:					SCRIBE:									
ARRESTEE'S NAME (Last, First, Middle) <b>GOLF</b>			Date of Birth	Age	Sex	Race	Arresting Officer (Name, ID#)								
Date Examined / Time / Location			Breath Results: Results: <b>0.00</b>		Test Refused <input type="checkbox"/> Instrument #: <b>1234</b>		Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Test or tests refused <input type="checkbox"/>								
Miranda Warning Given Given By:	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When? "Cookies" "Hour ago"		What have you been drinking? How much "I don't drink"		Time of last drink? N/A									
Time now/ Actual /	When did you last sleep? How long "Yesterday" "Two hours"		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "Am I under arrest?"										
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "Why are you doing this?"										
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "I told you, I don't do drugs!"			Attitude: <b>Excited, Upset, Animated</b>			Coordination: <b>Unsteady, Jittery</b>									
Speech: <b>Talkative, rapid</b>			Breath Odor: <b>Normal</b>			Face: <b>Sweaty</b>									
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft			Eyes: <input type="checkbox"/> Reddened Conjunctiva <input checked="" type="checkbox"/> Normal Bloodshot Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal								
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)			Vertical Nystagmus Yes <input checked="" type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy								
Pulse and time		HGN	Right Eye	Left Eye	ONE LEG STAND										
1. <b>102</b> /		Lack of Smooth Pursuit	<b>No</b>	<b>No</b>	20/30  21/30										
2. <b>100</b> /		Maximum Deviation	<b>No</b>	<b>No</b>	L R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms to balance										
3. <b>104</b> /		Angle of Onset	<b>None</b>	<b>None</b>	<input type="checkbox"/> <input type="checkbox"/> Hopping <input type="checkbox"/> <input type="checkbox"/> Puts foot down										
Romberg Balance 		Walk and turn test 		Cannot keep balance _____ Starts too soon <input checked="" type="checkbox"/>		Counted quickly, stumbled over his numbers									
Circular Sway		Had to be reminded to count out loud. Took quick steps.		Stops walking _____ Misses heel-toe _____ Steps off line _____ Raises arms <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Actual steps taken: 1 <sup>st</sup> Nine: <input checked="" type="checkbox"/> 2 <sup>nd</sup> Nine: <input checked="" type="checkbox"/>									
Internal clock <b>18</b> estimated as 30 seconds		Describe Turn: <b>Abrupt spin</b>		Cannot do test (explain) N/A		Type of footwear: <b>Boots</b>									
<b>Draw lines to spots touched</b>  <b>Quick and jerky movements</b>				PUPIL SIZE	Room light	Darkness	Direct	Nasal area: <b>Redness in nostrils</b>							
				Left Eye	<b>7.0</b>	<b>9.0</b>	<b>6.5</b>	Oral cavity: <b>Clear</b>							
				Right Eye	<b>7.0</b>	<b>9.0</b>	<b>6.5</b>								
HIPPIUS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				REBOUND DILATION Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		REACTION TO LIGHT: <b>Slow</b>									
<b>Blood pressure</b> <b>170/100</b>				<b>RIGHT ARM</b> 				<b>LEFT ARM</b> 							
												<b>Temperature</b> <b>99.8°</b>			
<b>No visible marks</b>															
What drugs or medications have you been using? "I told you. Quit asking me that!"			How much? N/A		Time of use? N/A		Where were the drugs used? (Location) N/A								
Date / Time of arrest:		Time DRE was notified:		Evaluation start time:		Evaluation completion time:		Precinct/Station:							
Opinion of Evaluator:			<input type="checkbox"/> Depressant <input type="checkbox"/> Stimulant		<input type="checkbox"/> Hallucinogen <input type="checkbox"/> Dissoc. Anesthetic		<input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Inhalant		<input type="checkbox"/> Cannabis <input type="checkbox"/> Alcohol <input type="checkbox"/> Medical Rule Out <input type="checkbox"/> No Opinion						
Officer's Signature:			Felony Offense:		Misdemeanor Offense:		Reviewed/approved by / date:								

	<b>DRUG INFLUENCE EVALUATION</b>				EVALUATOR:	
	REPORT NUMBER:				IACP#: <b>XXIX-8</b>	
	TYPE OF EVALUATION:				SCRIBE:	
ARRESTEE'S NAME (Last, First, Middle) <b>HOTEL</b>		Date of Birth	Age	Sex	Race	Arresting Officer (Name, ID#)
Date Examined / Time / Location		Breath Results: Results: <b>0.00</b>		Test Refused <input type="checkbox"/> Instrument #: <b>1234</b>		Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Test or tests refused <input type="checkbox"/>
Miranda Warning Given Given By:	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When? <b>"I don't remember"</b>		What have you been drinking? How much <b>"Uh, .....Water"</b>		Time of last drink? N/A
Time now/ Actual /	When did you last sleep? How long <b>(No response)</b>		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>(No response)</b>		
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>(No response)</b>		Attitude: <b>Dazed, Indifferent</b>			Coordination: <b>Poor, Staggering</b>	
Speech: <b>Slow, Deliberate</b>		Breath Odor: <b>Normal</b>		Face: <b>Flushed</b>		
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input checked="" type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Vertical Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy
Pulse and time 1. <b>112</b> / _____ 2. <b>110</b> / _____ 3. <b>114</b> / _____		HGN	Right Eye	Left Eye		
		Lack of Smooth Pursuit	<b>Yes</b>	<b>Yes</b>		
		Maximum Deviation	<b>Yes</b>	<b>Yes</b>		
		Angle of Onset	<b>Immed</b>	<b>Immed</b>		
Romberg Balance 		Walk and turn test 		Cannot keep balance _____ Starts too soon <input checked="" type="checkbox"/>		ONE LEG STAND 15/30 (L) 22 (R) 18 (L) 18/30 (R) L R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms to balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down <b>Leg tremors</b>
Eyelid tremors Circular sway		Did not touch heel to toe after the turn.		Stops walking <input checked="" type="checkbox"/>		
				Misses heel-toe <input type="checkbox"/>		
				Steps off line <input checked="" type="checkbox"/>		
				Raises arms <input checked="" type="checkbox"/>		
				Actual steps taken 1 <sup>st</sup> Nine: <input checked="" type="checkbox"/> 2 <sup>nd</sup> Nine: <input type="checkbox"/>		
				9 8		
Internal clock <b>60</b> estimated as 30 seconds		Describe Turn: <b>Staggered</b>		Cannot do test (explain) N/A		Type of footwear: <b>Boots</b>
Draw lines to spots touched 		PUPIL SIZE Room light    Darkness    Direct Left Eye    7.0    9.0    6.5 Right Eye    7.0    9.0    6.5		Nasal area: <b>Clear</b> Oral cavity: <b>Bits of greenish/brown material in teeth</b>		REACTION TO LIGHT: <b>Normal</b>
Had to be reminded to actually touch nose Blood pressure: <b>172/104</b> Temperature: <b>100.4°</b>		HIPPIUS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No REBOUND DILATION <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		RIGHT ARM 		
Muscle tone: Near Normal    Flaccid <input checked="" type="checkbox"/> Rigid		LEFT ARM 		No visible marks		
Comments:		What drugs or medications have you been using? <b>(No response)</b>		How much? <b>N/A</b>		Time of use? <b>N/A</b>
Date / Time of arrest:		Time DRE was notified:		Evaluation start time:		Where were the drugs used? (Location) <b>N/A</b>
Evaluation completion time:		Precinct/Station:		Opinion of Evaluator: <input type="checkbox"/> Depressant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis <input type="checkbox"/> Medical Rule Out <input type="checkbox"/> Stimulant <input type="checkbox"/> Dissoc. Anesthetic <input type="checkbox"/> Inhalant <input type="checkbox"/> Alcohol <input type="checkbox"/> No Opinion		
Officer's Signature:		Felony Offense:		Misdemeanor Offense:		Reviewed/approved by / date:

