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

ADMINISTRATOR'S GUIDE

1999 EDITION

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TABLE OF CONTENTS

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 Procedures, a few words are appropriate concerning the procedures themselves. **In particular, it is important to make clear what the Drug Evaluation and Classification Procedures are <u>not</u>:**

- These procedures are <u>not</u> 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.

- 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.

- 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:

- have achieved the learning objectives of the two-day PRE-School;
- have demonstrated proficiency in the use of the standardized field sobriety tests (i.e., horizontal gaze nystagmus, walk and turn and one leg stand);
- have good communications skills, and a demonstrated ability to testify in court;
- 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 an 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:

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

- o Case Preparation and Testimony.

- o Resume 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 Phencyclidine (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 Resume 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 Phase of Training	(2 hours, 30 minutes)

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

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

THE DRE SCHOOL - SCHEDULE (page 1)

WEDNESDAY	THURSDAY	FRIDAY
0800-0850 SESSION I: Introduction & Overview	0800-0850 SESSION V: (cont)	0800-0850 SESSION IX: Central Nervous System 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: Central Nervous System Stimulants
1030-1120 SESSION II: Drugs In Society & In Motor Vehicle Operation	1110-1120 BREAK	1100-1110 BREAK
1120-1130 BREAK	1120-1200 SESSION VII: Examination of Vital Signs	1110-1200 SESSION X: (cont)
1130-1230 SESSION III: Development & Effectiveness of the 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 Drug Recognition Expert 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: Demonstrations 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: Physician's Desk Reference & Other Reference Sources	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 Interpretation	1015-1200 SESSION XXIX: Classifying a Suspect-Role Play
0930-1030 SESSION XIV: (cont)	0900-0945 SESSION XVIII: Practice Test Interpretation	1050-1100 BREAK	1200-1300 LUNCH
1030-1045 BREAK	0945-1020 SESSION XIX: Inhalants	1100-1200 SESSION XXVI: Preparing the Narrative Report	1300-1600 ADMINISTRATION OF THE TEST VALIDATION
1045-1130 SESSION XV: Practice Test Interpretation	1020-1030 BREAK	1200-1300 LUNCH	1600-1630 SESSION XXX: Transition to Certification Training
1130-1200 SESSION XVI: Phencyclidine (PCP)	1030-1130 SESSION XIX: (cont)	1300-1430 SESSION XXVII: Practice Test Interpretation	1630-1700 Course Critique; Closing Remarks; Presentation of Certificates
1200-1300 LUNCH	1130-1145 BREAK	1430-1445 BREAK	
1300-1410 SESSION XVI: (cont)	1145-1300 SESSION XX: Practice Vital Signs Examinations	1445-1530 SESSION XXVIII: Case Preparation and Testimony	
1410-1420 BREAK	1300-1400 LUNCH	1530-1545 BREAK	
1420-1515 SESSION XVII: Narcotic Analgesics	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: Resume Preparation & Maintenance		
1800-2030 OPTIONAL REVIEW SESSION #1	1730-1800 QUIZ NUMBER THREE		

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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	Phencyclidine	D	1hr
12:00P - 1:00P	Lunch		1hr
1:00P - 2:00P	Phencyclidine (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
Block I - *Introduction and Overview* (merger of DWI Detection and SFST manual session I and the DRE manual session I) *SFST and DRE School Pre-tests*	2hrs
Block 2 - *Definition of drug and overview of the drug categories* (modified Pre-School session I, Introduction and Overview)	1hr
Block 3 - *Detection and Deterrence* (SFST manual session II)	1hr
Block 4 - *The Legal Environment* (SFST manual session III)	45min
Block 5 - *Overview of Detection, Notetaking and Testimony* (SFST manual session IV)	45min
Block 6 - *Phase One: Vehicle in Motion* (SFST manual session V)	1hr
Block 7 - *Phase Two: Personal Contact* (SFST manual session VI)	1hr
Block 8 - **Phase Three: Pre-Arrest Screening** (SFST manual session VII)	30min
DAY TWO	
Block 9 - *Concepts and Principles of the SFST* (SFST manual session VIII, segments A (development and validity) and B (types of nystagmus)	1hr
Block 10 - *Eye examinations* (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
Block 11 - *Psychophysical Tests* (Pre-School manual session III, segments A and B, Romberg and Walk and Turn)	1hr
Block 12 - *Psychophysical Tests* (Pre-School manual session III, segments C and D, One Leg Stand and Finger to Nose)	1hr
Block 13 - *SFST Battery Demonstrations* (SFST manual session IX, plus Romberg and Finger to Nose, utilizing the DRE order)	1hr
Block 14 - *SFST Dry Run Practice* (SFST manual session X, plus Romberg and Finger to Nose, in the DRE order)	1hr
Block 15 - *Alcohol Correlation Study #1* (merger of SFST manual session XI and Pre-School manual session V)	2hrs

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

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

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

ALTERNATE SCHEDULE #3
ACCELERATED DRE SCHOOL

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

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

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

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

C. Overview of the Curriculum Package.

In addition to this Administrator's Guide, the curriculum package for the classroom training program in drug evaluation and classification 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:

- the approximate amount of time to be devoted to each major content segment
- indications of what visual aids are to be used and when they are to be used
- questions to be posed to students to involve them actively in the presentation
- indications of points requiring special emphasis
- guidelines for conducting particular demonstrations to clarify how drug examinations are to be performed
- 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 chalkboard/flip-chart presentations
- o "visuals" (overhead transparencies)
- o 35mm photographic slides
- o video tapes

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 chalkboard.

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

The "visuals" or overhead transparencies 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.

35mm photographic slides are available of all the overhead transparencies.

The video tapes 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:

- 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.

- 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.

- 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, overhead and 35mm slide projectors, chalkboards and/or flip-charts and video tape 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 1.0mm to 9.0mm, 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:

- Session IV (Overview of Drug Evaluation and Classification Procedures)
- Session V (Eye Examinations)
- Session VIII (Demonstrations of the Evaluation Sequence)
- 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)
- The hands-on practice sessions (Sessions XI, XX, XVIII and XXIX)
- The Test Interpretation Practice Sessions (Sessions XV, XVII and XXV)
- Session XXVI (Narrative Drug Report)
- Session XXIII (Resume 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 DRE 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 DRE 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 principal 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.

NHTSA requires that a formal assessment of the drug evaluation and classification program be conducted by each agency that receives this training. At a minimum, it is expected that departments will maintain records, for a period of at least 6 months following completion of the Certification Phase training, on each DRE's on the job performance, and that copies of those records will be submitted to NHTSA. The records should include the Standard Drug Evaluation and Classification form (or its equivalent); the arrest report; the Narrative Report; and, the results of the laboratory analysis of a blood or urine sample (if available) on each suspect examined by a DRE.

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:

- 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:

- +2 for each "very important"
- 0 for each "somewhat important"
- -2 for each "un-important"
- -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.

One Hour and Fifty Minutes

SESSION I

INTRODUCTION AND OVERVIEW

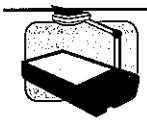
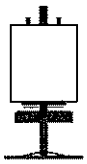
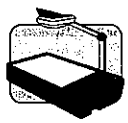
SESSION I INTRODUCTION AND OVERVIEW

Upon successfully completing this session, the participant 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.

During this session, the participant 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		

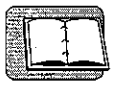
Aides	Lesson Plan	Instructor Notes
 **I-0** (Session Objectives)	INTRODUCTION AND OVERVIEW	Total Lesson Time: Approximately 110 Minutes Briefly review the content, objectives and activities of this session.
 **10 Minutes**	A. Welcoming Remarks and Goal	
	1. Welcome to the seven day DRE School.	Course title on wall chart. **Brief** welcoming remarks by the lead-off instructor (not longer than one minute).
 **I-1** (Goal)	2. The goal of this school is simple: To help you prevent crashes, deaths and injuries caused by drug impaired drivers.	
 **I-2A** (Tennessee)	a. University of Tennessee study (1988) 40% of drivers treated at Trauma Center for crash injuries had drugs other than alcohol in them.	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.
 **I-2B** (Maryland)	b. Maryland Shock Trauma Center study (1985-1986) 32% of drivers treated at the Shock Trauma Center had used marijuana prior to their crashes.	Emphasize that these studies clearly show that drug impaired driving is a major problem in this country. Instructor note: Remind students that all studies published are subject to interpretation.

Aides	Lesson Plan	Instructor Notes
		For more information contact NHTSA, The National Traffic Law Center, or the IACP DEC Technical Advisory Panel.
	3. We can do something to remove drugged drivers from our roads.	
	a. The DRE Program is based on solid medical and scientific facts.	
	b. The validity of the DRE Program has been tested in carefully controlled research in both the laboratory and the field.	**Point out** that the students will hear more about this research later today.
	4. By enrolling in DRE training, you have become part of an elite International Program.	
	a. Drug Recognition Experts form one of the tightest knit fraternities in law enforcement.	
	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.	Mention the various agencies represented among the instructors and the students in this school.
	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.	

Aides	Lesson Plan	Instructor Notes
	d. Your instructors welcome you to this school. We're proud to have you here, and we're sure that you are proud to be here.	
 **25 Minutes**	B. Introductions	
	1. Introduction of representatives of host agencies and other dignitaries.	The introductions of dignitaries, and their welcoming remarks, must be kept brief: no more than 10 minutes can be devoted to this.
	2. Introduction of faculty.	The lead-off instructor should mention the names and agency affiliations of all other instructors, asking each to stand as their name is called.
	3. Students' introductions.	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.
 **10 Minutes**	C. Objectives	
	1. If you successfully complete this School, you will be able to:	
 **I-3A** (First Three Objectives)	a. Describe the involvement of drugs in impaired driving incidents.	
	b. Name the seven categories of drugs and recognize their effects.	

Aides	Lesson Plan	Instructor Notes
 **I-3B** (Next Two Objectives)  **I-3C** (Last Three Objectives)	c. Describe and properly conduct the drug evaluation. d. Document the results of the drug evaluation. e. Properly interpret the results of the evaluation. f. Write narrative Drug Influence Reports. g. Testify clearly and convincingly in drug evaluation cases. h. Maintain an up to date resume. 2. Every DRE needs to be able to do these eight things. 3. Before you can be certified as a DRE, you will have to demonstrate that you can do each of these things.	Solicit students' questions about the objectives.
 **25 Minutes** 	D. Overview of Content and Schedule 1. Major content topics a. Drugs in society and in vehicle operation. b. Development and effectiveness of the Drug Evaluation and Classification Program. c. Overview of Drug Recognition Expert Procedures.	Refer to wall charts in previewing the content topics. Briefly overview the contents covered under each major topic.

Aides	Lesson Plan	Instructor Notes
	d. Eye Examinations (a major component of the Drug Evaluation Procedures).	
	e. Physiology and Drugs.	
	f. Vital signs examinations (a major component of the Drug Evaluation Procedures).	
	g. The seven categories of drugs.	
	h. The Physicians's Desk Reference (PDR) and other reference sources.	
	i. Interviewing suspects (a major component of the Drug Evaluation Procedures).	
	j. Resume preparation and maintenance.	
	k. Case preparation and testimony.	
	l. Classifying a suspect (interpreting and documenting the results of an examination)	Solicit students' questions concerning the content topics.
	2. Hands-on practice sessions.	Emphasize that hands on practice is the principal learning activity of this course.
	a. Eye Examinations practice (Nystagmus, Lack of Convergence, pupil size and reaction to light)	Refer to wallchart outlining practice sessions.

Aides	Lesson Plan	Instructor Notes
	b. Alcohol workshop (psychophysical testing practice)	Point out that volunteer drinkers from outside the class will be recruited for this session.
	c. Practicing interpretation of the examination results.	Point out that several sessions will be devoted to this. In each, students will review drug evaluation reports and identify the probable category or combinations of categories of drugs involved.
	d. Vital signs examinations practice (pulse, blood pressure)	
	e. Practicing administration of the DRE examination.	Point out that several sessions will be devoted to this. In each, students will practice administering the drug examinations to each other. No hands on practice with actual drugged subjects is included in the classroom portion of DRE training.
	f. Simulated drug impaired subjects examinations.	Point out that students will work in teams to conduct and document examinations of instructors who will be simulating the indicators of drug-impaired subjects. Solicit students' questions concerning the hands-on practice sessions.
	3. Course schedule.	Refer students to the schedule shown in their manuals. Briefly overview the schedule of sessions. Solicit students' questions concerning the schedule.

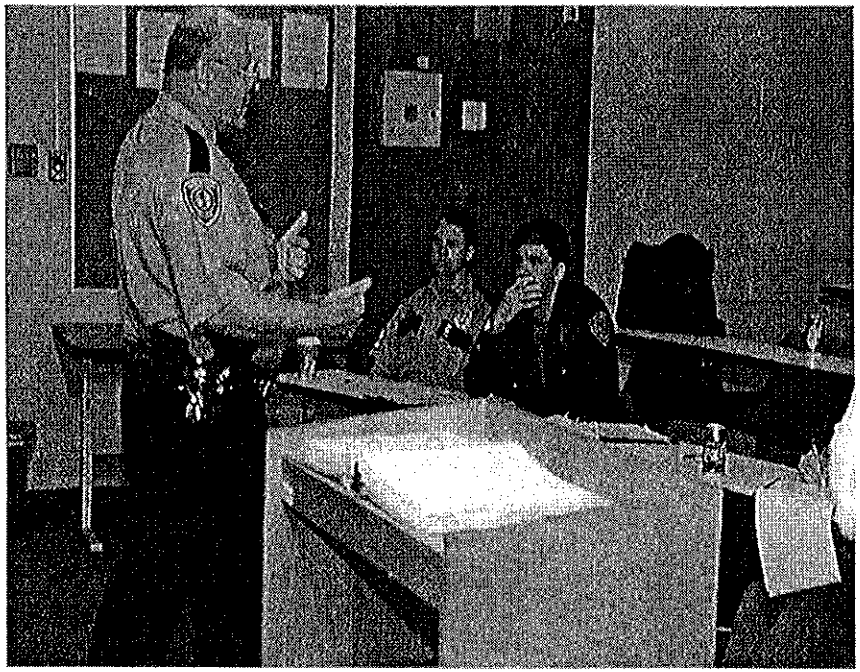
Aides	Lesson Plan	Instructor Notes
 **25 Minutes**	E. Overview of Student Manual	
	1. Student Manual is the basic reference document for this course.	Make sure each student has a copy of the student manual.
	a. The Manual Contains a summary of presentations made by instructors throughout the classroom training.	
	b. The Manual includes a set of "class notes" for every session in the course.	Point out that the Student Manual has a separate chapter, or section, for each session of the course. Instruct students to open their Manuals to Session I, and briefly review the content of that section of the Manual, to illustrate how the document is organized.
	2. Students are expected to use the Manual to review the material covered in class.	
	3. The Manual should also be used to preview the class sessions.	Encourage students to read the appropriate Student Manual Sections prior to each day's classes.
	4. By taking good notes, and by studying the Manual carefully, students should have no trouble in passing the course.	
	5. At the conclusion of the classroom training, the student must pass the written test with a score of 80% or better in order to progress to the certification phase.	Remind students that there will be numerous quizzes during the class.

Aides	Lesson Plan	Instructor Notes
 **15 Minutes**	F. Administrative Matters	
	1. Logistics. (Completion of registration forms, travel vouchers, etc.)	
	2. Mandatory attendance at all sessions of this school.	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.
	3. Facilities. (Locations of restrooms, lunchrooms, etc.)	
	4. Pre-test	Hand out pre-tests. Emphasize 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. 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.