	<b>DRUG INFLUENCE EVALUATION</b>				EVALUATOR:											
	REPORT NUMBER:				IACP#: <b>XXIX-9</b>											
	TYPE OF EVALUATION:				SCRIBE:											
ARRESTEE'S NAME (Last, First, Middle) <b>INDIA</b>				Date of Birth	Age	Sex	Race	Arresting Officer (Name, ID#)								
Date Examined / Time / Location			Breath Results: Results: <b>0.00</b>		Test Refused <input type="checkbox"/> Instrument #: <b>1234</b>		Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Test or tests refused <input type="checkbox"/>									
Miranda Warning Given Given By:		<input type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? When? "Eggs" "At lunch"		What have you been drinking? How much "Nothing"		Time of last drink? N/A								
Time now/ Actual /		When did you last sleep? How long "This morning" "2 hours"		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "I feel okay"		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No										
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (No response)										
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (No response)				Attitude: <b>Cooperative, Confused</b>			Coordination: <b>Stumbling, Staggering</b>									
Speech: <b>Low, Slow, Mumbling</b>			Breath Odor: <b>Gas-like odor</b>			Face: <b>Flushed</b>										
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft			Eyes: <input type="checkbox"/> Reddened Conjunctiva Normal <input checked="" type="checkbox"/> Bloodshot Watery			Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal								
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)			Vertical Nystagmus Yes <input checked="" type="checkbox"/> No			Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input checked="" type="checkbox"/> Normal Droopy								
Pulse and time		HGN		Right Eye	Left Eye	Convergence		ONE LEG STAND								
1. <b>96</b> /		Lack of Smooth Pursuit		<b>Yes</b>	<b>Yes</b>											
2. <b>92</b> /		Maximum Deviation		<b>Yes</b>	<b>Yes</b>			<input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> Uses arms to balance <input checked="" type="checkbox"/> Hopping <input checked="" type="checkbox"/> Puts foot down								
3. <b>94</b> /		Angle of Onset		<b>30</b>	<b>30</b>			<b>Leg tremors, nearly fell</b>								
		Walk and turn test		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon _____ Stops walking _____ Misses heel-toe _____ Steps off line _____ Raises arms _____ Actual steps taken		<table border="1"> <tr> <td>1<sup>st</sup> Nine</td> <td>2<sup>nd</sup> Nine</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><b>9</b></td> <td><b>8</b></td> </tr> </table>		1 <sup>st</sup> Nine	2 <sup>nd</sup> Nine	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<b>9</b>	<b>8</b>	
1 <sup>st</sup> Nine	2 <sup>nd</sup> Nine															
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>															
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>															
<b>9</b>	<b>8</b>															
Romberg Balance Lost balance and nearly fell.		Reminded to count out loud														
Internal clock <b>42</b> estimated as 30 seconds		Describe Turn: <b>Staggered</b>		Cannot do test (explain) N/A		Type of footwear: <b>Boots</b>										
Draw lines to spots touched 				PUPIL SIZE	Room light	Darkness	Direct	Nasal area: <b>Redness, runny</b>								
				Left Eye	<b>5.0</b>	<b>6.5</b>	<b>3.5</b>	Oral cavity: <b>Clear</b>								
				Right Eye	<b>5.0</b>	<b>6.5</b>	<b>3.5</b>									
HIPPUS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				REBOUND DILATION Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		REACTION TO LIGHT: <b>Normal</b>										
Had to be reminded to actually touch nose Blood pressure <b>148/88</b> Temperature <b>98.8<sup>0</sup></b> Muscle tone: Near Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> <input checked="" type="checkbox"/> Rigid Comments:				RIGHT ARM 		LEFT ARM 										
				No visible marks												
				What drugs or medications have you been using? "Nothing" How much? <b>N/A</b> Time of use? <b>N/A</b> Where were the drugs used? (Location) <b>N/A</b>												
Date / Time of arrest:		Time DRE was notified:		Evaluation start time:		Evaluation completion time:		Precinct/Station:								
Opinion of Evaluator:			<input type="checkbox"/> Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis	<input type="checkbox"/> Medical Rule Out									
			<input type="checkbox"/> Stimulant	<input type="checkbox"/> Dissoc. Anesthetic	<input type="checkbox"/> Inhalant	<input type="checkbox"/> Alcohol	<input type="checkbox"/> No Opinion									
Officer's Signature:			Felony Offense:		Misdemeanor Offense:		Reviewed/approved by / date:									

	<b>DRUG INFLUENCE EVALUATION</b>					EVALUATOR:					
	REPORT NUMBER:					IACP#: <b>XXIX-10</b>					
	TYPE OF EVALUATION:					SCRIBE:					
ARRESTEE'S NAME (Last, First, Middle) <b>JULIET</b>					Date of Birth	Age	Sex	Race	Arresting Officer (Name, ID#)		
Date Examined / Time / Location			Breath Results: Results: <b>0.06</b>		Test Refused <input type="checkbox"/> Instrument #: <b>1234</b>		Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Test or tests refused <input type="checkbox"/>				
Miranda Warning Given Given By:	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When? <b>"Cereal" "About 7 am"</b>		What have you been drinking? How much <b>"Two beers"</b>		Time of last drink? <b>"Hour ago"</b>					
Time now/ Actual /	When did you last sleep? How long <b>"Last night" "8 hours"</b>		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <b>Cooperative, Withdrawn</b>			Coordination: <b>Unsteady</b>						
Speech: <b>Low, Mumbling</b>		Breath Odor: <b>Alcoholic Beverage</b>			Face: <b>Flushed</b>						
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva Normal <input checked="" type="checkbox"/> Bloodshot Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal					
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Vertical Nystagmus Yes <input checked="" type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: Normal <input checked="" type="checkbox"/> Droopy					
Pulse and time 1. <b>82</b> / _____ 2. <b>80</b> / _____ 3. <b>80</b> / _____		HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset		Right Eye <b>Yes</b> <b>Yes</b> <b>45</b>		Left Eye <b>Yes</b> <b>Yes</b> <b>45</b>		Convergence  Right eye Left eye		ONE LEG STAND <b>25/30</b> <b>28/30</b>  L R <input type="checkbox"/> <input type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms to balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input type="checkbox"/> <input type="checkbox"/> Puts foot down <b>Reminded to count out loud</b>	
Romberg Balance  Circular Sway		Walk and turn test  M		Cannot keep balance _____ Starts too soon _____ Stops walking _____ Misses heel-toe _____ Steps off line _____ Raises arms _____ Actual steps taken		1 <sup>st</sup> Nine <input checked="" type="checkbox"/>		2 <sup>nd</sup> Nine <input checked="" type="checkbox"/>			
Internal clock <b>38</b> estimated as 30 seconds		Describe Turn: <b>Proper, Slow</b>		Cannot do test (explain) <b>N/A</b>		Type of footwear: <b>Boots</b>					
<b>Draw lines to spots touched</b>  <b>Had to be reminded to actually touch nose</b>		PUPIL SIZE		Room light		Darkness		Direct		Nasal area: <b>Clear</b>	
		Left Eye		<b>4.5</b>		<b>6.0</b>		<b>3.5</b>		Oral cavity: <b>Clear</b>	
		Right Eye		<b>4.5</b>		<b>6.0</b>		<b>3.5</b>			
HIPPUS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		REBOUND DILATION Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		REACTION TO LIGHT: <b>Normal</b>							
RIGHT ARM		LEFT ARM		 <b>No visible marks</b>		 <b>No visible marks</b>					
Blood pressure <b>128/84</b>		Temperature <b>98.7<sup>0</sup></b>		Muscle tone: Near Normal Flaccid <input checked="" type="checkbox"/> Rigid		Comments:					
What drugs or medications have you been using? <b>"Nothing"</b>		How much? <b>N/A</b>		Time of use? <b>N/A</b>		Where were the drugs used? (Location) <b>N/A</b>					
Date / Time of arrest:		Time DRE was notified:		Evaluation start time:		Evaluation completion time:		Precinct/Station:			
Opinion of Evaluator:		<input type="checkbox"/> Depressant <input type="checkbox"/> Stimulant		<input type="checkbox"/> Hallucinogen <input type="checkbox"/> Dissoc. Anesthetic		<input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Inhalant		<input type="checkbox"/> Cannabis <input type="checkbox"/> Alcohol		<input type="checkbox"/> Medical Rule Out <input type="checkbox"/> No Opinion	
Officer's Signature:		Felony Offense:		Misdemeanor Offense:		Reviewed/approved by / date:					

	<b>DRUG INFLUENCE EVALUATION</b>				EVALUATOR:						
	REPORT NUMBER:				IACP#: <b>XXIX-11</b>						
	TYPE OF EVALUATION:				SCRIBE:						
ARRESTEE'S NAME (Last, First, Middle) <b>KILO</b>		Date of Birth	Age	Sex	Race	Arresting Officer (Name, ID#)					
Date Examined / Time / Location		Breath Results: Results: <b>0.05</b>		Test Refused <input type="checkbox"/>		Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/>					
Miranda Warning Given Given By:		<input type="checkbox"/> Yes <input type="checkbox"/> No		What have you eaten today? When? <b>"Nothing"</b>		What have you been drinking? How much <b>"Couple of beers"</b>					
Time now/ Actual /		When did you last sleep? How long <b>"Last night" "5 hours"</b>		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <b>Cooperative, Drowsy acting</b>		Coordination: <b>Unsteady, Slow</b>							
Speech: <b>Slurred, Slow, Raspy</b>		Breath Odor: <b>Alcoholic Beverage</b>		Face: <b>Flushed, Licking Lips, Dry Mouth</b>							
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal					
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Vertical Nystagmus Yes <input checked="" type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: Normal <input checked="" type="checkbox"/> Droopy					
Pulse and time 1. <b>60</b> / _____ 2. <b>58</b> / _____ 3. <b>58</b> / _____		HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset		Right Eye <b>Yes</b> <b>No</b> <b>None</b>		Left Eye <b>Yes</b> <b>No</b> <b>None</b>					
Romberg Balance  <b>Head nodded forward</b>		Walk and turn test 		Convergence  Right eye      Left eye		ONE LEG STAND  L R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms to balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down <b>Stopped tests for safety reasons</b>					
Internal clock <b>48</b> estimated as 30 seconds		Describe Turn: <b>Staggered</b>		Cannot do test (explain) <b>N/A</b>		Type of footwear: <b>Boots</b>					
<b>Draw lines to spots touched</b>  <b>Had to be reminded to actually touch nose</b>		PUPIL SIZE		Room light		Darkness		Direct		Nasal area: <b>Clear</b>	
		Left Eye		<b>1.5</b>		<b>1.5</b>		<b>1.5</b>		Oral cavity: <b>Clear</b>	
		Right Eye		<b>1.5</b>		<b>1.5</b>		<b>1.5</b>			
Blood pressure <b>108/64</b>		Temperature <b>97.2<sup>0</sup></b>		HIPPIUS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		REBOUND DILATION Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		REACTION TO LIGHT: <b>None</b>			
Muscle tone: Near Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid <input type="checkbox"/>		Comments:		RIGHT ARM 		LEFT ARM 		No visible marks			
What drugs or medications have you been using? <b>"Nothing, I'm clean now"</b>		How much? <b>N/A</b>		Time of use? <b>N/A</b>		Where were the drugs used? (Location) <b>N/A</b>					
Date / Time of arrest:		Time DRE was notified:		Evaluation start time:		Evaluation completion time:		Precinct/Station:			
Opinion of Evaluator: <input type="checkbox"/> Depressant <input type="checkbox"/> Stimulant		<input type="checkbox"/> Hallucinogen <input type="checkbox"/> Dissoc. Anesthetic		<input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Inhalant		<input type="checkbox"/> Cannabis <input type="checkbox"/> Alcohol		<input type="checkbox"/> Medical Rule Out <input type="checkbox"/> No Opinion			
Officer's Signature:		Felony Offense:		Misdemeanor Offense:		Reviewed/approved by / date:					