DRE 7-Day School

Session I

Introduction and Overview



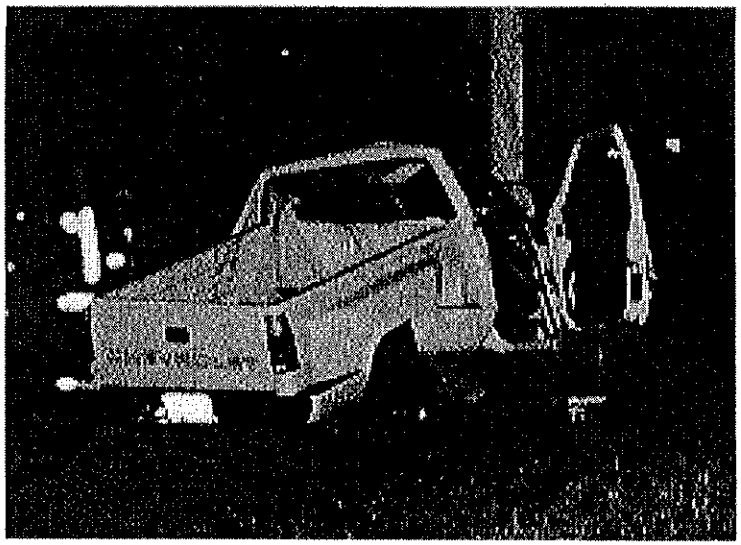
Introduction and Overview

Upon successfully completing this session, the participant 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

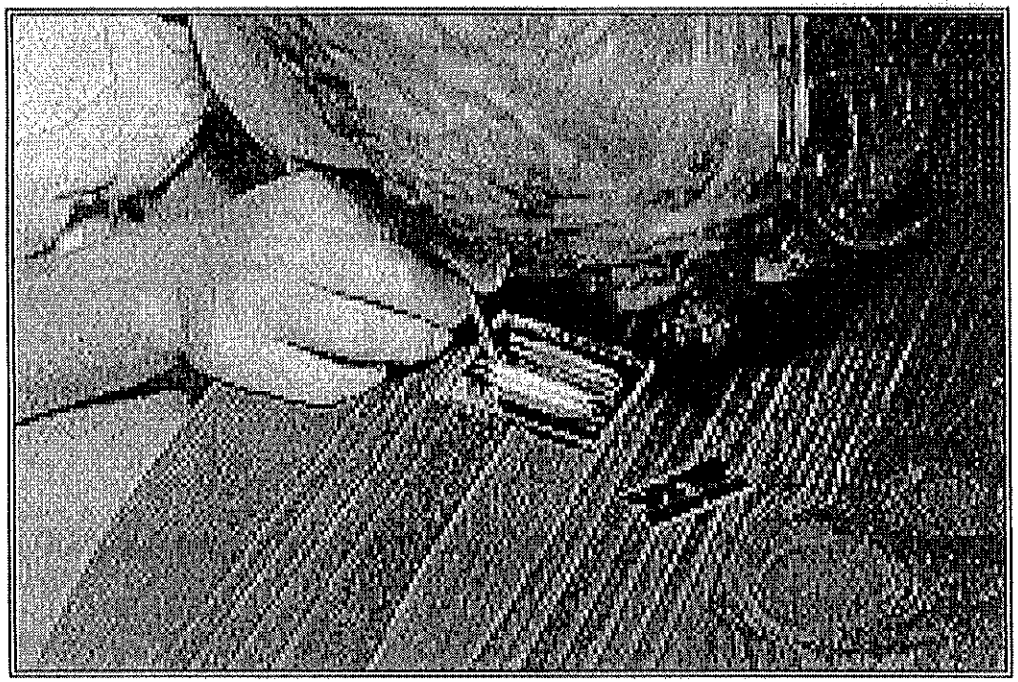
Ultimate Goal of the Program:

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



University of Tennessee Study (1988):

40% of drivers receiving emergency treatment had used drugs prior to their crashes



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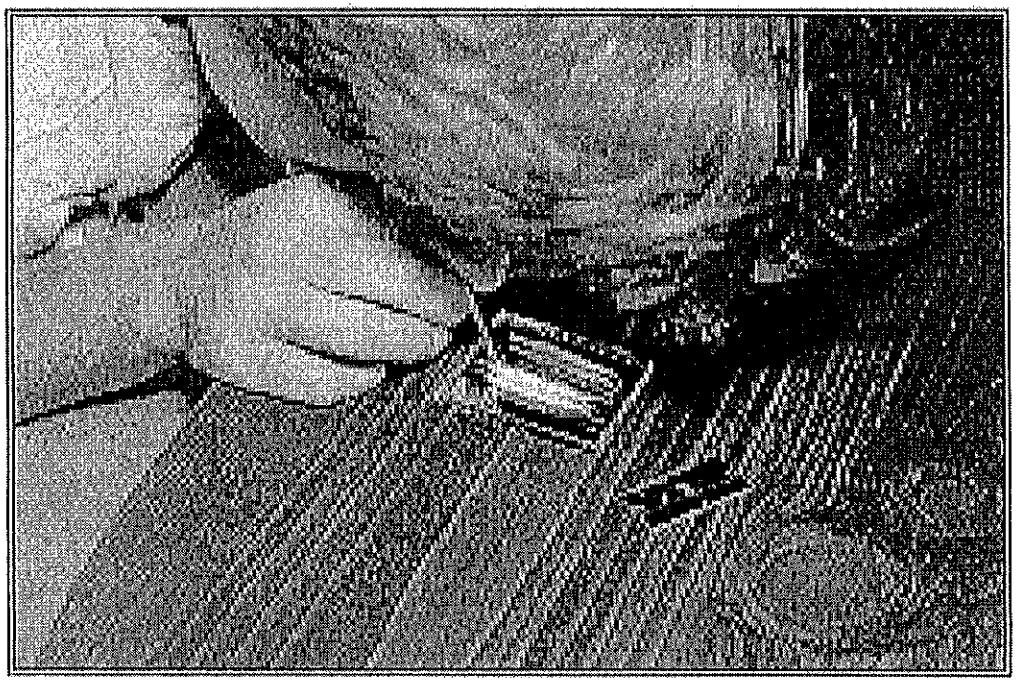

Maryland Shock Trauma Center Study (1985-1986):

32% of drivers treated at the shock trauma center had used marijuana prior to their crashes

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 evaluation

Classroom Training Objectives (continued)

4. Document the results of the drug evaluation and classification process
5. Properly interpret the results of the evaluation

Classroom Training Objectives (continued)

6. Prepare a narrative drug influence report
7. Discuss appropriate procedures for testifying in typical drug evaluation/classification cases
8. Maintain a relevant and up-to-date resume

DRUG RECOGNITION AND CLASSIFICATION TRAINING
FINAL WRITTEN EXAMINATION
TEST ADMINISTRATION

- Secure a quiet room with adequate lighting and sufficient work space for each candidate.

- The exam was not designed to be a speed test, therefore, if a time limit is established for administrative convenience, it should be liberal (e.g., 3 hours) and flexible.

- Distribute one answer sheet and one test booklet to each candidate. Be sure each candidate has a number 2 pencil. Tell candidates not to open test booklets until instructed to do so.

- Read the following instructions to candidates:

  - **"Use a pencil to fill out the answer sheet and to enter your responses to questions."**

  - **"Write your name in the space labeled 'Name' on the answer sheet. Use the following order: last name, space, first name, space, middle initial. Fill in the circle underneath each letter that corresponds to that letter."** *(Wait for candidates to finish.)*

  - **"Write your social security number in the space marked, 'Social Security Number' on the answer sheet. Put the first digit of the social security number in the first space in the 'Social Security Number' section. Fill in the corresponding circles."** *(Wait for candidates to finish.)*

  - **"Write today's date in the space marked 'Date'. Today's date is _____. Fill in the corresponding circles."** *(Wait for candidates to finish.)*

  - **"Write _____ in the space marked 'State'.** *(Provide candidates with the two letter abbreviation for the state in which the exam is being administered.)* **Fill in the corresponding circles."** *(Wait for candidates to finish.)*

  - **"Fill in the circle 'A' in the area marked 'Test Form'."**

  - **"All answers must be provided on the answer sheet. Marks in the test booklet will not be considered. Circles corresponding to selected answers should be filled in completely. No stray marks should be made on the answer sheet."**

- **"Read all alternatives and then select the one best answer for each question. Read the questions and all alternatives carefully before selecting your answer. There is no penalty for guessing."**

- **"The examination is scheduled to end at _____, however you will be allowed additional time if you need it. When you have completed the examination, return the examination booklet and answer sheet to me."**

- **"Any questions?"**

- **"You may begin working on the examination."**

- Monitor candidates carefully.

- When candidates finish, collect all materials (test booklets and answer sheets). The security of the test booklets must be a top priority. At no time, before, during, or after the exam, should candidates have uncontrolled access to exam materials.

- Make a copy of each completed answer sheet before mailing. Keep these copies in a secure location.

- Return original completed answer sheets to IACP at the address below. Be sure to inform IACP of any unusual or notable occurrences during exam administration.

Kim Kohlhepp
Manager, Center for Testing Services
International Association of Chiefs of Police
515 North Washington Street
Alexandria, VA 22314
703/836-6767 or 800/THE-IACP

DRUG EVALUATION AND CLASSIFICATION TRAINING

FINAL WRITTEN EXAMINATION

FORM A

Instructions to Candidates:

Read each question carefully.

Select the one best alternative for each question.

Record all responses on the answer sheet.

DRUG EVALUATION AND CLASSIFICATION TRAINING

FINAL WRITTEN EXAMINATION

FORM B

Instructions to Candidates:

Read each question carefully.

Select the one best alternative for each question.

Record all responses on the answer sheet.

STUDENT IDENTIFICATION SHEET

SOCIAL SECURITY NUMBER

DATE

MONTH DAY YEAR

TEST FORM

A
B

NAME

Last Name, First Name, Middle Initial

STATE

000064

SCORE SHEET

1 A B C D E	11 A B C D E	21 A B C D E	31 A B C D E	41 A B C D E
2 A B C D E	12 A B C D E	22 A B C D E	32 A B C D E	42 A B C D E
3 A B C D E	13 A B C D E	23 A B C D E	33 A B C D E	43 A B C D E
4 A B C D E	14 A B C D E	24 A B C D E	34 A B C D E	44 A B C D E
5 A B C D E	15 A B C D E	25 A B C D E	35 A B C D E	45 A B C D E
6 A B C D E	16 A B C D E	26 A B C D E	36 A B C D E	46 A B C D E
7 A B C D E	17 A B C D E	27 A B C D E	37 A B C D E	47 A B C D E
8 A B C D E	18 A B C D E	28 A B C D E	38 A B C D E	48 A B C D E
9 A B C D E	19 A B C D E	29 A B C D E	39 A B C D E	49 A B C D E
10 A B C D E	20 A B C D E	30 A B C D E	40 A B C D E	50 A B C D E
51 A B C D E	61 A B C D E	71 A B C D E	81 A B C D E	91 A B C D E
52 A B C D E	62 A B C D E	72 A B C D E	82 A B C D E	92 A B C D E
53 A B C D E	63 A B C D E	73 A B C D E	83 A B C D E	93 A B C D E
54 A B C D E	64 A B C D E	74 A B C D E	84 A B C D E	94 A B C D E
55 A B C D E	65 A B C D E	75 A B C D E	85 A B C D E	95 A B C D E
56 A B C D E	66 A B C D E	76 A B C D E	86 A B C D E	96 A B C D E
57 A B C D E	67 A B C D E	77 A B C D E	87 A B C D E	97 A B C D E
58 A B C D E	68 A B C D E	78 A B C D E	88 A B C D E	98 A B C D E
59 A B C D E	69 A B C D E	79 A B C D E	89 A B C D E	99 A B C D E
60 A B C D E	70 A B C D E	80 A B C D E	90 A B C D E	100 A B C D E

FINAL WRITTEN EXAMINATION

DRUG EVALUATION AND CLASSIFICATION TRAINING

DRUG RECOGNITION EXPERT

STANDARDIZED FIELD EVALUATION

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DRUG EVALUATION AND CLASSIFICATION PROGRAM

GLOSSARY OF TERMS

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.

ARTERY

The strong, elastic blood vessels that carry blood from the heart to the body tissues.

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.

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.

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 his or her nose. (See, also, "Lack of Convergence".)

CRACK

A hard chunk form of cocaine that produces a very intense, but relatively short duration "high". (Rock is a different process.)

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.

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 ANESTHETIC

A drug that inhibits pain by cutting off (or "disassociating") the brain's perception of the pain. PCP is usually described as a dissociative anesthetic.

DIVIDED ATTENTION

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

DRUG

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

DYSPNEA

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 produced by boiling, compressing and drying the leaves of the female marijuana plant. Hashish has a higher concentration of THC (tetrahydrocannabinol) than does the marijuana from which it is produced.

HASH OIL

A liquid extracted from hashish, and containing a relatively high concentration of THC.

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

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.

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

HYPOGLYCEMIA
An abnormal decrease of blood sugar levels.

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.

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, metopon, 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 state of deep relaxation, 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 technicians. The PDR provides detailed information on the physical appearance and psychoactive effects of all licitly-manufactured drugs.

PHENCYCLIDINE

A contraction of PHENYL CYCLOHEXYL PIPERIDINE, or PCP. Phencyclidine is the name of one of the seven drug categories, and is also the name of the major drug in that category.

PHENYL CYCLOHEXYL PIPERIDINE (PCP)

1. One of the seven drug categories, often called "phencyclidine".
2. A specific drug belonging to the phencyclidine 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.

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 psychotogenetic 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.

REBOUND DILATION

A phenomenon that reportedly is sometimes observed when direct light is shined into the eye. The pupil may be seen to pulsate in size, growing steadily larger on the expansion fluctuations.

RESTING NYSTAGMUS

A special case of horizontal gaze Nystagmus, in which the eyeball can be observed jerking side-to-side while the eye is looking straight ahead.

RESUME

A written summary of a person's education, training, experience, noteworthy achievements and other relevant information about a particular topic. (Pronounced 'rez-ew-may".)

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 unpollenated 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 NYSTAGMUS

An up-and-down jerking of the eyeball that occurs as the eyes gaze upward in the vertical plane.

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. Withdrawal from heroin is reported to be an especially unpleasant experience.

Fifty Minutes

SESSION II

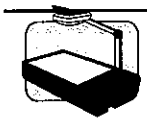
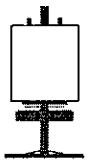
DRUGS IN SOCIETY AND IN VEHICLE OPERATION

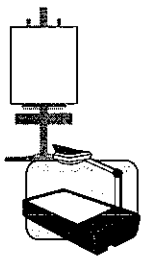
SESSION II DRUGS IN SOCIETY AND IN VEHICLE OPERATION

Upon successfully completing this session, the participant will be able to:

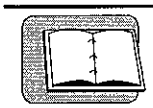
- Define the term "drug" in the context of this course.
- Name the seven major categories of drugs that are relevant to the Drug Evaluation and Classification Process.
- State in approximate, quantitative terms the incidence of drug use among various segments of the American public.
- State in approximate, quantitative terms the incidence of drug involvement in motor vehicle crashes and other driving incidents.