	<b>DRUG INFLUENCE EVALUATION</b>					EVALUATOR:											
	REPORT NUMBER:					IACP#: <b>XXIX-12</b>											
	TYPE OF EVALUATION:					SCRIBE:											
ARRESTEE'S NAME (Last, First, Middle) <b>LIMA</b>			Date of Birth	Age	Sex	Race	Arresting Officer (Name, ID#)										
Date Examined / Time /Location			Breath Results: Results: <b>0.03</b>		Test Refused <input type="checkbox"/> Instrument #: <b>1234</b>		Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Test or tests refused <input type="checkbox"/>										
Miranda Warning Given Given By:	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When? <b>"Eggs and Toast" "Noon"</b>		What have you been drinking? How much <b>"Wine" "One glass"</b>		Time of last drink? <b>"Hour ago"</b>											
Time now/ Actual /	When did you last sleep? How long <b>"Yesterday" "5 hours"</b>		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No												
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No													
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Attitude: <b>Nervous, Anxious</b>			Coordination: <b>Unsteady, Jittery</b>											
Speech: <b>Rapid, slurred</b>		Breath Odor: <b>Alcoholic Beverage</b>			Face: <b>Normal</b>												
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Reddened Conjunctiva <input checked="" type="checkbox"/> Normal Bloodshot Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal											
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Vertical Nystagmus Yes <input checked="" type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy											
Pulse and time 1. <b>100</b> / _____ 2. <b>102</b> / _____ 3. <b>102</b> / _____		HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset		Right Eye <b>Yes</b> <b>No</b> <b>None</b>		Left Eye <b>Yes</b> <b>No</b> <b>None</b>											
 <p><b>Romberg Balance</b> <b>Circular Sway</b></p>		 <p><b>Walk and turn test</b> <b>Had to be reminded to count out loud. Quick steps.</b></p>		Convergence  <p>Right eye      Left eye</p>		ONE LEG STAND <b>42/30</b> <b>23</b> <b>40/30</b> 											
Cannot keep balance _____ Starts too soon _____ Stops walking _____ Misses heel-toe _____ Steps off line _____ Raises arms _____ Actual steps taken		<table border="1" style="width:100%; text-align: center;"> <tr> <td>1<sup>st</sup> Nine</td> <td>2<sup>nd</sup> Nine</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><b>9</b></td> <td><b>9</b></td> </tr> </table>		1 <sup>st</sup> Nine	2 <sup>nd</sup> Nine	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<b>9</b>	<b>9</b>	L R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms to balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input type="checkbox"/> Puts foot down <b>Counted quickly</b>							
1 <sup>st</sup> Nine	2 <sup>nd</sup> Nine																
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
<b>9</b>	<b>9</b>																
Internal clock <b>18</b> estimated as 30 seconds		Describe Turn: <b>Spun around</b>		Cannot do test (explain) N/A		Type of footwear: <b>Boots</b>											
Draw lines to spots touched  <p><b>Kept opening eyes. Quick movements.</b></p>		PUPIL SIZE <table border="1" style="width:100%; text-align: center;"> <tr> <td></td> <td>Room light</td> <td>Darkness</td> <td>Direct</td> </tr> <tr> <td>Left Eye</td> <td><b>7.5</b></td> <td><b>9.0</b></td> <td><b>7.0</b></td> </tr> <tr> <td>Right Eye</td> <td><b>7.5</b></td> <td><b>9.0</b></td> <td><b>7.0</b></td> </tr> </table>			Room light	Darkness	Direct	Left Eye	<b>7.5</b>	<b>9.0</b>	<b>7.0</b>	Right Eye	<b>7.5</b>	<b>9.0</b>	<b>7.0</b>	Nasal area: <b>Redness in nostrils, no nasal hair</b> Oral cavity: <b>Clear</b>	
	Room light	Darkness	Direct														
Left Eye	<b>7.5</b>	<b>9.0</b>	<b>7.0</b>														
Right Eye	<b>7.5</b>	<b>9.0</b>	<b>7.0</b>														
Blood pressure <b>170/96</b>		Temperature <b>99.6<sup>0</sup></b>		HIPPIUS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		REBOUND DILATION Yes <input checked="" type="checkbox"/> No REACTION TO LIGHT: <b>Slow</b>											
Muscle tone: Near Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid <input type="checkbox"/>		RIGHT ARM      LEFT ARM  <p><b>No visible marks</b></p>															
What drugs or medications have you been using? <b>"Nothing, just a little wine"</b>		How much? <b>N/A</b>		Time of use? <b>N/A</b>		Where were the drugs used? (Location) <b>N/A</b>											
Date / Time of arrest:		Time DRE was notified:		Evaluation start time:		Evaluation completion time:											
Opinion of Evaluator:		<input type="checkbox"/> Depressant <input type="checkbox"/> Stimulant		<input type="checkbox"/> Hallucinogen <input type="checkbox"/> Dissoc. Anesthetic		<input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Inhalant											
Officer's Signature:		Felony Offense:		Misdemeanor Offense:		Reviewed/approved by / date:											

## GUIDELINES FOR ROLE PLAYERS

As a "role player", you have the important task of helping students practice the administration and interpretation of the drug influence evaluations. You will also be expected to coach the students as they are practicing. To help insure that you do the best possible job, please follow these guidelines carefully.

1. Study the exemplar for your assigned role play carefully and thoroughly. Become familiar with all of the information it contains. You do not have to memorize the exemplar. Instead, you will carry the exemplar with you, and you will refer to it as the students administer their tests to you. But you must be familiar with the exemplar to make sure that you give the students all of the information they need to classify "your" drug category or categories.
2. Do not attempt to "act" impaired. Let the information on the exemplar speak for itself.
3. Start by informing the students of your role play "name" (Alpha, Bravo, etc.). State your actual age. Instruct students to record your actual sex and race, and the actual date and time.
4. Inform the students of the BAC for your role.
5. For the Preliminary Examination:
  - a. Answer each question exactly as indicated on your exemplar.
  - b. Instruct students to record your answers exactly as you give them.
  - c. Allow students to conduct the preliminary examinations of your eyes. Coach them as necessary during the preliminary eye checks to make sure they conduct the checks properly. When they have finished, tell them to record the information given on your exemplar.
  - d. Allow students to conduct the first check of your pulse. Coach them as necessary during to make sure that they check pulse properly. When they have finished, tell them to record the information given on your exemplar.
6. For the Eye Examinations:
  - a. Allow the students to conduct the full tests of Horizontal Gaze Nystagmus, Vertical Gaze Nystagmus and Lack of Convergence. Coach them as necessary to make sure they conduct the tests properly.

- b. As they complete each test, instruct them to record the information given on your exemplar.
7. For the Psychophysical Tests:
- a. Do not actually perform the Romberg test. Instead, allow the students to give you the Balance test instructions, then comment on their performance in giving the instructions. Tell them to record the Romberg test information given on your exemplar.
  - b. Do not actually perform the Walk and Turn test. Instead, place your feet in the heel-to-toe stance for the "instructions stage" and allow the students to give you the Walk and Turn instructions. When the instructions are completed, comment on the students' performance in giving the instructions. Then, tell them to record the Walk and Turn information given on your exemplar.
  - c. Do not actually perform the One Leg Stand test. Instead, allow the students to give you the One Leg Stand instructions (for one leg), then comment on their performance in giving the instructions. Tell them to record the One Leg Stand information given on your exemplar.
  - d. You will have to perform the Finger-to-Nose test, since students give instructions throughout that test. Try to place your finger tips on the points indicated in the diagram on your exemplar. When the test is completed, show the diagram to the students and instruct them to replicate it on their record form.
8. For the Vital Signs Examinations:
- a. Allow the students to conduct the full checks of blood pressure, temperature and pulse. Coach the students as necessary to make sure they conduct the tests properly.
  - b. As they complete each test, instruct them to record the information given on your exemplar.
9. For the Dark Room Examinations:
- a. Allow the students to conduct the full checks of pupil size, pupil reaction to light, nasal area and oral cavity. Coach them as necessary to make sure they conduct the checks properly.
  - b. As they complete each check, instruct them to record the information given on your exemplar.

10. Examinations for Muscle Tone and Injection Sites:
  - a. Allow the students to conduct these examinations, and coach them as appropriate. Allow students to conduct the third check of your pulse. Coach them as necessary to make sure that they check pulse properly. When they have finished, tell them to record the pulse measurement shown on your exemplar.
  - b. Instruct them to record the information given on your exemplar.
11. Give the students the information (if any) contained on the reverse side of your exemplar. Do not make any other statements.
12. When you finish working with one team of students, move on to the next team.

Two Hours and Thirty Minutes

**SESSION XXX**

**TRANSITION TO THE CERTIFICATION PHASE OF TRAINING**

**SESSION XXX      TRANSITION TO THE CERTIFICATION PHASE OF TRAINING**

During this session the student will:

- o Demonstrate their mastery of the knowledge and skills the course was intended to help develop.
- o Summarize the key topics covered.
- o Offer comments and suggestions for improving the course.
- o Receive assignments for Field Certification Training.
- o Understand the steps involved in the DRE certification process.

Content Segments

Learning Activities

- |   |  |
|---|--|
| A. Summary  | o Participant led Presentations              |
| B. Post-Test  | o Participants' Anonymous Critique of Course |
| C. Critique   | o Knowledge Examination                      |
| D. Certification Process, Training Assignments and Schedule | o Instructor led Presentation                |
| E. Closing Remarks  |  |

Aids	Lesson Plan	Instructor Notes
 <p><b>15 Minutes</b></p>  <p><b>XXX-1 (Title)</b></p>  <p><b>XXX-2 (Objectives)</b></p>	<p><b>TRANSITION TO THE CERTIFICATION PHASE OF TRAINING</b></p> <p><b>A. Summary</b></p> <ol style="list-style-type: none"> <li>1. The seven categories of drugs. <ol style="list-style-type: none"> <li>a. CNS Depressants</li> <li>b. CNS Stimulants</li> <li>c. Hallucinogens</li> <li>d. Dissociative Anesthetics</li> <li>e. Narcotic Analgesics</li> <li>f. Inhalants</li> <li>g. Cannabis</li> </ol> </li> <li>2. The drug evaluation and classification procedure. <ol style="list-style-type: none"> <li>a. Breath Alcohol Test</li> <li>b. Interview of Arresting Officer</li> <li>c. Preliminary Examination</li> <li>d. Examinations of Eyes</li> <li>e. Divided Attention Tests</li> <li>f. Vital Signs Examinations</li> </ol> </li> </ol>	<p>Total Lesson Time: Approximately 160 Minutes</p> <p>Display Session Title</p> <p>Briefly review the objectives, content and activities of this session.</p> <p><u>Ask</u> students to name the seven categories. Make sure all categories are named.</p> <p>Ask students to name the components of the procedure. Make sure all components are named. Ask students to discuss the kinds of evidence/ information gleaned from each component.</p>