Content Segments		Learning Activities	
A.	Definition and Categories of Drugs	o	Instructor Led Presentations
B.	Drugs and Driving	o	Reading Assignments

Aides	Lesson Plan	Instructor Notes
 **II-0** (Session Objectives)	DRUGS IN SOCIETY AND IN VEHICLE OPERATION	Total Lesson Time: Approximately 50 Minutes Briefly review the objectives, content and activities of this session.
		Session title on wallchart.
 **35 Minutes**	A. Definition and Categories of 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.
	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?	Pose this question to the students. Solicit several responses.
 **II-1** (Definition of "Drugs")	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, Section 312. Point out that this definition excludes many substances that physicians, chemists, etc. might consider to be "drugs", e.g., antibiotics, novocain, vitamins, etc. It also includes some substances that aren't normally thought of as "drugs", such as model airplane glue, insecticides, etc.

Aides	Lesson Plan	Instructor Notes
	3. Within this simple, law enforcement oriented definition, there are seven categories of drugs. a. Each category consists of substances that impair a person's ability to drive. 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. c. Because the categories produce different types of impairment, they generate different signs and symptoms. 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 suspect.	<u>Ask</u> students: "What are the seven categories of drugs?" <u>Write</u> the names of the categories on the chalkboard or flip-chart as they are mentioned by the students.
 II-2	4. Central Nervous System Depressants. a. The category of CNS Depressants includes some of the most commonly abused drugs.	<u>Point out</u> that tens of millions of prescriptions for such drugs are written in this country each year.

Aides	Lesson Plan	Instructor Notes
	o Alcohol, the most familiar drug of all is abused by an estimated 40-50 million Americans.	
	o In 1998, more than 75 million prescriptions were written for Valium and similar tranquilizers and sedatives.	Some examples of prescription drugs are Xanax, Prozac, and muscle relaxants.
	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.	i.e., depress the brain's ability to sense pain.
	o in very high doses, induce coma and death.	
 II-3	5. Central Nervous System Stimulants	
	a. CNS Stimulants constitute another widely abused category of drugs.	

Aides	Lesson Plan	Instructor Notes
	o There appear to be more than 20 million Americans who have used Cocaine. o Cocaine is one of the most frequently reported drugs in overdose cases treated at hospital emergency rooms. o Several million Americans appear to use Amphetamines. o The crystalline, smokeable form of Methamphetamine, called "Ice", is widely abused. b. Stimulants speed up the operation of the central nervous system, and of the various bodily functions controlled by the Central Nervous System. o cause the user to become hyperactive, extremely talkative. o speech may become rapid and repetitive. o heart rate increases. o blood pressure increases. o body temperature rises, user may become excessively sweaty.	**Source**: National Institute on Drug Abuse (1988). **NOTE**: Estimates of drug use vary widely, especially for illicit drugs such as Cocaine, Methamphetamine, etc. In February 1989, the **Washington Post** reported an alarming increase, nationally, in use of Methamphetamine.

Aides	Lesson Plan	Instructor Notes
	o induce emotional excitement, restlessness, irritability.	
	o can induce cardiac arrhythmia (abnormal beating of the heart), cardiac seizures and death.	Remind students of well-known athletes and others who have died because of Cocaine abuse.
 II-4	6. Hallucinogens	
	a. Hallucinogens are also widely abused.	Point out that LSD and Peyote are only two examples of Hallucinogens. There are many other Hallucinogens.
	b. In recent years, significant increases in the abuse of both LSD and "Ecstasy" (MDMA) have been reported.	In many communities, LSD has become the drug of choice among high school students.
	c. Hallucinogens create hallucinations, i.e., perceptions that differ from reality.	
	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.	
	e. Hallucinogens cause the nervous system to send strange or false signals to the brain.	Clarification: Hallucinogens confuse the Central Nervous System (as well as speeding it up, like Stimulants).
	o Produce sights, sounds, odors, feelings and tastes that aren't real.	

Aides	Lesson Plan	Instructor Notes
	o Induce a temporary condition very much like psychosis or insanity.	
	o Can create a "mixing" of sensory modalities, so that the user "hears colors", "sees music".	Point out that this mixing of the senses is called Synesthesia. Point out that, with all of these false, and distorted perceptions, a person under the influence of hallucinogens would be a very unsafe driver.
 II-5	7. Phencyclidine (PCP)	
	a. PCP is considered by the medical community to be a Hallucinogen. However, because of the symptomology it presents, it is in a separate category.	Point out that people under the influence of PCP may exhibit a combination of the signs associated with Hallucinogens, Stimulants and Depressants. Phencyclidine is a short form of the chemical name Phenyl Cyclohexyl Piperidine, from which we get the abbreviation "PCP".
	b. PCP is a synthetic drug, i.e., it does not occur naturally but must be produced in a laboratory-like setting.	Point out that PCP has many analogs, or "chemical cousins" that are very similar to PCP in chemical structure, and that produce essentially the same effects.
	c. PCP has some effects that resemble the effects of other categories.	The category "Phencyclidine" consists of PCP and its various analogs.
	d. PCP is similar to CNS Depressants in that it depresses brain wave activity.	

Aides	Lesson Plan	Instructor Notes

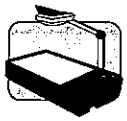
- o slows down thought
- o slows reaction time
- o slows verbal responses

e. But PCP is similar to CNS Stimulants in that it activates the parts of the brain that control emotions, the heart and the other autonomic systems.

- o heart rate increases
- o blood pressure increases
- o adrenalin production increases
- o body temperature rises
- o muscles become rigid

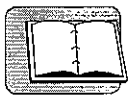
f. And PCP is similar to Hallucinogens in that it distorts or "scrambles" signals received by the brain.

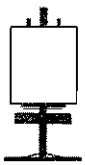
- o sight, hearing, taste, smell and touch may all be distorted
- o user's perception of time and space may be distorted
- o user may become paranoid, feel isolated and depressed
- o user may develop a strong fear of and preoccupation with death

Aides	Lesson Plan	Instructor Notes
	o user may become unpredictably violent	
	g. PCP is also a very powerful pain killer, or anesthetic.	Point out that PCP is known as a "dissociative anesthetic"; it "separates" the user from any sensation of pain without making him or her unconscious.
 II-6	8. Narcotic Analgesics	
	a. There are two subcategories of Narcotic Analgesics.	
	o Opiates are derivatives of Opium.	Point out that Morphine and Codeine are examples of Opiates.
	o Synthetics are produced chemically in the laboratory. The synthetics are not derived in any way from Opium, but produce similar effects.	Point out that Methadone and Numorphan are examples of Synthetic Narcotics.
	b. The word "Analgesic" means pain killer. All of the drugs in this category reduce the person's reaction to pain.	
	c. Heroin is one of the most commonly abused of the Narcotic Analgesics. Its use is on the rise. There are an estimated one-half million Heroin addicts in America.	
	d. Heroin is highly addictive.	

Aides	Lesson Plan	Instructor Notes
	o many addicts support their habit by stealing property and converting it to cash.	
	o America's narcotic addicts annually steal property estimated to have a value of $4 billion.	Note: That is $8,000 worth of stolen property annually per Heroin addict.
	e. In addition to reducing pain, Narcotic Analgesics produce euphoria, drowsiness, apathy, lessened physical activity and sometimes impaired vision.	
	f. Persons under the influence of Narcotic Analgesics often pass into a semi-conscious type of sleep or near-sleep.	Point out that this condition is often called being "on the nod".
	o they often are sufficiently alert to respond to questions effectively.	
	g. Higher doses of Narcotic Analgesics can induce coma, respiratory failure and death.	
 II-7	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	

Aides	Lesson Plan	Instructor Notes
	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.	
 II-8	10. Cannabis	
	a. The category "Cannabis" includes the various forms and products of the <u>Cannabis Sativa</u> plant and other species of Cannabis plants.	Write "Cannabis Sativa" on the chalkboard or flip chart.
	b. The primary active ingredient in Cannabis products is the substance known as "Delta-9 Tetra-hydrocannabinol", or "THC".	Write "Δ-9 THC" on the chalkboard or flip-chart.

Aides	Lesson Plan	Instructor Notes
	c. Apart from alcohol, Marijuana is the most commonly abused drug in this country.	
	d. In a household survey in 1996, almost 27% of Americans age 18-25 reported using Marijuana in the past year, nearly half (48%) indicated they had used Marijuana during their lifetimes.	Source: White House Office of National Drug Control Policy; 1996
	e. Cannabis appears to interfere with the attention process. Drivers under the influence of Marijuana often do not pay attention to their driving.	Point out that divided attention field sobriety tests usually disclose some of the best evidence of Cannabis impairment.
	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.	
 **II-9** (Drug Combina-tions)	11. Drug Combinations	
	a. Many drug users appear to be "chemical gluttons". They often ingest more than one drug at a time.	
	b. The term for this is "polydrug use"	Note: "poly" is the Greek prefix for "many".
	c. Some very common examples of polydrug use include:	Write "polydrug use" on the chalkboard or flip-chart.

Aides	Lesson Plan	Instructor Notes
	o Alcohol with virtually any other drug.	
	o Marijuana and PCP	Point out that a common way to ingest PCP is to sprinkle it on a Marijuana "joint" and smoke it.
	o Cocaine and Heroin	Sometimes called a "speedball".
	o Heroin and Amphetamine	Sometimes called a," poor man's speedball".
	o Heroin and PCP	Sometimes called a "fireball".
	o "Crack" Cocaine and PCP	This is sometimes called a "space base".
	o "Crack" Cocaine and Marijuana	Sometimes called a "primo".
	o "Crack" and Methamphetamine	Sometimes called "croak".
	d. Sometimes, people take two different drugs (such as Heroin and Cocaine) that produce some opposite effects.	Example: o Heroin tends to lower blood pressure. o Cocaine tends to elevate blood pressure
	e. Different drug combinations may produce unique, interactive effects.	Write on chalkboard or flipchart: "Polydrug use unique, interactive effects."
	f. When a person has ingested multiple drugs, that person will experience multiple drug effects.	Note, however, that under proper medical supervision, specific drugs often are used to reverse overdose conditions.

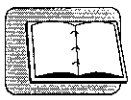
Aides	Lesson Plan	Instructor Notes

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.

15 Minutes

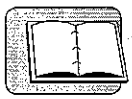
B. Drugs and Driving

1. All available information shows that drug use and abuse are widespread among large segments of the American public.



a. Fact: 14% of 600 drivers killed in single vehicle crashes in 78-81 in North Carolina had drugs other than alcohol in them at the time of the crash.

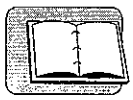
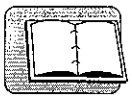
Source: North Carolina, 1981

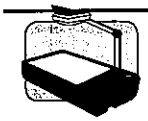
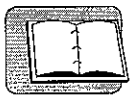
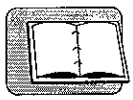


b. Fact: 1997 Monitoring the Future Study: Drug use among high school seniors:

Source: National Institute on Drug Abuse; 1997.

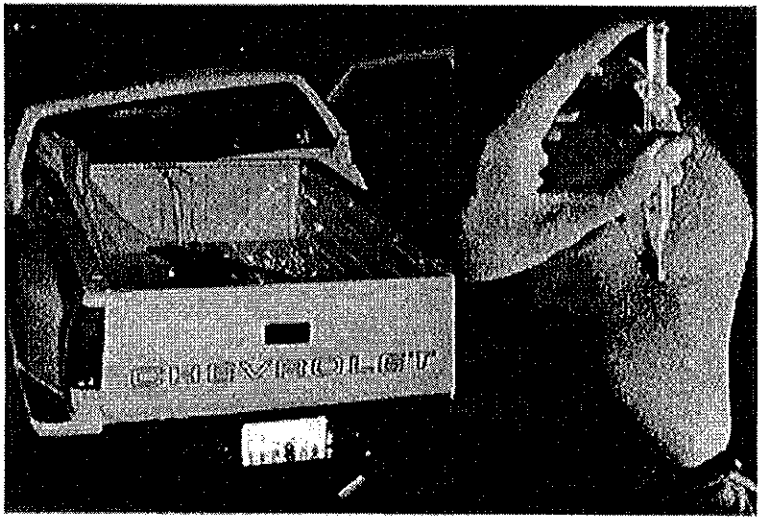
Drug	Ever used	Past year	Past month
Marijuana	49.6%	38.5%	23.7%
Cocaine	8.7	5.5	2.3
Crack	3.9	2.4	0.9
Stimulants	16.5	10.2	4.8
LSD	13.6	8.4	3.1
PCP	3.9	2.3	0.7
Heroin	2.1	1.2	0.5

Aides	Lesson Plan	Instructor Notes
	c. Fact: More than 75 million prescriptions for Valium, Librium and similar tranquilizers are written in America annually.	Source: **Washington Post**, February 17, 1987.
	d. Fact: An estimated 1.6 million Americans age 25 and under reported using cocaine in the past year. An estimated 9.4 million Americans in the same age group reported using Marijuana in the past year.	Source: Substance Abuse and Mental Health Services Administration; 1996
	e. Fact: Nearly than half (49%)of inmates surveyed in state prisons reported being under the influence of drugs or alcohol while committing the offense they were incarcerated for. 17% reported committing the offense for money to buy drugs.	Source: Bureau of Justice Statistics; 1991
	2. Evidence of drug use frequently shows up in people killed or injured in motor vehicle crashes.	
	a. Fact: University of Tennessee (1988) found 40% of crash injured drivers had drugs other than alcohol in them.	
	b. Fact: The Maryland Shock Trauma Center (1986) found nearly one-third of crash injured drivers had recently used Marijuana.	