Aids	Lesson Plan	Instructor Notes
  <b>100 Minutes</b>	<ul style="list-style-type: none"> <li>g. Dark Room Examinations</li> <li>h. Check for Muscle Rigidity</li> <li>i. Inspection for Injection Sites</li> <li>j. Statements and Observations</li> <li>k. Opinion of the Evaluator</li> <li>l. Toxicological Examination</li> </ul> <p>3. Major signs and symptoms.</p> <p><b>B. Post-Test</b></p> <ul style="list-style-type: none"> <li>1. Knowledge Examination.</li> </ul>	<p><u>Instruct</u> students to turn to the symptomatology chart in their manuals.</p> <p><u>Briefly</u> summarize and review the major signs and symptoms associated with each drug category.</p> <p>Solicit students' questions concerning the major content topics of the course.</p> <p>Inform the students that the final exam in a "closed book" test. Instruct them to put all books and notes away.</p> <p>Distribute post-test knowledge examinations.</p> <p>Allow students approximately 80 minutes to complete the knowledge examination.</p> <p>Collect the completed knowledge examination.</p> <p>Grade the knowledge exams.</p>
 <b>15 Minutes</b>	<p><b>C. Critique</b></p>	<p>Handout critique forms to the students for completion.</p>

Aids	Lesson Plan	Instructor Notes
<div></div> <p><b>20 Minutes</b></p> <div></div> <p><b>XXX-3</b> (Three Phases)</p> <div></div> <p><b>XXX-4</b> (Certification Requirement)</p>	<p><b>D. Certification Training Assignments and Schedule</b></p> <ol style="list-style-type: none"> <li>1. Remind the students of the three phases of training needed to complete their certification process: <ul style="list-style-type: none"> <li>• Phase I - Pre-School</li> <li>• Phase II - DRE School</li> <li>• Phase III - Field Certifications</li> </ul> </li> <li>1. Review with the students the IACP International Standards for DRE certification. <ol style="list-style-type: none"> <li>a. IACP Standard 1.10 requires that the candidate DRE satisfactorily complete a minimum of twelve (12) evaluations, identifying subjects under the influence of at least three of the drug categories. All three must be supported by toxicology.</li> <li>b. The candidate DRE must also act as the evaluator for at least six evaluations.</li> <li>c. All evaluations, either administered or observed must be documented on the candidate's rolling log.</li> <li>d. Candidate DREs need to have toxicology samples from at least nine (9) subjects evaluated during the certification process.</li> <li>e. The candidate DRE cannot be certified unless the opinion concerning the drug</li> </ol> </li> </ol>	<p>Hand out sheets to each student outlining his or her schedule of certification training.</p> <p><u>Point out</u> that IACP does not certify DREs. The State is the certifying body. IACP only credentials the DREs by assigning them a DRE number and the DRE paperwork.</p> <p>Note: The minimum standards for certification are at the back of the instructor manual. (State requirements may be more stringent than the national standards.)</p> <p>IACP DEC Program International Standard 1.11</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XXX-5</b> (Field Certs)</p>	<p>category(s) is supported by toxicology 75 percent of the time or in at least seven (7) of the nine samples submitted for certification.</p> <p>f. Remind students that during certification all evaluations must be supervised by instructors to count towards minimum certification requirements.</p> <p>3. Field Certifications</p> <p>a. Remind the students of what will be needed for the field certifications.</p> <p>b. Should include the following:</p> <ul style="list-style-type: none"> <li>o DRE kits</li> <li>o Certification Progress Log</li> <li>o DRE Student Manual</li> <li>o Rolling Log</li> <li>o A “prepared mind”</li> </ul> <p>c. Remind the students that DRE field certifications must be completed as soon as possible following completion of the classroom training.</p> <p>d. Remind the students that by the time they have completed field certification(s), they candidate shall have</p>	<p><u>Point out</u> that in situations where an instructor is not available to observe a student evaluation, the student should check the local policy governing this. These evaluations do <u>NOT</u> count toward certification requirements.</p> <p>IACP DEC Program International Standard 1.13</p> <p>IACP DEC Program International Standard 1.14</p>

Aids	Lesson Plan	Instructor Notes
<p></p> <p><b>20 Minutes</b></p> <p></p> <p><b>XXX-6A&amp;B</b> (Final Knowledge Exam)</p> <p></p> <p><b>XXX-7</b> (Certification Progress Log)</p>	<p>prepared a Curriculum Vitae (C.V.)</p> <p>4. Final Certification Knowledge Examination</p> <p>a. Prior to concluding the certification process, the candidate DRE must satisfactorily complete an IACP approved Certification Knowledge Examination.</p> <p>b. The Final Certification Know Knowledge Examination is a multi-part comprehensive examination where the student can not make significant errors or omissions.</p> <p>c. Examination consists of five parts which tests the candidate DRE's knowledge of the drug symptomatology matrix, drug effects, drug combinations and report writing skills.</p> <p>5. After each component required for certification is completed, a DRE Instructor must sign off on the DRE candidate's log.</p>	<p><u>Point out that the Certification Knowledge Exam can be given during the field certifications but only once the candidate has completed not less than three drug evaluations.</u></p> <p>IACP DEC Program International Standard 1.12</p>

Aids	Lesson Plan	Instructor Notes
 <p><b>XXX-8&amp;9</b> (Certification &amp; Maintaining Proficiency)</p>	<p>a. The candidate DRE must be recommended for certification by two DRE instructors.</p> <p>6. DRE Certification</p> <p>a. DRE certification is for a period of two years.</p> <p>b. Once certified, DREs shall be required to renew their certificates of continuing proficiency every two years.</p> <p>c. Continuing proficiency requires:</p> <ul style="list-style-type: none"> <li>o Performing a minimum of four (4) acceptable drug evaluations since the last date of certification;</li> <li>o Completing a minimum of eight (8) hours of approved re-certification training; and</li> <li>o Presenting an updated C.V. and Rolling Log to the appropriate coordinator for review.</li> </ul> <p><b>E. Closing Remarks</b></p>	<p>Solicit questions from students regarding the field certifications and certification process.</p> <p>Closing remarks will be offered by appropriate representatives of the department and faculty.</p>

## Session XXX

### Transition to the Certification Phase of Training



XXX-1

## Transition to the Certification Phase of Training

During this session the student will:

- Demonstrate their mastery of the knowledge and skills the course was intended to help develop
- Summarize the key topics covered
- Offer comments and suggestions for improving the course
- Receive their assignments for Field Certification Training

Drug Evaluation &amp; Classification Training

XXX-2

## The Three Phases of Training for the DEC Program

Certification involves three-phase training process:

1. Phase I - Two-day (16-hour) Pre-school
2. Phase II - Seven-day (56-hour) DRE School
3. Phase III - Field Certifications (usually within 60 to 90 days, but not longer than six months following the completion of the classroom training)

Drug Evaluation &amp; Classification Training

XXX-3

## Field Evaluations Requirements

- 12 evaluations (minimum)
- 9 toxicology samples collected
- 7 positive (confirmed) toxicology samples from the lab
- 6 of the 12 evaluations conducted - YOU must be the evaluator
- 3 of the 7 drug categories must be encountered
- Evaluations must be witnessed and supervised by a DRE Instructor

Drug Evaluation &amp; Classification Training

XXX-4

## Field Certifications

What's needed for the Field Certification nights?

- DRE kits
- Certification Progress Log
- Your Student Manual
- Your Rolling Log
- A prepared mind



Drug Evaluation &amp; Classification Training

XXX-5

## The Final Certification Knowledge Examination

**Standard 1.12...Prior to concluding field certification training, the candidate shall satisfactorily complete an approved "Certification Knowledge Examination."**

**...The examination shall only be administered after the candidate has completed not less than three drug evaluations.**

Drug Evaluation &amp; Classification Training

XXX-6A

## Final Certification Knowledge Examination

- A multi-part, comprehensive examination
- No significant errors or omissions allowed
- Examines candidate's overall knowledge



Drug Evaluation & Classification Training

XXX-68

## IACP Certification Progress Log

- After each component required for certification is completed, a DRE Instructor must sign off on your log
- You must be recommended for certification by two DRE Instructors
  - Instructors will sign off in the *Authorized Signature* portion at the bottom of the Progress Log

Drug Evaluation & Classification Training

XXX-7

## How Long Am I Certified For?

- DRE Certification is good for two years
- DRE's shall be required to renew their certificate of continuing proficiency every two years

Drug Evaluation & Classification Training

XXX-8

## How Do I Maintain Proficiency?

IACP International Standard 3.4...A DRE shall demonstrate continuing proficiency by:

1. Performing a minimum of four (4) acceptable evaluations since the date of last certification...
2. Completing a minimum of eight (8) hours of recertification training...
3. Presenting an updated Curriculum Vitae and Rolling Log to the appropriate coordinator for review and approval.

Drug Evaluation & Classification Training

XXX-9

# QUESTIONS?

Drug Evaluation & Classification Training

# Congratulations!



Drug Evaluation & Classification Training

## INSTRUCTOR'S GUIDELINES FOR THE FINAL EXAMINATION

### ADMINISTERING THE FINAL EXAMINATION

The NHTSA and IACP approved Final Examination (Form A) appears on the pages immediately following. The Answer Sheet appears immediately after the examination. Each student must receive one copy of the examination and an answer sheet. To guard against loss of a copy of the examination, do not simply hand over a large supply of examinations to the first row of students and ask them to "pass them back". Instead, instructors must physically hand a single copy to each individual student. **EMPHASIZE THAT STUDENTS MUST WRITE NOTHING ON THE EXAMINATION ITSELF.** When a student completes the test, make sure you collect their copy of the examination along with the answer sheet. Carefully inspect the copy of the examination to make sure nothing has been written on it. Destroy completely any copies that have been marked in any way.

### GRADING THE EXAMINATION

The Final Examination contains 100 multiple choice questions. A student must correctly answer at least 80 questions to pass the examination and progress to Certification Training. A student who is totally correct on at least 80 questions passes. A student who answers 21 or more questions incorrectly fails.

### WHAT DO WE DO WHEN A STUDENT FAILS?

The International Standards established for this program by IACP, and endorsed by NHTSA, grant every student who fails the Final Examination one additional attempt to pass. **BUT PLEASE NOTE THAT SOME OF THE STATES AND LAW ENFORCEMENT AGENCIES PARTICIPATING IN THE DRUG EVALUATION AND CLASSIFICATION PROGRAM HAVE ADOPTED A MORE EXACTING STANDARD.** For example, some agencies will not allow a "failed" student a second attempt unless he or she scored at least 70 on the first attempt.

All participating agencies have the right to set standards that are more stringent than those promulgated by IACP. Therefore, when a student fails the Final Examination, your first duty is to determine whether the student qualifies for a second attempt.

Assuming a "failed" student qualifies, the second attempt cannot occur sooner than two weeks following the completion of the school, and must occur not later than four weeks after the schools end. In other words, there is an enforced waiting period of two weeks, to provide time for remedial study; then, there is a two week "window of opportunity". **NO EXCEPTION CAN BE MADE TO THIS.**

During the two week waiting period, the student is expected to study the Manual and their class notes. Tutoring by certified DRE instructors is permissible and encouraged. However, if you tutor a "failed" student, be sure that you do not simply "teach the test".

DO NOT GO OVER THE FINAL EXAMINATION WITH THE STUDENT. DO NOT LET HIM OR HER KNOW WHICH QUESTIONS WERE ANSWERED INCORRECTLY. Do use the available quizzes and other study guides to help tutor the student. These include the "Challenge Quiz" found at the end of the PRE-School Student's Manual; the Pre-test for this School; the five quizzes that are used in this School; and, the "Self-Test for Review and Study" that is found at the end of Session XXVIII of the DRE School Student's Manual.

One thing that the "failed" student cannot do during the two-week waiting period is formally enroll in Certification Training. It is permissible for him or her to attend Certification Training events as an observer. But the "failed" student cannot administer any subject evaluations, nor can they serve as the recorder for any evaluations. And, of course, the "failed" student will receive absolutely no credit for any evaluations they observe.