Aides	Lesson Plan	Instructor Notes
 II-10  	c. Fact: A study of young male drivers fatally injured in California crashes found that 51% had used drugs other than alcohol.	Source: Compton, R. and Anderson, T., **The Incidence of Driving Under the Influence of Drugs: 1985.** National Highway Traffic Safety Administration, 1985.
	d. Fact: A study of nearly 500 crash-injured drivers in Rochester, New York, found that 22% had used other drugs.	Source: same as above.
	3. The facts are unmistakable: a. Drug use is common among many Americans. b. So is drug impaired driving.	INSTRUCTOR PLEASE NOTE: You should consult the "DRE" newsletter and other sources for updated statistics on drugs and driving. Solicit students' comments and questions about drugs in society and vehicle operation

Session II

Drugs in Society and in Vehicle Operation



Drugs in Society and in Vehicle Operation

960000

Upon successfully completing this session, the participant 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 process

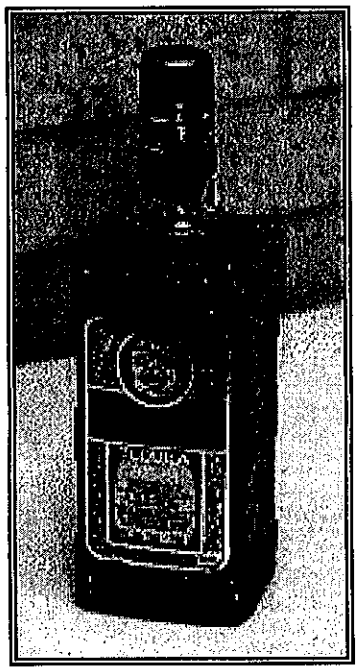
Drugs in Society and in Vehicle Operation (continued)

- 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

Working Definition of "Drug":

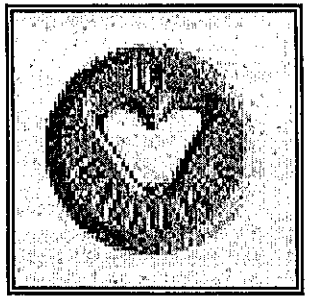
Any substance which, when taken into the human body, can impair the ability of the person to operate a vehicle safely

Central Nervous System Depressants



Examples:

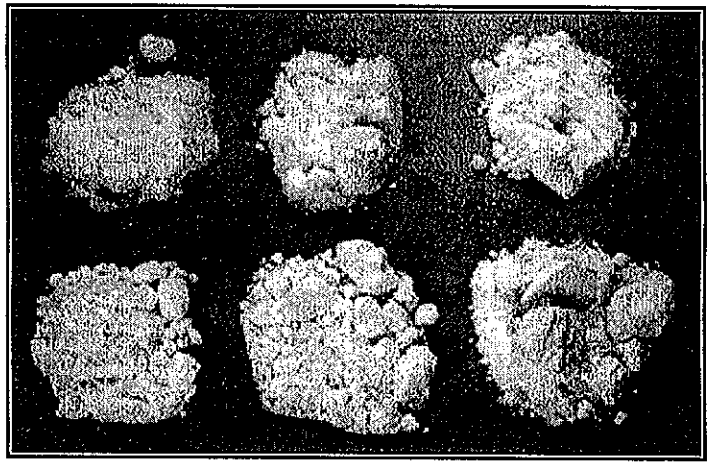
- Alcohol
- Barbiturates
- Tranquilizers
- Anti-Anxiety



Central Nervous System Stimulants

Examples:

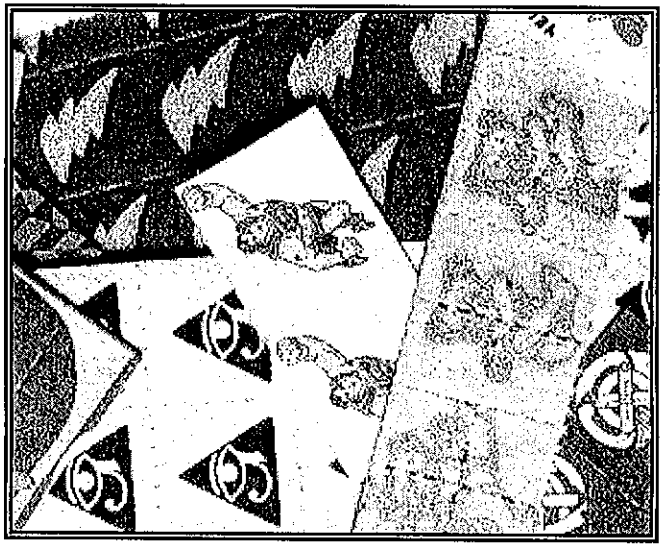
- Cocaine
- Amphetamine
- Methamphetamine
- Ritalin

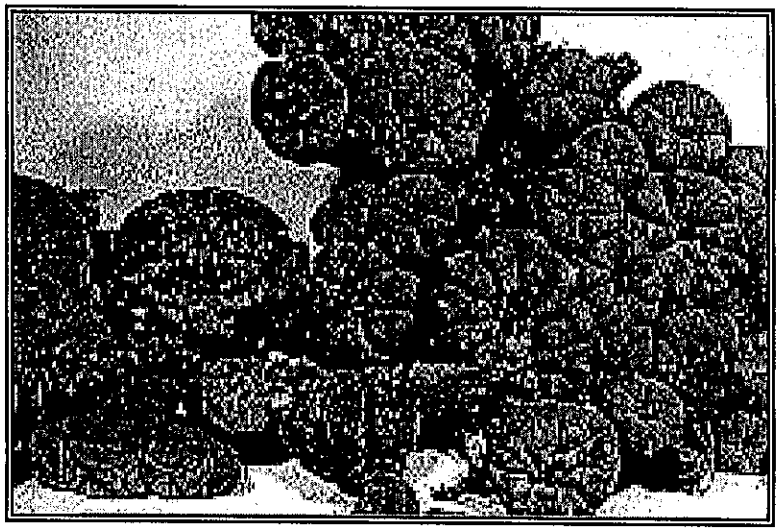


Hallucinogens

Examples:

- LSD
- Ecstasy
- Peyote
- Psilocybin

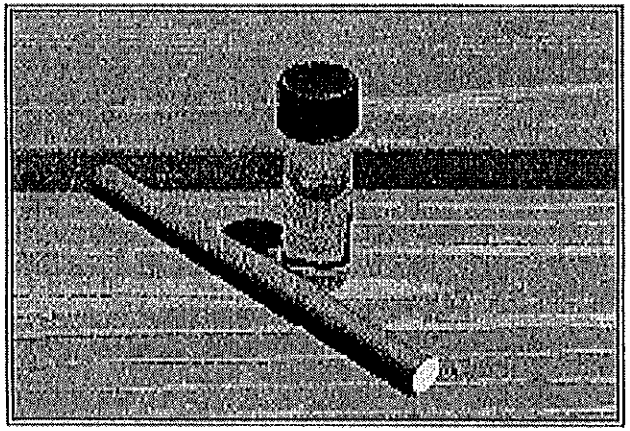




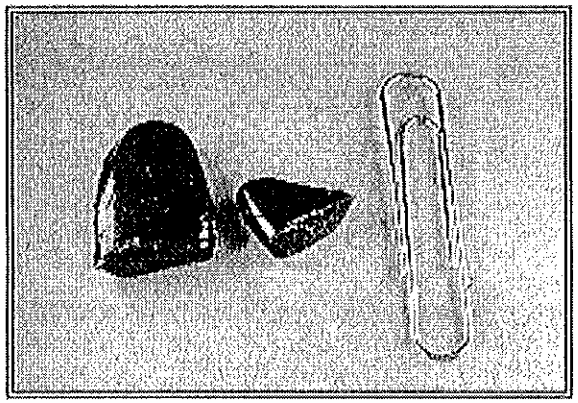
Phencyclidine

Examples:

- PCP (Phenyl Cyclohexyl Piperidine)
- Ketamine

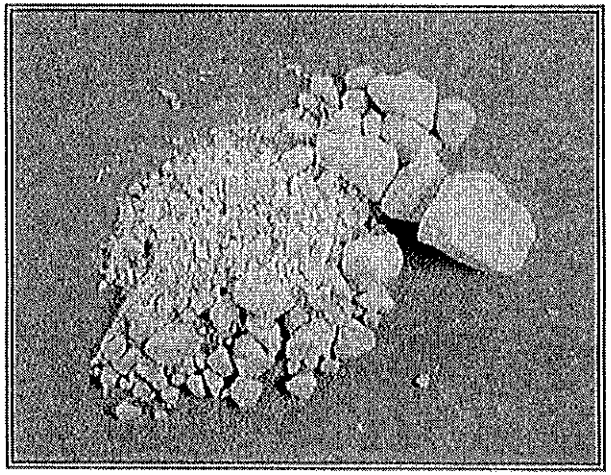


Narcotic Analgesics



Examples:

- Morphine
  - Heroin
  - Dilaudid
- Codeine
  - Percodan
  - Hycodan
- Demerol
- Methadone



Inhalants

Examples:

- Volatile Solvents

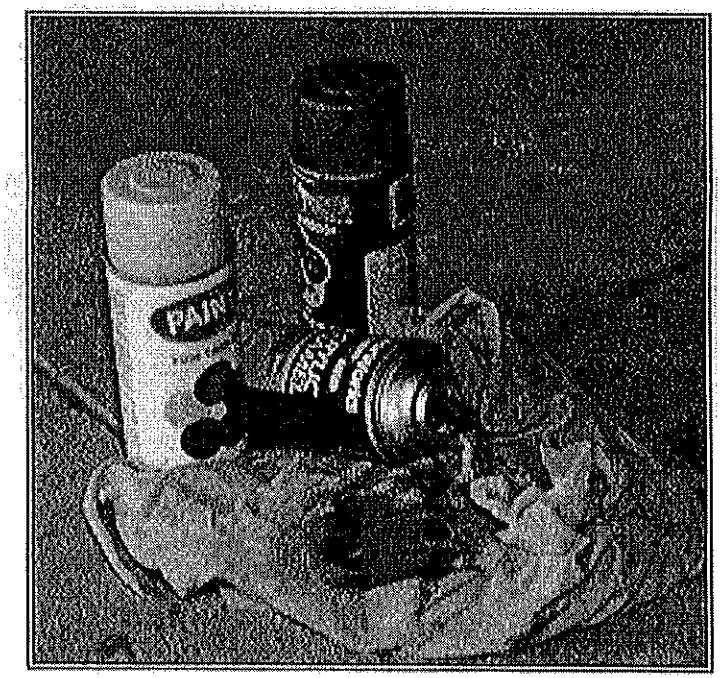
  (Glue, Gasoline, Paint, etc.)

- Aerosols

  (Hairspray, Insecticides, etc.)

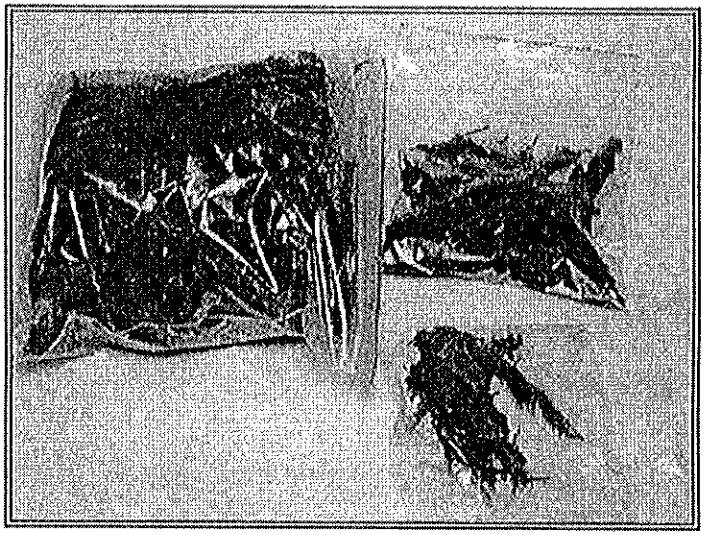
- Anesthetic Gases

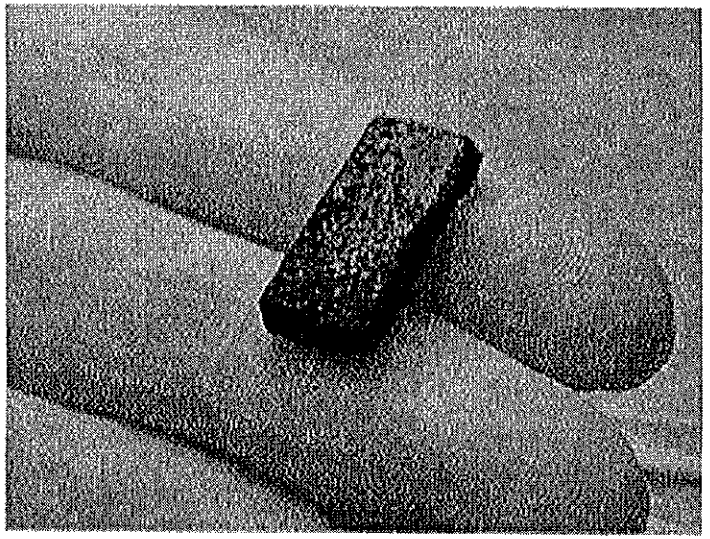
  (Nitrous Oxide, Amyl Nitrite, etc.)



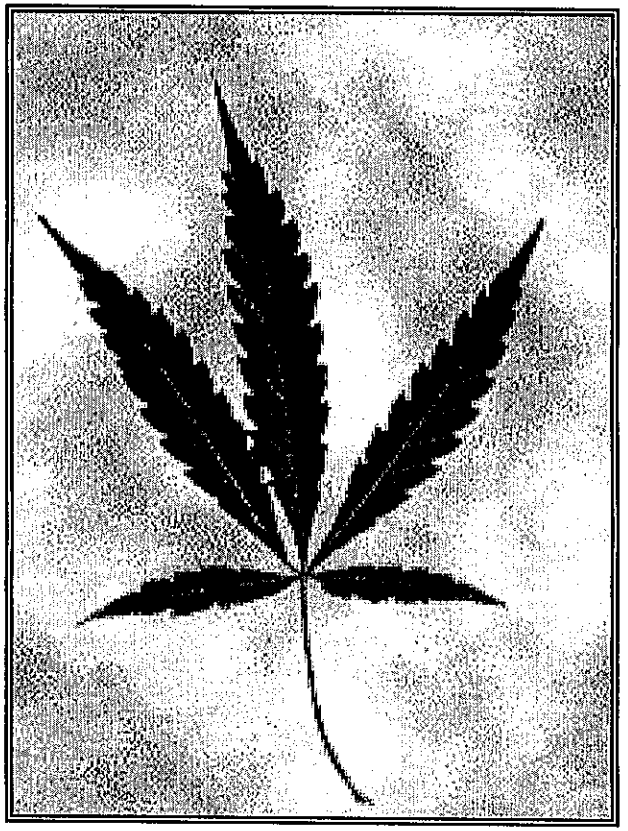
Cannabis

- Active ingredient:
  - Tetrahydrocannabinol (THC)
- Examples:
  - Marijuana
  - Hashish
  - Marinol

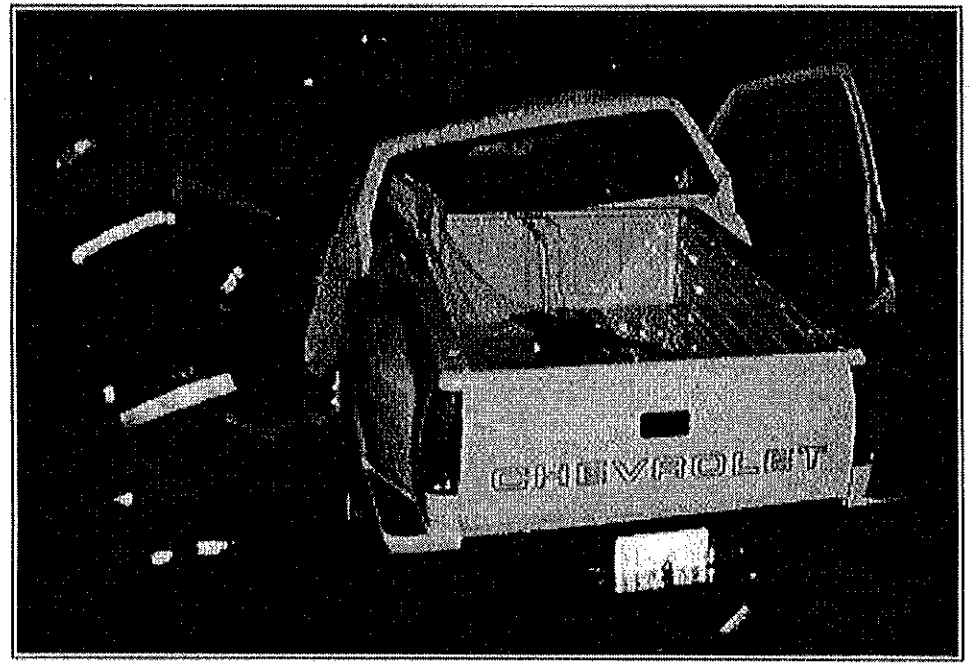




Drug Combinations



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



Fifty Minutes

SESSION III

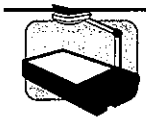
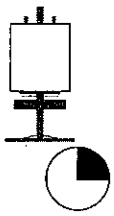
DEVELOPMENT AND EFFECTIVENESS OF THE DRUG EVALUATION AND CLASSIFICATION PROGRAM

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

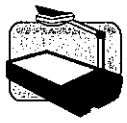
Upon successfully completing this session, the participant will be able to:

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

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	

Aides	Lesson Plan	Instructor Notes
 **III-0** (Session Objectives)	DEVELOPMENT AND EFFECTIVENESS OF THE DRUG EVALUATION AND CLASSIFICATION PROGRAM	Total lesson time: Approximately 50 Minutes Briefly review the content, objectives and activities of this session. Session title on wall chart.
 **15 Minutes**	A. Origin and Evolution of the Drug Evaluation and Classification (DEC) Program	
	1. The Drug Evaluation and Classification Program was developed by personnel of the Los Angeles Police Department.	Write: "LAPD" on chalkboard or flip chart.
	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.	
	3. Individuals principally responsible for initiation and development of the program.	
	a. Dick Studdard (A Traffic Officer)	Sergeant Studdard retired from the LAPD in June, 1990.
	o encountered many impaired drivers whose BACs were zero or very low.	
	o occasionally succeeded in having physicians examine some of these low BAC subjects, resulting in diagnosis of drug influence.	Note: examining physicians subsequently would be subpoenaed to testify in contested cases.