The second attempt at the Final Examination must employ Form B Final Written Examination. This 100-question, multiple choice test appears on the pages immediately following the Form A Answer Sheets. If the student correctly answers at least 80 questions on the second attempt, they pass. If the score is 79 or lower, or if the two to four week "window" elapses and the student has not been re-tested, they irrevocably fail, and are no longer a participant in the Drug Evaluation and Classification Program. The only way that the student can be re-admitted to the Program would be to enroll in another DRE School, complete it in its entirety, and pass the Final Examination.

**PROFICIENCY EXAMINATION CHECKLIST  
(For Use During Certification Training)**

Student's Name \_\_\_\_\_

Date \_\_\_\_\_ Examiner \_\_\_\_\_

**I. Preliminary Examination**

1. Did the student ask all preliminary examination questions?

\_\_\_\_\_yes      \_\_\_\_\_no

(If No: What questions were deleted? \_\_\_\_\_  
\_\_\_\_\_

2. Did the student properly estimate pupil size?

\_\_\_\_\_yes      \_\_\_\_\_no

3. Did the student properly assess the eyes' tracking ability?

\_\_\_\_\_yes      \_\_\_\_\_no

4. Did the student properly measure pulse rate?

\_\_\_\_\_yes      \_\_\_\_\_no

**II. Eye Examinations**

1. Did the student properly administer the Horizontal Gaze Nystagmus test?

\_\_\_\_\_yes      \_\_\_\_\_no

(If no, explain deficiencies \_\_\_\_\_  
\_\_\_\_\_

2. Did the student properly administer the Vertical Gaze Nystagmus test?

\_\_\_\_\_yes      \_\_\_\_\_no

(If no, explain deficiencies \_\_\_\_\_  
\_\_\_\_\_

3. Did the student properly administer the test for Lack of Convergence?

\_\_\_\_\_yes          \_\_\_\_\_no

(If no, explain deficiencies \_\_\_\_\_  
\_\_\_\_\_

III. Psychophysical Tests

1. Did the student properly administer the Romberg Balance test?

\_\_\_\_\_yes          \_\_\_\_\_no

(If no, explain deficiencies \_\_\_\_\_  
\_\_\_\_\_

2. Did the student properly administer the Walk and Turn test?

\_\_\_\_\_yes          \_\_\_\_\_no

(If no, explain deficiencies \_\_\_\_\_  
\_\_\_\_\_

3. Did the student properly administer the One Leg Stand test?

\_\_\_\_\_yes          \_\_\_\_\_no

(If no, explain deficiencies \_\_\_\_\_  
\_\_\_\_\_

4. Did the student properly administer the Finger To Nose test?

\_\_\_\_\_yes          \_\_\_\_\_no

(If no, explain deficiencies \_\_\_\_\_  
\_\_\_\_\_

V. Vital Signs Examinations

1. Did the student properly measure blood pressure?

\_\_\_\_\_yes      \_\_\_\_\_no

(If no, explain deficiencies \_\_\_\_\_  
\_\_\_\_\_

2. Did the student properly measure temperature?

\_\_\_\_\_yes      \_\_\_\_\_no

(If no, explain deficiencies \_\_\_\_\_  
\_\_\_\_\_

3. Did the student properly measure pulse?

\_\_\_\_\_yes      \_\_\_\_\_no

(If no, explain deficiencies \_\_\_\_\_  
\_\_\_\_\_

IV. Dark Room Examinations

1. Did the student properly control the pen light for the two checks of pupil size?

\_\_\_\_\_      yes      \_\_\_\_\_no

(If no, explain deficiencies \_\_\_\_\_  
\_\_\_\_\_

2. Did the student accurately estimate pupil size?

\_\_\_\_\_yes      \_\_\_\_\_no

3. Did the student properly check the nasal area?

\_\_\_\_\_yes      \_\_\_\_\_no

4. Did the student properly check the oral cavity?

\_\_\_\_\_yes      \_\_\_\_\_no

VI. Examinations of Muscle Tone

1. Did the student adequately inspect for muscle tone?

\_\_\_\_\_yes      \_\_\_\_\_no

(If no, explain deficiencies \_\_\_\_\_  
\_\_\_\_\_

V. Examinations of Injection Sites and Third Pulse

1. Did the student adequately inspect for injection sites?

\_\_\_\_\_yes      \_\_\_\_\_no

(If no, explain deficiencies \_\_\_\_\_  
\_\_\_\_\_

2. Did the student properly measure pulse?

\_\_\_\_\_yes      \_\_\_\_\_no

(If no, explain deficiencies \_\_\_\_\_  
\_\_\_\_\_

VII. Evaluator's Opinion of Student's Proficiency

(Offer appropriate, specific comments concerning the student's progress)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Administrator's  
Guide**

**I  
Introduction & Overview**

**II  
Drug In Society**

**III  
Development & Effectiveness  
of the DEC Program**

**IV  
Overview of Drug  
Recognition Procedures**

**V**  
**Eye Examinations**

**VI**  
**Physiology & Drugs:  
An Overview**

**VII**  
**Examination of  
Vital Signs**

**VIII**  
**Demonstration of the  
Evaluation Sequence**

**IX**  
**Central Nervous  
System Depressants**

**X**  
**Central Nervous  
System Stimulants**

**XI**  
**Practice:  
Eye Examinations**

**XII**  
**Alcohol Workshop**

**XIII**  
**Physician's Desk  
Reference**

**XIV**  
**Hallucinogens**

**XV  
Practice:  
Test Interpretation**

**XVI  
Dissociative Anesthetics**

**XVII  
Narcotic Analgesics**

**Mid-Course  
Review**

**XVIII  
Practice:  
Test Interpretation**

**XIX  
Inhalants**

**XX  
Practice:  
Vital Signs**

**XXI  
Cannabis**

**XXII  
Overview of  
Signs & Symptoms**

**XXIII  
Curriculum Vitae  
Preparation  
& Maintenance**

**XXIV  
Drug Combinations**

**XXV  
Practice:  
Test Interpretation**

**XXVI  
Preparing the  
Narrative Report**

**XXVII  
Practice:  
Test Administration**

**XXVIII  
Case Preparation  
and Testimony**

**Review Session**

**XXIX  
Classifying A  
Suspect (Role Play)**

**XXX  
Transition to the  
Certification Phase**