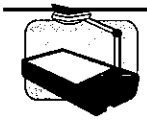
Aides	Lesson Plan	Instructor Notes
	o for various reasons, physicians were often reluctant or unwilling to conduct these examinations and offer opinions.	Some reasons why doctors may be reluctant: (1) They typically receive little training in the recognition of specific signs of drug impairment, particularly at street level doses. (2) They may not see the suspect until hours after the drugs were used, by which time the signs and symptoms often have changed.
	o as a result, some drivers whom Studdard and other officers were certain were impaired were not prosecuted or convicted for DWI.	
	o Studdard concluded that it was essential to develop diagnostic procedures that officers could use when confronted with persons suspected of drug impairment.	
	b. Len Leeds (A Narcotics Officer)	Deceased in 1995.
	o was approached by Studdard and asked to collaborate in the development of a program.	

Aides	Lesson Plan	Instructor Notes
	o initiated some independent research by consulting with physicians, enrolling in relevant classes, studying text books, technical articles, etc. o secured management level support within the department to continue research and program development. c. As time went on, many other key persons both within and outside LAPD contributed to the development and refinement of the program. 4. Around 1979, the DRE program was officially recognized by LAPD. 5. The DRE program evolved into what is essentially a three-step process.	
 **III-1** ("Three-Step Process")	a. First, establish that the suspect is impaired and verify that his or her alcohol level is not consistent with the degree of impairment that is evident. b. Second, use some simple diagnostic procedures to determine whether the impairment may stem from illness or injury, requiring prompt medical attention.	Clarification: the first portion of the drug evaluation examination is devoted principally to standardized field sobriety testing of the suspect, and to the administration of a breath test. 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.

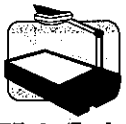
Aides	Lesson Plan	Instructor Notes
	c. Third, use diagnostic procedures to determine what category (or categories) of drugs is the likely cause of the impairment.	
	6. Key point: the entire examination is standardized.	
	a. Administered exactly the same was to all suspects.	
	b. Administered exactly the same way by all officers.	
	7. The need for diagnostic procedures.	Pose this question: "Why is it necessary for an officer to use diagnostic procedures to determine the category of drugs causing the impairment?" Follow-up question: "If we see that a suspect 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?" Solicit responses from students.
	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 request for a chemical test of the suspect.	Some courts or motor vehicle hearings officers may find that a low BAC result, by itself, does not provide adequate basis for requesting the suspect to submit to a second chemical test.

Aides	Lesson Plan	Instructor Notes
	b. Another reason is that the suspect 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. c. A third reason is that chemical tests usually disclose only that the suspect has used a particular drug recently. The chemical test usually does not indicate whether the drug is psychoactive at the present time. Thus, the DRE procedures are needed to establish that the suspect not only has used the drug, but also that he or she is under the influence at this time. 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.	

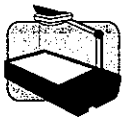
Aides	Lesson Plan	Instructor Notes
	e. It is always possible that a person suspected of drug impairment is actually suffering from some medical problem. If a sample is collected, and the suspect are not examined by someone who is qualified, evidence of medical problems may not come to light until it is too late.	Solicit students' questions and comments concerning the origin, evolution and need for the Drug Evaluation and Classification Program.
20 Minutes	B. Evidence of Effectiveness	
	1. LAPD began to work with the National Highway Traffic Safety Administration (NHTSA) on issues relating to this program in the early 1970's.	
	a. The first step was to develop and validate a battery of field sobriety tests for investigating alcohol impaired driving.	
	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.	
	c. By the early 1980's, NHTSA completed its validation of the standardized tests for alcohol enforcement.	
	d. At that time, NHTSA began to assist LAPD in validating the drug enforcement program.	

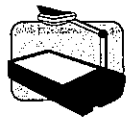
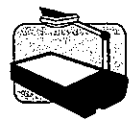
Aides	Lesson Plan	Instructor Notes
 **III-2** ("Two Stages of Validation")	2. NHTSA assisted LAPD in a two-phased validation study. a. Laboratory Validation, using volunteers who ingested selected drugs. b. Field Validation, using persons actually arrested in Los Angeles on suspicion of drug influence. 3. The Laboratory Validation took place at Johns Hopkins University in Maryland. a. The drug examiners were senior DREs from LAPD. b. The laboratory experiments were planned and conducted by researchers from Johns Hopkins. c. Volunteers each took a "pill" and smoked a "cigarette". d. The "pill" contained either no drug (placebo) or one of the following drugs: o Secobarbital (CNS Depressant) o Valium (i.e. Diazepam - CNS Depressant) o Desoxyn (i.e. Methamphetamine Sulfate - CNS Stimulant)	The LAPD participants: Dick Studdard Jerry Powell Pat Russell Doug Laird

Aides	Lesson Plan	Instructor Notes
	e. The "cigarette" contained either Marijuana or no drug (placebo).	
	f. Neither the volunteers nor the LAPD officers knew what the volunteers had taken.	Note: 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.
	g. Two different dose levels of Marijuana, Diazepam and Methamphetamine Sulfate were used.	Clarification: 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". **Instructor: The following is given for your information.** Normal daily doses for therapeutic purposes: • Secobarbital: approx 100mgs • Diazepam: 4-40mgs • Desoxyn (methamphetamine sulfate): 15mgs Doses administered for this study: • Secobarbital: 300 mgs • Diazepam: weak - 15mgs; strong - 30mgs • Desoxyn: weak - 15mgs strong - 30mgs

Aides	Lesson Plan	Instructor Notes
 **III-3** (Lab Test 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 high doses of Marijuana, Diazepam or Methamphetamine Sulfate. o they correctly identified the category of drug for 91.7% of those high dose subjects. c. The DREs were less successful in identifying the low dose subjects. o only 17.5% of the subjects who received the low dose of Meth-amphetamine Sulfate were classified as "impaired".	• Marijuana: weak - 12 puffs of 1.3% THC cigarettes strong - 12 puffs of 2.8% THC cigarettes

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

Aides	Lesson Plan	Instructor Notes
		But the researchers excluded all cases where the suspects 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 suspects' injuries could have confounded the drug examination.
	c. Twenty-eight different DREs from LAPD participated in the examinations of these 173 suspects.	
 **III-4** (The Los Angeles Field Validation Study)	6. Results of the Field Study.	
	a. Based on the independent blood tests, only one of the 173 suspects was found to have no alcohol or other drugs.	
	b. Another 10 suspects were found to have only alcohol in them.	POINT OUT that it is possible that these 11 so-called "drug free" suspects may have used drugs that the independent laboratory could not identify, for various reasons. 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.
	c. 37 (21%) of the suspects were found to have only one drug other than alcohol.	
	d. 82 had two drugs other than alcohol (47%), and 43 (25%) had three or more drugs other than alcohol.	

Aides	Lesson Plan	Instructor Notes
	e. This means that 125 of the 173 suspects had ingested two or more drugs other than alcohol: **That is more than 70% of the suspects.**	Emphasize: Polydrug use is very common. Write on chalkboard "70% two or more drugs other than alcohol".
	f. PCP was the drug most often found among these 173 suspects: **more than half of them (56%) had used PCP.**	
 **III-5** (In the Los ...)	7. The Key Finding of this study was the following: **For more than nine out of ten of the suspects (92.5%), the blood test confirmed the presence of at least one drug category "predicted" by the DREs.**	
 **III-6** (Confirmation ...)	8. The confirmation rates for specific categories:	
	a. PCP: blood tests con-firmed DREs' predictions in 92% of the cases.	POINT OUT that in the other 8% it is possible that a PCP analog might have been used.
	b. Narcotic Analgesics: blood tests confirmed 85% of the DRTs' predictions.	
	c. Cannabis: blood tests confirmed 78% of DREs' predictions.	

Aides	Lesson Plan	Instructor Notes
	d. CNS Depressants: blood tests confirmed 50% of DREs' opinions.	POINT OUT that there are literally hundreds of different CNS Depressants, many of which may not have been identifiable by the independent laboratory.
	e. CNS Stimulants: blood tests confirmed 33% of DREs' opinions.	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.
	9. Numerous states have conducted comparisons of laboratory analysis and DRE opinions. The correlation rates exceeded 80% in those studies.	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
	10. The overall conclusion of the laboratory and field studies is that the DRE program is an effective tool for law enforcement.	Solicit students' questions about the laboratory and field studies.
	C. Case Law Review	
15 Minutes	1. Favorable Court Rulings on DRE Procedures	
	a. Courts in various states have ruled favorably on the DEC Program. Some judges have held that the drug influence examination procedures need to meet the Frye standard for admissibility of "new" scientific evidence, while others have ruled that Frye need not apply.	

Aides	Lesson Plan	Instructor Notes
	b. The Frye standard: "is the procedure or principle espoused accepted by the relevant scientific community?"	NOTE: Frye standard was set by the US Supreme Court in 1923. Print "Frye Standard" on the chalkboard or flip-chart. State of Arizona v. Dayton Johnson and Samuel Rodriquez, et al, NOS 90056865 and 90035883, (1990). State of Minnesota, City of Minneapolis v. Larry Michael Klawitter, 518 N.W.2d 577, (1993). State of Colorado v. Daniel Hernandez, 92M 181, (1992).
	c. An Arizona court (Tuscon Municipal Court) ruled that the Frye Standard was met. However, upon appeal, The Arizona State Supreme Court ruled that the Frye Standard did not apply to the DEC Program. d. A Minnesota Court (City of Minneapolis) ruled that outside of nystagmus, the DEC Program is not subject to the Frye Standard. e. A Colorado Court (Boulder County Court) ruled that the procedures used by DREs are not new or novel and the Frye Standard did not apply.	

Aides	Lesson Plan	Instructor Notes
	f. In many jurisdictions, it will not be necessary to have expert scientific testimony to secure admissibility of a DRE's examination of a suspect.	
	2. The DEC program is gaining acceptance in many courts.	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.
	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.	In fact, testimony based on DRE investigation have been accepted by courts for many years.
	b. Many more State Supreme Courts are expected to rule favorably on HGN in the near future.	Print "State vs. Blake" on the chalkboard 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

Aides	Lesson Plan	Instructor Notes
	4. Summary of HGN Case Law.	Solicit students' questions and comments about case law.
	a. The prevailing trend, in recent years, is for courts to admit HGN as evidence of impairment, provided the proper scientific foundation has been laid.	
	b. But courts consistently reject all attempts to introduce HGN as evidence of a quantitative BAC.	
	(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 field sobriety tests to show a "neurological dysfunction", one cause of which could be the ingestion of alcohol.	Write "No Chemical Test - HGN Admissible". Write on chalkboard or flip chart - "Cannot be used as evidence of specific BAC level".

Session III

Development and Effectiveness of the Drug Evaluation and Classification Program

Development and Effectiveness of the Drug Evaluation and Classification Program

Upon successfully completing this session, the participant 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

Development and Effectiveness of the Drug Evaluation and Classification Program (continued)

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

The Three-Step Process of Drug Evaluation

Step One

Establish that the suspect is impaired

1

Step Two

Rule out medical impairment

2

Step Three

Determine the category of drugs involved

3

Two Stages of Validation

1

Stage One: Laboratory Validation Study

Johns Hopkins University

2

Stage Two: Field Validation Study

Los Angeles

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

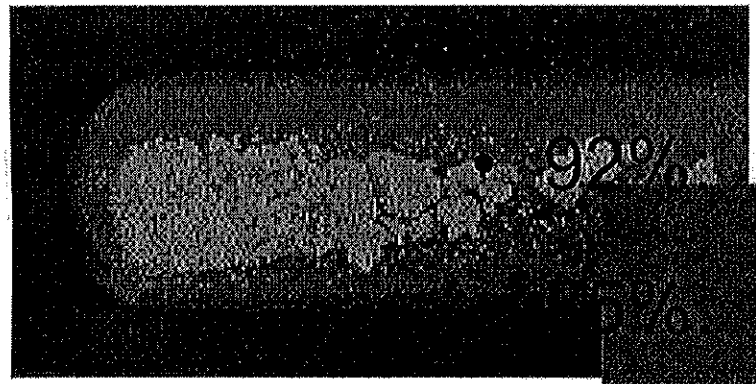
The Los Angeles Field Validation Study

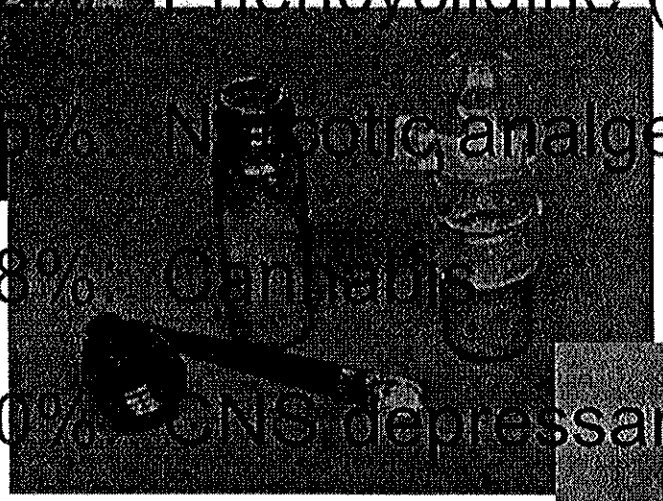
- 173 drivers accused of drug impairment
- Blood tests "confirmed":
  - One suspect had no drugs or alcohol
  - 10 had alcohol only
  - 37 (21%) had one other drug
  - 82 (47%) had two other drugs
  - 43 (25%) had three or more other drugs

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 suspects

Confirmation Rates for Specific Categories





- 92%: Phencyclidine (PCP)
- 78%: Narcotic analgesics
- 50%: CNS depressants
- 33%: CNS stimulants

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.

1991
The people of the State of New York v. Mary Quinn, Defendant, Docket No. 3130122, District Court, Suffolk County, October 24, 1991, 580 N.Y.S. 2d 818, Misc.2d 139 (N.Y.D.C. 1991).

"The Court found the People's evidence to be persuasive. The protocol is relatively simple. Jurors should have no trouble understanding the testimony of the DRE witness."

"Further, nothing contained in the protocol is a new invention. It is rather a compilation of tried and true procedures utilized by medical science and the law enforcement community in similar contexts for many years."

"The Court believes that the protocol's underlying principles are not so hypertechnical nor the skills required so specialized as to require professional medical training."

"The Court holds that the people have successfully established that both the HGN test and the DRE protocol meet the standards enunciated by "Frye" and "Middleton."

The prosecutors in this case were Joe Lombardo and Richard Frankel (Suffolk County). Expert witnesses for the prosecution included: Richard Studdard, retired LAPD Sergeant, Marcelline Burns, Ph.D., Sergeant Thomas Page, LAPD, Technical Sgt. Douglas Paquette, New York State Police, Zenon Zuk, M.D., David Peed, O.D., and Edward Briglia, Ph.D.

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: Sergeant Thomas Page, LAPD, Dr. Marcelline Burns (psychologist), Dr. David Peed (optometrist), Dr. Zenon Zuk (medical doctor), Eugene Adler (criminalist), Dr. S.J. Jejurikar (Minnesota Bureau of Criminal Apprehension), and Robert Meyer (toxicologist).

1994
11th 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.

ATTACHMENT B

STATE AND FEDERAL APPELLATE COURT CASES ON HORIZONTAL GAZE NYSTAGMUS

(November 12, 1996)

This paper summarizes the opinions of State and Federal courts that have considered the admissibility of the results of the Horizontal Gaze Nystagmus (HGN) test at a DWI trial. Most of the cases summarized are appellate court decisions. Ref: 60 ALR4th 1129.

Alabama. The court held that the admission of HGN test results at a DWI trial was "not harmless error" if a proper foundation for the test's results had not been made by the State. However, the court further stated that this holding did not necessarily mean that it would approve the admissibility of HGN results even if there was a "proper foundation". 574 So.2d at 859 The court felt that it had "not been presented with sufficient evidence concerning the test's reliability or acceptance by the scientific community to address that question." See *Ex parte State of Alabama,* 574 So.2d 859 (Ala. 1990)** and *Malone v. City of Silverhill,* 575 So.2d 106 (Ala. 1990)**. A law enforcement officer's testimony concerning his training in the use of the HGN test was not sufficient evidence of the scientific reliability of such test to warrant the admissibility of its results into evidence at a DWI trial. *Brunson v. State,* 580 So.2d 62 (Ala.Cr.App. 1991) (cert. den. by the Alabama Supreme Court), *Johnson v. State,* 591 So.2d 580 (Ala.Cr.App. 1991), and *Desselle v. State,* 596 So.2d 602 (Ala.Cr.App. 1991)

Alaska. The court of appeals held that the results of an HGN test could be used alone to determine if there is probable cause to make a DWI arrest where there was other evidence of intoxication (e.g., bloodshot eyes) even if the defendant passed four (4) other field sobriety tests. However, the court made it clear that HGN test results were not to be admitted into evidence at a DWI trial to "corroborate" a chemical test for intoxication. *State v. Grier,* 791 P.2d 627 (AlaskaApp. 1990)

Arizona. HGN test results may be admitted as evidence of driving under the influence. The court felt that HGN satisfied the *Frye** test. However, the court held that HGN test results cannot be used to prove a specific alcohol concentration. Statutory law requires that an alcohol concentration be determined by a chemical analysis of a defendant's blood, breath, or urine. The court also held that the HGN test results could be used to determine probable cause of DWI for arrest purposes. *State v. Superior Court,* 718 P.2d 171 (Ariz. 1986)**. In cases where there is no chemical test to determine an alcohol concentration for intoxication purposes, HGN test results can be admitted the same as other field sobriety tests to show a "neurological dysfunction, one cause of which could be alcohol ingestion." 799 P.2d 860 However, HGN test results cannot be used to establish an alcohol concentration.

The court, in a footnote, discusses the factual differences in this case and the *Ricke* case below decided by the court of appeals. *State ex. rel. Hamilton v. City Court of City of Mesa,* 799 P.2d 855 (Ariz. 1990)**. Also, if the defendant is not careful when cross examining the officer who administered the HGN test, they could "open the door" to the possible introduction of evidence by the State that relates HGN results to an alcohol concentration. *State v. Cook,* 834 P.2d 1267 (Ariz.App.Div. 2 1993) In an illegal per se case decided by the court of appeals, the court held that HGN test results could be admitted into evidence to corroborate chemical test evidence that a person was operating a motor vehicle with an alcohol concentration at or above 0.10. The State supreme court appears to have approved this holding in the *Mesa* case; see footnote 2 in 799 P.2d at 858. *State ex rel. McDougall v. Ricke,* 778 P.2d 1358 (Ariz. App. 1989) Note: An appellate court has held that it was error to admit the results of an HGN test in situations where the defendant was wearing hard contact lenses during the test. However, such error was considered harmless given other aspects of the case. *State v. Stevens,* 1994 Ariz.App. LEXIS 184, __P.2d__ (Ariz.App. 1994)

Arkansas. The results of an HGN test may be admitted for the purpose of proving intoxication. The court, however, has apparently indirectly held that HGN results cannot be used to establish a specific alcohol concentration. *Whitson v. State,* 863 S.W.2d 794 (Ark. 1993)** For a prior case by the Arkansas Court Appeals that reached similar conclusions, see *Middleton v. State,* 780 S.W.2d 581 (Ark. App. 1989)

California. The Court of Appeals ruled that the HGN test was generally accepted by the relevant scientific community and could be used by officers, in conjunction with other tests and observations, in reaching an opinion whether a defendant was intoxicated. The court ruled that the relevant scientific community is comprised of behavioral psychologists, highway safety experts, criminalists, and medical doctors concerned with the recognition of alcohol intoxication. *People v. Joehnk,* 35 Cal.App.4th 1488 (1995)

Georgia. The court considered the HGN a type of field sobriety test and allowed the results of such test to be introduced into evidence as would other such tests. *Manley v. State,* 424 S.E.2d 818 (Ga.App. 1992) In an earlier decision, the court felt that there may have been error in the admission of the results of an HGN tests at a DWI trial. The court reached this opinion based on the fact that the State introduced no proof that this test was accepted within the scientific community. However, the introduction of HGN results was considered "harmless error" do to the fact that there was other sufficient evidence upon which the court could have based a DWI conviction. *Foster v. State,* 420 S.E.2d 78 (Ga.App. 1992) For a similar case, see *Ross v. State,* 386 S.E.2d 721 (Ga. App. 1989).

Idaho. HGN test results are admissible into evidence at a DWI trial. However, such results cannot be used to determine an alcohol concentration. *State v. Garrett,* 811 P.2d 488 (Idaho 1991), and *State v. Gleason,* 844 P.2d 691 (Idaho 1992)

Illinois. The appellate courts in this State have reached contrary positions on whether HGN test results should be admitted into evidence at a DWI trial. Because the State did not provide a proper foundation to establish the scientific reliability of the HGN test, the results of such test could not be admitted into evidence. *People v. Vega,* 496 N.E.2d 501 (Ill. App. 4 Dist. 1986) (reaffirmed in *People v. Sides,* 556 N.E.2d 778 (Ill. App. 4 Dist. 1990)), and *People v. Smith,* 538 N.E.2d 1268 (Ill. App. 2 Dist. 1989). In another case the HGN test results could not be admitted at a DWI trial to establish an alcohol concentration. Statutory law provides that an alcohol concentration be determined by an analysis of bodily substances. *People v. Dakuras,* 527 N.E.2d 163 (Ill. App. 2 Dist. 1988). Note: In one case, HGN test results were admitted because the defendant did not object to such admissibility. *People v. Seymoure,* 511 N.E.2d 986 (Ill. App. 4 Dist. 1987). However, HGN tests can be used as a factor by law enforcement officers to establish probable cause to make a DWI arrest. *People v. Griffith,* 493 N.E.2d 413 (Ill. App. 5 Dist. 1986) and *People v. Furness,* 526 N.E.2d 947 (Ill. App. 5 Dist. 1988) Note: In *People v. Jebelian,* 561 N.E.2d 1079 (Ill.App. 3 Dist. 1990), the court raised the possibility that HGN test results were not evidence, but the court made no specific holding on this issue. Nevertheless, in another appellate court HGN test results were admitted into evidence at a DWI trial based on the reasoning that they represented observed "behavior" and, therefore, could be used without a scientific foundation to establish whether the defendant was under the influence of alcohol. However, such evidence could not be used to determine a specific alcohol concentra-tion. *People v. Buening,* 592 N.E.2d 1222 (Ill.App. 5 Dist. 1992) In another case, the decision of the *Buening* court was supported. However, the court also held that HGN test results "are not conclusive evidence of intoxication" but are only one of several factors which must be considered to determine if a person was under the influence of alcohol. *People v. Wiebler,* 640 N.E.2d 24 (Ill.App. 3 Dist. 1994)

Iowa. The results of an HGN test could be admitted into evidence at a DWI trial to prove the intoxication of a driver. Note: HGN test results, however, were not used to determine a specific alcohol concentration. The court considered the HGN test to be one of the standard field sobriety tests law enforcement officers administer to persons suspected of a DWI offense. The officer, in this case, was properly trained to administer the HGN test and other field sobriety. These tests that are especially designed to assist an officer's observations in determining if a person is intoxicated.

The court felt that the officer did not have to qualify as an expert witness because the observations of intoxication obtained from the HGN test results were objective in nature. Therefore, there was no need that an officer be specially qualified to be able to interpret such results. The Iowa court based its decision to a large degree on *State v. Negal,* 506 N.E.2d 285 (Ohio App. 1986). *State v. Murphy,* 451 N.W.2d 154 (Iowa 1990)**. Note: The *Murphy* case was indirectly affirmed in *State v. Edman,* 452 N.W.2d 169 (Iowa 1990)**.

Kansas. The court held that HGN test results could not be admitted into evidence at a DWI trial. The court felt that the HGN test was scientific in nature and that, as a result, it was not the same as other field sobriety tests. In order to be admissible, therefore, the HGN test will have to satisfy the *Frye** test. *State v. Witte,* 836 P.2d 1110 (Kan. 1992)**

Louisiana. The court held that the "HGN test meets the standards of admissibility in *Frye** and, a proper foundation, may be admitted as evidence of intoxication." 561 So.2d at 887 Note: The court did not directly address the issue of whether HGN test results could be admitted into evidence at a DWI trial to establish a specific BAC level. *State v. Armstrong,* 561 So.2d 883 (La.App. 2 Cir. 1990) (writ denied by the Louisiana Supreme Court, 568 So.2d 1077 (La. 1990)), and *State v. Breiting,* 623 So.2d 23, (La.App. 1 Cir. 1993)

Minnesota. Using the *Frye** standard, the results of an HGN test can be admitted into evidence at a trial of a person charged with driving while under the influence of drugs. The HGN test was part of the 12 step protocol used by law enforcement officers, who have been trained as Drug Recognition Experts, to determine if a person should be arrested for DWI drugs. *State v. Klawitter,* 518 N.W.2d 577 (Minn. 1994)**

Missouri. The results of an HGN test can be admitted into evidence as proof of intoxication. It is interesting to note that, even though the court held that the results of the test could not be admitted to establish a specific alcohol concentration, it, nevertheless, held that a law enforcement officer could testify as to their experience concerning how a person's performance on the HGN test compares with breathalyser test results that indicated an alcohol concentration of 0.10 or more. The court based its decision on the *Frye** rule. *State v. Hill,* 865 S.W.2d 702 (Mo.App. W.D. 1993).

Montana. HGN test results may be admitted into evidence at a DWI trial. The court did not follow the general acceptance rule for scientific evidence, the *Frye** test, in reaching the holding in this case. Using more "liberalized" rules of evidence, the court felt that all scientific evidence should be admitted unless it is "exaggerated popular opinion" and likely to be prejudicial. *State v. Clark,* 762 P.2d 853 (Mont. 1988)**.

Nebraska. It was error to admit the HGN test results into evidence at a DWI trial. The court felt that the State had not established the scientific reliability of the test via a proper foundation. Note: Nevertheless, the court held that such admission was not prejudicial to the defendant and upheld his DWI conviction. There was other evidence that indicated the defendant's guilt. *State v. Borchardt,* 395 N.W.2d 551 (Neb. 1986)**.

New York. In a DWI case related to driving while under the influence of drugs, the court held that HGN test results were admissible. The court felt that the HGN test met the *Frye** standard for admissibility. However, the case was overturned on legalistic issues, none of which were related to HGN. *People v. Quinn,* 580 N.Y.S.2d 818 (Dist.Ct. 1991)

North Dakota. The results of an HGN test can be admitted into evidence at a DWI trial provided it is a part of the standard field sobriety tests. *City of Fargo v. McLaughin,* 512 N.W.2d 700 (N.D. 1994)**

Ohio. The State's supreme court has held that the results of an HGN test could be used (1) to establish probable cause of a DWI arrest and (2) as evidence at a DWI trial to prove that a person was driving a motor vehicle while under the influence of alcohol. However, the court also held that the results of an HGN test could not be used to prove a specific alcohol concentration. *State v. Bresson,* 554 N.E.2d 1330 (Ohio 1990)**, *Columbus v. Anderson,* 600 N.E.2d 712 (OhioApp. 10 dist. 1991), and *State v. Scott,* 606 N.E.2d 1023 (OhioApp. 3 Dist. 1992). Note: In an earlier decision, the Ohio Court of Appeals held that the results of an HGN test could be admitted into evidence at a DWI trial. The court reasoned that the HGN test was just another "field sobriety test" and, as such, a police officer could testify as to their observations while conducting the test without the need for them to be qualified as an expert witness. *State v. Negal,* 506 N.E.2d 285 (Ohio App. 1986).

Oklahoma. The court felt that HGN test results could not be admitted into evidence because the HGN test had not met the *Frye** standard. *Yell v. State,* 856 P.2d 996 (Okl.Cr. 1993)**

Oregon. The Oregon Court of Appeals has held that the results of an HGN test to admitted into evidence. I.e., law enforcement officers may now testify as to the defendants' reactions to the test and what the test meant to the officers. *State v. O'Key,* 858 P.2d 904 (Or.App. 1993) This decision reversed a prior one by this court on the same subject. *State v. Reed,* 732 P.2d 66 (Or. App. 1987) Note: An HGN test is considered a type of field sobriety test. Such tests are considered searches under Oregon law. *State v. Nagel,* 880 P.2d 451 (Or. 1994)

Pennsylvania. HGN test results could not be admitted into evidence at a DWI trial. The court held that the State had failed to "establish an adequate foundation for the admission of the test results." *Com. v. Miller,* 532 A.2d 1186 (Pa.Super. 1987), *Com. v. Apollo,* 603 A.2d 1023 (Pa.Super. 1992), and *Com. v. Moore,* 635 A.2d 625 (Pa.Super. 1993)

South Carolina. The court felt that the HGN test was one of the field sobriety tests. The results of the HGN test could be admitted into evidence in conjunction with the evidence obtained from other field sobriety tests. *State v. Sullivan,* 426 S.E.2D 766 (S.C. 1993)**

Texas. HGN test results could be admitted into evidence at a DWI trial to prove intoxication. *Emerson v. State,* 880 S.W.2d 759 (Tex.Cr.App. 1994)**

Washington. In order to be admissible, HGN must be shown to meet generally accepted scientific principles. The court used the *Frye** standard. *State v. Cissne,* 865 P.2d 564 (Wa.App.Div. 3 1994)

West Virginia. The court felt that, if the HGN test is proven reliable, its results could be admitted into evidence to prove that a driver was under the influence. However, HGN test results could not be used as a measure of a person's alcohol concentration. Again, as in other States, HGN test results are not recognized in the statutes as a method for determining alcohol concentration. Note: In the specific case before the court, the State offered no evidence of the scientific reliability of the HGN test. *State v. Barker,* 366 S.E.2d 642 (W.Va. 1988)**.

Wisconsin. The court held that HGN test results could be admitted into evidence at a DWI trial. The Wisconsin court's reasoning was similar to that of the Ohio Court of Appeals in *State v. Negal,* 506 N.E.2d 285 (Ohio App. 1986). The court considered that HGN test results were "merely behavioral observations based upon the officer's training and experience. It required little more expertise than is acquired by anyone who observes unusual behavior in persons suspected of drinking intoxicants." The court disagreed with the defendant's argument that the HGN test involved scientific principles such that it was necessary for the witness to be a qualified professional. *Wisconsin v. Peters,* 419 N.W.2d 575 (unpublished limited precedent opinion) (Wis. App. Dist. 3 1987), & *State v. Keller,* 1995 Wisc. App. LEXIS 446 (Wis.App. 1990), HGN test results were used as evidence of probable cause of a drunk driving offense. However, in this published opinion, the scientific reliability of this test was not an issue before the court.

United States. HGN test results could be admitted into evidence at a DWI trial as part of the results of a series of tests performed on a driver to determine if they were under the influence of alcohol. There was no indication that the results of the HGN test were used to establish a specific alcohol concentration. Note: The driver, in this case, was charged with violating Federal regulations that prohibit a person from operating a motor vehicle on Federal park lands while under the influence of alcohol. *U.S. v. Van Griffin,* 874 F.2d 634 (9th Cir. 1989) Comment: Both the U.S. Supreme Court and the U.S. Court of Appeals for the Fourth circuit have mentioned in opinions that law enforcement officers have used the HGN test as a field sobriety test. These courts, however, made no determinations as to the reliability of the HGN test or to the admissibility of the test's results into evidence at a DWI trial. *Pennsylvania v. Muntiz,* 496 U.S. 582, 110 S.Ct. 638, 110 L.Ed.2d 528 (1990), and *U.S. v. Reid,* 929 F.2d 990 (4th Cir. 1991)

**Frye v. United States,* 293 F. 1013 (D.C. Ct. of App. 1923) In this case, the court held, that before a scientific principle could be admitted into evidence, it "must be sufficiently established to have gained general acceptance in the particular field in which it belongs." 293 F. at 1014 The U.S. Supreme Court has recently held that the *Frye* standard does not apply to the admission of scientific expert testimony in cases tried in Federal courts. Instead, the Court held that this standard has been superseded by Federal Rule of Evidence 702. *Daubert v. Merrell Dow Pharmaceuticals,* ____U.S.____, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993)
**Opinion of the State's highest court.

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 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. 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).

9. 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.).

10. 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).

11. 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).

12. 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).

13. 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).

14. 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).

15. 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).

16. 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).

17. 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).

18. 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).

19. 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).

20. 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).

21. 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).

22. Rashbass, The Relationship Between Saccadic and Smooth Tracking Eye Movements, 159 J. PHYSIOL. 326 (1961) (barbiturate drugs interfere with smooth tracking eye movement).

23. 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).

24. 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.).

25. 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).

26. 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).

27. 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).

28. 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).

29. 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

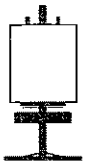
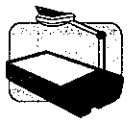
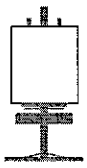
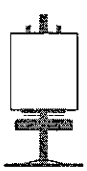
OVERVIEW OF DRUG RECOGNITION EXPERT PROCEDURES

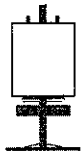
SESSION IV OVERVIEW OF DRUG RECOGNITION EXPERT PROCEDURES

Upon successfully completing this session, the participant will be able to:

- o Name the components of the drug evaluation and classification process.
- o State the purposes of each component.
- o Describe the activities performed during each component.
- o Correctly answer the "Topics for Study" questions at the end of this section.

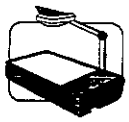
Content Segments		Learning Activities	
A.	Components of the Process	o	Instructor Led Presentations
B.	Interview of the Arresting Officer	o	Instructor Led Demonstrations
C.	The Preliminary Examination	o	Video Presentations
D.	Examinations of the Eyes	o	Reading Assignments
E.	Divided Attention Psychophysical 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 Tape Demonstration		

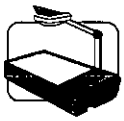
Aides	Lesson Plan	Instructor Notes
	OVERVIEW OF DRUG EVALUATION AND CLASSIFICATION PROCEDURES	Total Lesson Time: Approximately 150 Minutes Session title on wall chart.
 **IV-O** Objectives		
 **35 Minutes**	A. Components of the Process	
	1. The DRE procedure is a standardized and systematic method of examining a subject to determine: a. Whether subject is impaired. b. Whether the impairment is caused by drugs or a medical condition. c. And if drugs, the category (or categories) of drugs that is (or are) the likely cause of the subject's impairment.	
	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.	Write on chalkboard or flip-chart: "A SYSTEMATIC PROCESS"
	a. Some of these observable signs and symptoms relate to the subject's <u>appearance</u>.	<u>Write</u> "appearance" on chalkboard or flip chart.

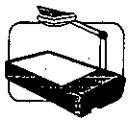
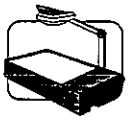
Aides	Lesson Plan	Instructor Notes
	b. Some of the signs and symptoms relate to the subject's behavior.	Write "behavior" on chalkboard or flip chart.
	c. Some relate to the subject's performance of carefully administered psychophysical tests.	Write "psychophysical testing" on chalkboard or flip chart. Ask students: "What does 'psychophysical' mean?" Point out that "psycho-physical" relates to the subject's mind (psyche) and body (physique).
	o Drugs impair the subject's ability to control his or her mind and body. o Psychophysical tests can disclose that the subject's ability to control mind and body is impaired. o The specific manner in which the subject performs the psycho-physical tests may help indicate the category or categories of drugs causing the impairment.	
	d. Some of the observable signs and symptoms relate to automatic responses of the subject's body to the specific drugs that are present.	Write "automatic responses of the body" on the chalkboard or flip chart.

Aides	Lesson Plan	Instructor Notes
	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.	
 **IV-1** ("Standardized and Systematic")	3. The process is <u>standardized</u> in that it is administered exactly the same way, to every subject, by every Drug Recognition Expert.	
	a. Standardization helps to ensure that no mistakes are made.	
	o No examinations are left out.	
	o No extraneous or unreliable "indicators" are included.	
		<u>Ask</u> students: "Why is it so important to perform the drug evaluation and classification examination in exactly the same way, every time?"
		Probe to draw out all major reasons for standardization.
	b. Standardization helps to promote professionalism among drug recognition experts.	
	c. Standardization helps to secure acceptance in court.	
 **IV-2** (Breath Alcohol Test)	4. The Drug Evaluation and Classification Process has <u>twelve</u> components.	

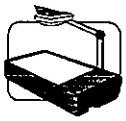
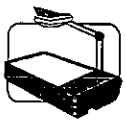
Aides	Lesson Plan	Instructor Notes
	a. The Breath Alcohol Test is needed to determine Blood Alcohol Concentration (BAC). o The purpose of the breath test is to determine whether the specific drug, alcohol, may be contributing to the impairment observable in the subject. o Obtaining an accurate measurement of BAC enables the drug recognition expert to assess 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.	Remind students that many suspects who are under the influence of drugs other than alcohol also have alcohol in their bodies.
 **IV-3** (Interview of ... Officer)	b. The Interview of the Arresting Officer. o In most cases, the suspects you will examine will not be people that you arrested. o The arresting officer may have seen or heard things that would be valuable indicators of the kinds of drugs the suspect has ingested.	

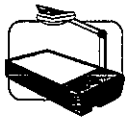
Aides	Lesson Plan	Instructor Notes
	o The arresting officer, in searching the suspect, may have uncovered drug related paraphernalia, or even drugs themselves. o The arresting officer also may be able to alert you to important information about the suspect's behavior that could be very valuable for your own safety.	
 **IV-4A&B** (Preliminary Examination)	c. The <u>Preliminary Examination</u>. o The preliminary examination is your first opportunity to observe the suspect closely and directly. o A major purpose of the preliminary examination is to determine if the suspect may be suffering from an injury or some other medical condition not necessarily related to drugs. o 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.	<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. <u>Emphasize</u> that the term "preliminary" does <u>not</u> imply "unimportant". Very valuable evidence often comes to light during the preliminary examination.

Aides	Lesson Plan	Instructor Notes
	o The preliminary examination consists of a series of questions dealing with possible injuries or medical problems; observations of the suspect's face, speech and breath; initial checks of the suspect's eyes; and, an initial examination of the suspect's pulse.	Emphasize 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 they should advise suspects of their Constitutional rights before asking these questions.
 **IV-5A&B** (Eye Examinations)	d. Examinations of the Eyes.	
	o Certain Drugs produce very easily observable effects on the eyes.	Ask students: "What do we look for, in a suspect's eyes, to determine if he or she may be under the influence of alcohol?"
		Probe, as necessary, to draw out the response "nystagmus".
	o One of the most dramatic of these effects is nystagmus, which means an involuntary jerking of the eyes.	
	o Persons under the influence of alcohol usually will exhibit horizontal gaze nystagmus, which is an involuntary jerking of the eyes occurring as the eyes gaze to the side.	
	o Alcohol is not the only drug that enhances Nystagmus.	

Aides	Lesson Plan	Instructor Notes
	o Horizontal gaze nystagmus is not the only observable effect on the eyes that will be produced by various drugs.	Point out that the examinations of the eyes will be covered in much greater depth subsequently.
 **IV-6A&B** (Divided Attention Tests)	e. Divided Attention Psychophysical tests.	
	o All drugs that impair driving ability will also impair the suspect's ability to perform certain carefully designed divided attention tests.	Ask students: "What does 'divided attention' mean?" Probe, as necessary, to draw out responses indicating the concept of "concentrating on more than one thing at a time".
	o These tests are familiar to you in the context of examining alcohol impaired suspects.	
	o The same tests are very valuable for disclosing evidence of impairment due to drugs other than alcohol.	Point out that students will have opportunities to practice administering these tests subsequently in the course.
 **IV-7A&B** (Vital Signs Examinations)	f. Examinations of Vital Signs.	
	o Many categories of drugs affect the operation of the heart, lungs and other major organs of the body.	
	o These effects show up during examination of the suspect's vital signs.	

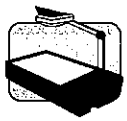
Aides	Lesson Plan	Instructor Notes
	o The vital signs that are reliable indicators of drug influence include blood pressure, pulse, and temperature.	Point out that examinations of vital signs will be covered in depth subsequently, and that students will have ample opportunity to practice measuring vital signs.
 **IV-8A&B** (Dark Room Examina-tions)	g. Dark Room Examinations	
	o Many categories of drugs affect how the pupils will appear, and how they respond to light.	
	o Certain kinds of drugs will cause the pupils to widen dramatically, or dilate.	
	o Some other drugs cause the pupils to narrow, or constrict.	
	o By systematically changing the amount of light entering the suspect's eyes, we can observe the pupils' appearance and reaction under controlled conditions.	
	o We carry out these examinations in a dark room, using a penlight to control the amount of illumination entering the suspect's eyes.	Exhibit a penlight.
	o We use an instrument called a pupillometer to estimate the size of the suspect's pupils.	Exhibit a pupillometer. Point out that the pupillometer has a series of black circles of various sizes.

Aides	Lesson Plan	Instructor Notes
	o Other examinations are also conducted in the darkroom, using the penlight: i.e., examination of the nasal area and mouth for signs of drug use and for concealed contraband.	By lining the circles up along side the suspect's pupil, the pupil's size can be determined Point out that students will have several opportunities to practice conducting dark room examinations subsequently in the course.
 **IV-9A&B** (Muscle Tone)	h. Examination for Muscle Tone. o Certain categories of drugs can cause the user's muscles to become markedly tense, and rigid. Others may cause flaccidity, or "rubbery-like" muscle tone. o Evidence of this muscle tone may come to light when the suspect attempts to perform the divided attention test. o Evidence of muscle tone can also be observed when taking the suspect's pulse, blood pressure or while examining for injection sites.	Point out that examination for muscle tone will be covered in greater depth subsequently in the course.
 **IV-10A&B** (Examination for Injection Sites)	i. Examination for Injection Sites.	

Aides	Lesson Plan	Instructor Notes
	o Certain drugs are commonly injected by their users, via hypodermic needles. o Heroin is probably most commonly associated with injection, but several other types of drugs also are injected by many users. o Uncovering injection sites on a suspect provides evidence of possible drug use.	Ask students: "What drug is most often associated with injection via hypodermic needle?"
 **IV-11A&B** (Statements and Other Observations)	j. Suspect's statements and other observations. o 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. o The DRE should also have at least an articulable suspicion as to the category or categories of drugs causing the impairment. o The DRE should proceed to interview the suspect to confirm their opinion concerning the drug category or categories involved.	<u>Emphasize</u> that any such interview can proceed only in conformance with formal admonition and strict observance of the suspect's Constitutional rights.

Aides	Lesson Plan	Instructor Notes
	o The DRE must carefully record the suspect's statements, and any other observations that may constitute relevant evidence of drug induced impairment.	Point out that the appropriate procedures for interviewing suspects vary with the probable category or categories of drugs involved.
 **IV-12** (Opinions of the Evaluator)	k. Opinions of Evaluator o Based on all of the evidence and observations gleaned from the preceding ten steps, the DRE must reach an informed conclusion as to: - whether the suspect is under the influence of a drug or drugs - if so, the probable category or categories of drugs causing the impairment o The DRE must record a narrative summary of the facts forming the basis for their conclusion.	
 **IV-13** (Toxicological Examination)	l. Toxicological Examination o The toxicological examination is a chemical test or tests designed to obtain scientific, admissible evidence to substantiate the DRE's conclusion.	

Aides	Lesson Plan	Instructor Notes
	o Departmental policy and procedures must be carefully and completely followed in requesting, obtaining and handling the toxicological sample.	Solicit students' comments and questions concerning this preview of the Drug Evaluation and Classification Procedures.
10 Minutes	B. Interview of the Arresting Officer	
	1. The purpose of the interview of the arresting officer is to obtain a summary of the suspect's actions, behaviors, etc. that led to the arrest and the suspicion that drugs other than alcohol may be involved.	Emphasize that DREs should form the habit of posing explicit questions to arresting officers. 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.
IV-14A ("Interview: Behavior")	2. Issues concerning the suspect's behavior. a. Was the suspect operating a vehicle? b. What actions, maneuvers, etc. were observed? c. Was there a collision? If yes, was the suspect injured? d. Was the suspect observed smoking, drinking or eating? e. Was the suspect apparently inhaling any substance? f. How did the suspect respond to the arresting officer's command to stop?	

Aides	Lesson Plan	Instructor Notes
	g. Did the suspect attempt to conceal or throw away any items or materials?	
	h. What has been the suspect's attitude and demeanor during contact with the arresting officer and have there been any changes?	Ask students to suggest any other questions that might be relevant concerning the arresting officer's observations of the suspect's behavior. Note: Remind the students that they are acting as investigators and advisors to the arresting officers.
 **IV-14B** ("Interview: Statements")	3. Issues concerning the suspect's statements.	
	a. Has the suspect complained of an illness or injury?	
	b. Has the suspect used any "street terms" or slang associated with drugs or drug paraphernalia?	
	c. How has the suspect responded to the arresting officer's questions?	
	d. Does the suspect's speech appear to be slurred, slow, rapid, thick, mumbled, etc.?	
	e. What, specifically, has the suspect said to the arresting officer?	Ask students to suggest any other questions that might be relevant concerning statements the suspect made in the arresting officer's presence.
 **IV-14C** ("Interview: Physical Evidence")	4. Issues concerning physical evidence.	

Aides	Lesson Plan	Instructor Notes
	a. What items or materials were uncovered during the search of the suspect or vehicle? b. Were any smoking paraphernalia uncovered? c. Were any injection materials, i.e., needles, syringes, leather straps, rubber tubes, spoons, bottle caps, etc. found? d. Were there any balloons, plastic bags, small metal foil wrappings, etc. found? e. What was the suspect's blood alcohol concentration?	NOTE: Emphasize that the suspect should be requested to submit to a breath test, if that has not already been done. Ask students to suggest any other relevant questions concerning physical evidence. Solicit students' comments and questions concerning the interview of the arresting officer.
20 Minutes **IV-15** (Overview of Preliminary Examination)	C. The Preliminary Examination 1. The preliminary examination consists of: a. Questions b. Observations of face, breath and speech. c. Initial checks of the eyes.	

Aides	Lesson Plan	Instructor Notes
	d. The initial check of the suspect's pulse.	Point out that the pulse check actually is part of the examination of the suspect's vital signs. Pulse is checked three times during the Drug Evaluation and Classification Examination.
 **IV-16** ("Preliminary Examination Questions")	2. The questions deal with injuries or medical problems the suspect may have.	
	a. Are you sick or injured? b. Do you have any physical defects? c. Are you diabetic or epileptic? d. Do you take insulin? e. Are you under a doctor or dentist's care?	Point out that these questions are incorporated into the Standardized Drug Influence Evaluation Form, which the students will use during all of their practice sessions. Briefly discuss the relevance of each question.
	f. Are you taking medication?	Show video segment, "Preliminary Examination Questions"
 **IV-17** ("Initial Checks of Eyes")	3. The initial checks of the suspect's eyes include several particularly important items.	
	a. Checks of the size of each pupil. o A pupillometer is utilized for this check	Point out that, if the two pupils are of unequal size, this may indicate that the suspect is suffering from a head injury, brain tumor, or other condition that may require prompt medical attention.

Aides	Lesson Plan	Instructor Notes
		Also point out that the influence of certain categories of drugs may be indicated if the pupils are dilated or constricted.
	b. Assessment of the ability of the eyes to track a moving object.	Demonstrate how to use a stimulus to assess the ability of eyes to track a moving object.
	o The presence of Nystagmus indicates the possible presence of certain categories of drugs.	Point out that, if the two eyes do not exhibit the same tracking ability, this too may indicate a head injury or other medical problem.
	c. Initial estimation of the angle of onset of Horizontal Gaze Nystagmus.	Point out that certain categories of drugs enhance Horizontal Gaze Nystagmus. For example, this will be true of CNS Depressants; PCP; and certain inhalants.
	o The approximate angle of onset may indicate the presence of some drug other than alcohol.	Remind students that there is a general correspondence, or correlation, between blood alcohol concentration and the onset angle of nystagmus. Generally speaking, the higher the BAC, the earlier will be the angle of onset. But, if the suspect has also ingested some other drug that also enhances Nystagmus, the onset angle may occur even earlier than the Blood Alcohol Concentration would indicate. Example: Suppose you are examining a suspect who is known to have a BAC of 0.05%.

Aides	Lesson Plan	Instructor Notes
		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. The formula to estimate the angle of onset, 50 minus the blood alcohol (BA). But if that suspect has also ingested PCP, the onset could occur much earlier, perhaps as soon as the eyes start to move to the side. Emphasize 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. But also emphasize the Nystagmus onset angle could correspond very closely to what would be expected from the alcohol level alone even though the suspect has ingested large quantities of other drugs. For example, Cannabis, Narcotic Analgesics, CNS Stimulants and Hallucinogens do not enhance nystagmus, and will not affect the onset angle.
10 Minutes  **IV-18** ("Eye Examinations")	D. Examinations of the Eyes 1. The Examinations of the Eyes consist of three tests:	Selectively reveal the items on the slide.

Aides	Lesson Plan	Instructor Notes
	a. Horizontal Gaze Nystagmus.	Emphasize that this test is a full scale, formal and precise examination, unlike the initial estimation of angle of onset conducted during the preliminary examination.
	b. Vertical Nystagmus.	Point out that vertical nystagmus is an involuntary jerking of the eyes that occurs when the eyes gaze upwards. Select a student, and demonstrate how to perform a test of Vertical 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 suspect's eyes are elevated as far as possible. Hold the eyes at that position for four seconds. If the eyes are observed to jerk noticeably, vertical nystagmus is present. Point out that certain types of drugs tend to produce Vertical Nystagmus, while others do not. Also point out that vertical nystagmus tends to develop with relatively high doses of certain drugs.
 IV-19	c. Lack of convergence.	Point out that Lack of Convergence is the inability of both eyes to draw in toward the center while fixating on a stimulus being pushed in to the bridge of the nose.

Aides	Lesson Plan	Instructor Notes
	2. Lack of Convergence is checked by first getting the subject to focus on and track the object while it is slowly moving in a circle in front of the subject's face.	Point out that the circular motion (either left or right) serves to demonstrate that the subject is tracking the object. Demonstrate this circular motion, using the student volunteer.
	3. Then, the object is slowly pushed in and touched to the bridge of the subject's nose and held for approximately 1 second.	Demonstrate, using the student volunteer.
	4. Under the influence of certain types of drugs, the eyes may not be able to converge.	Illustrate on flip chart different examples of Lack of Convergence. Point out that many people may not be able to converge their eyes. Excuse the student volunteer and thank him or her for participating. Solicit students' comments and questions concerning the Examinations of the Eyes.
 **10 Minutes**  **IV-20** ("Divided Attention Tests")	E. Divided Attention Psychophysical Tests 1. The Divided Attention tests used for drug examinations are the same familiar tests used for examining alcohol impaired subjects.	

Aides	Lesson Plan	Instructor Notes
	a. Romberg Balance b. Walk and Turn c. One Leg Stand d. Finger to Nose	Point out that the Romberg Test is administered by asking the suspect to close their eyes, tilt their head back and estimate 30 seconds, when they believe 30 seconds have passed they are to tilt their head forward, open their eyes and say stop. Point out that the One Leg Stand is administered twice during the drug evaluation and classification examination (once on each leg).
	2. Walk and Turn demonstration.	Point out that complete demonstrations of all four tests will be given later. For the present, we will demonstrate only the Walk and Turn.
	a. Instructions stage.	Select a student known to be proficient in administering the Walk and Turn test.
	b. Walking stage.	Select another student to serve as the test subject. Instruct the student administrator to administer the Walk and Turn test to the student subject. Excuse the students, following the demonstration, and thank them for participating. Point out that students will have numerous opportunities to observe and practice the divided attention tests during the remainder of the course.

Aides	Lesson Plan	Instructor Notes
5 Minutes  **IV-21** ("Vital Sign Measurements and Instrumentation")	F. Examinations of Vital Signs 1. The Vital Signs consist of three things routinely measured in basic physical examinations. a. Blood pressure b. Pulse c. Temperature 2. These measurements require some familiar instruments. a. Stethoscope b. Blood pressure cuff and gauge (sphygmomanometer) c. Thermometer (digital, with disposable mouthpieces) d. Timepiece capable of measuring in seconds.	<u>Display</u> these items. <u>Point out</u> that procedures for measuring blood pressure, pulse and temperature will be explained and practiced subsequently. Solicit students' comments and questions concerning examinations of vital signs.
15 Minutes  **IV-22** ("Dark Room Checks of Pupil Size")	G. Dark Room Checks of Pupil Size 1. The principal activity that takes place during the dark room examinations is the estimation of pupil size under four lighting conditions.	

Aides	Lesson Plan	Instructor Notes
	a. Room light b. Near total darkness c. Indirect light d. Direct light	
	2. Another officer should always accompany you and the suspect into the dark room.	Point out that this is essential for officer safety. Remind students that no one should be carrying a weapon when in the presence of a suspect during a drug evaluation and classification examination. Point out that some departments require that the suspect be handcuffed before going into the darkroom.
	3. Before turning off the lights, you will estimate the size of the suspect's pupils under room light.	
	a. You must always first estimate the left pupil, then the right .	Point out that the subject should be instructed not to try to focus on you or on the penlight, but to look "slightly up and at a specific focal point" (several feet away) during the estimation of pupil size.
	b. You must position the pupillometer alongside the eye to ensure an accurate estimation.	
	c. After you have completed the room light estimations, turn off the lights and wait 90 seconds to allow your eyes and the suspect's eyes to adapt to the dark.	
	4. The next check will be of pupil size under near total darkness.	

Aides	Lesson Plan	Instructor Notes
	a. You will need the bare minimum amount of light necessary to see the suspect's pupils and the pupillometer.	
	b. You can create the necessary light by covering the tip of the penlight with your finger.	Demonstrate this. Point out the reddish glow that emanates through the skin. If possible, darken the room and exhibit the reddish glow.
	5. The next check will be of pupil size under indirect light.	
	a. Shine the light across (but not into) the subject's eye.	
	b. You can do this by holding the penlight about three to four inches from the side of the suspect's face, and shining the light at right angles to the face.	Demonstrate this. Select a student, and demonstrate how to shine the light across the student's eye. Demonstrate how to use the pupillometer to estimate the size of the student's pupil.
	c. Shine the light so that there is a slight crescent shaped shadow in the corner of the eye and on the nose.	
	d. This will ensure that the light shines across the suspect's eye, but not in it.	
	6. The fourth and final check will be of the pupil size under direct light.	
	a. You will shine the full strength of the penlight directly into the subject's eye for 15 seconds.	Point out that it is necessary to maintain reasonably fresh batteries in the penlight.

Aides	Lesson Plan	Instructor Notes
	b. Do this by bringing the light in from the side of the student's face.	Demonstrate this, using the student volunteer.
	c. The penlight should be held close enough to the subject's eye so that its beam fills the eye socket.	Demonstrate this. Point out that this will illuminate the area that usually would be discolored if the subject had a "black eye".
	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.	If possible, darken the room and exhibit the illumination of the student volunteer's eye socket.
	7. Two other activities are conducted while in the darkroom.	Emphasize 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.
	a. Examination of the nasal area.	
	b. Examination of the oral cavity.	Excuse the student and thank him or her for participating. Solicit students' comments and questions concerning these checks of pupil size.
10 Minutes	H. Examination of Muscle Tone.	
	1. Starting with the left arm, examine the arm muscles.	
	2. Firmly grasp the upper arm and slowly move down to determine muscle tone.	
	3. The muscles will appear flaccid, normal or rigid to the touch.	
	4. Examine the right arm in the same fashion.	Demonstrate.

Aides	Lesson Plan	Instructor Notes
10 Minutes	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 <u>fresh</u> injection site may not be readily observable. 3. Frequently, a DRE will locate the injection site initially by <u>touch</u>, 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 <u>ski light</u> is used to provide a magnified visual examination.	Emphasize that gloves should be worn when touching the suspect. <u>Select</u> a student and demonstrate a tactile search for injection sites. "Ski": short for schematic. <u>Display</u> this instrument. <u>Demonstrate</u> its use. Solicit students' comments and questions concerning examination for injection sites.
10 Minutes	J. Suspect Statements 1. All spontaneous statements and suspect's response to questions should be documented. Ask additional probing questions as appropriate.	Note: Give specific examples of probing questions, admissions and denials. Ask students for additional examples and list all on chalkboard or flip chart.

Aides	Lesson Plan	Instructor Notes
20 Minutes	K. Opinion of Evaluator 1. By this point in the evaluation, the DRE should have an formed an opinion of the category or categories of drugs responsible for any observed impairment. 2. This opinion is based on the totality of the investigation.	
20 Minutes	L. Toxicological Examination. 1. Toxicology Samples Your State's implied consent statues will dictate the type of sample you can obtain; urine, blood, breath or saliva. 2. Specimen Containers 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. b. Containers should be sterile and have a lid that will seal tightly. Make sure the seal is tight to prevent leakage.	Review the students' department's policy and procedures for requesting, obtaining and handling toxicological samples. Ask the students to relate the laws of their state. The implied consent laws may vary significantly from state to state. Have the students discuss their individual laws and possibly write their requirements on the flip chart for comparison.

Aides	Lesson Plan	Instructor Notes
	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. 3. Obtaining a Sample a. Urine - An officer must witness the drawing of the sample. b. Blood - Should be drawn by a qualified technician and witnessed by the officer. The sample must include a preservative. This is often pre-packaged in the container intended for this use. Samples should be refrigerated or frozen as soon as possible to minimize degeneration during storage. 4. Chain of Custody a. Establish a policy dictating the chain of custody, if one does not already exist. b. Establish a policy for your Department on: The sealing of evidence to include officer identification markings; (i.e. initials, labels, tags and packaging)	Note: If possible, discourage the use of the mail for delivering the sample to the lab.

Aides	Lesson Plan	Instructor Notes
	Paperwork for the chain of custody and laboratory analysis of your sample. Transportation of the sample to the laboratory. Return reporting of the laboratory analysis.	Note: 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. Solicit students' comments and questions concerning toxicological examinations.
 **15 Minutes** 	M. Video Demonstration	Instruct students to refer to their checklists as they watch the video. Show the Video Tape "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.) Solicit students' comments and questions.

Session IV

Overview of Drug Recognition Expert Procedures

Overview of Drug Recognition Expert Procedures

Upon successfully completing this session, the participant will be able to:

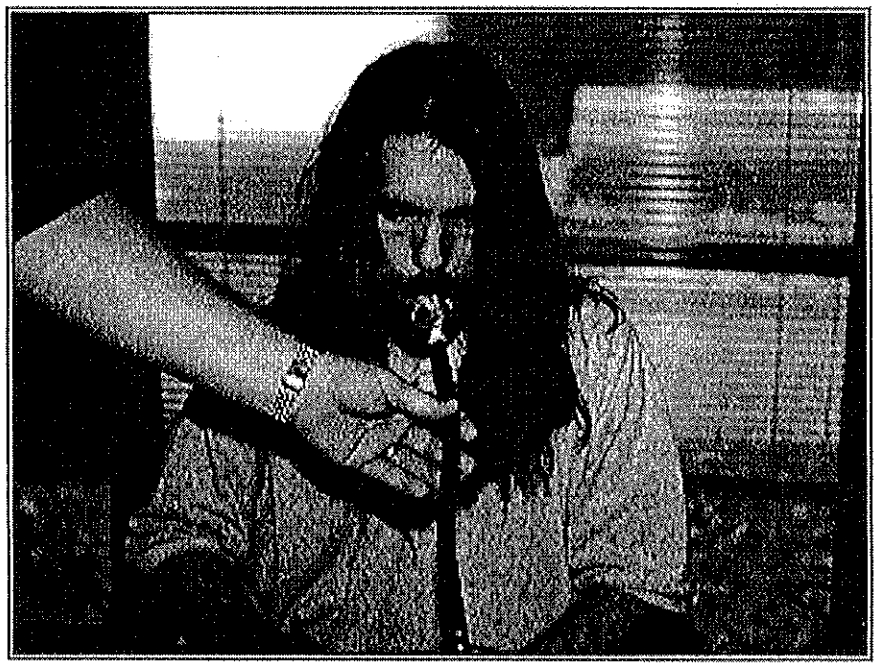
- Name the components of the drug evaluation and classification process
- State the purpose of each component
- Describe the activities performed during each component
- Correctly answer the "Topics for Study" questions at the end of this section

The Drug Evaluation:

A standardized and systematic process

Drug Evaluation Steps

1. The breath alcohol test

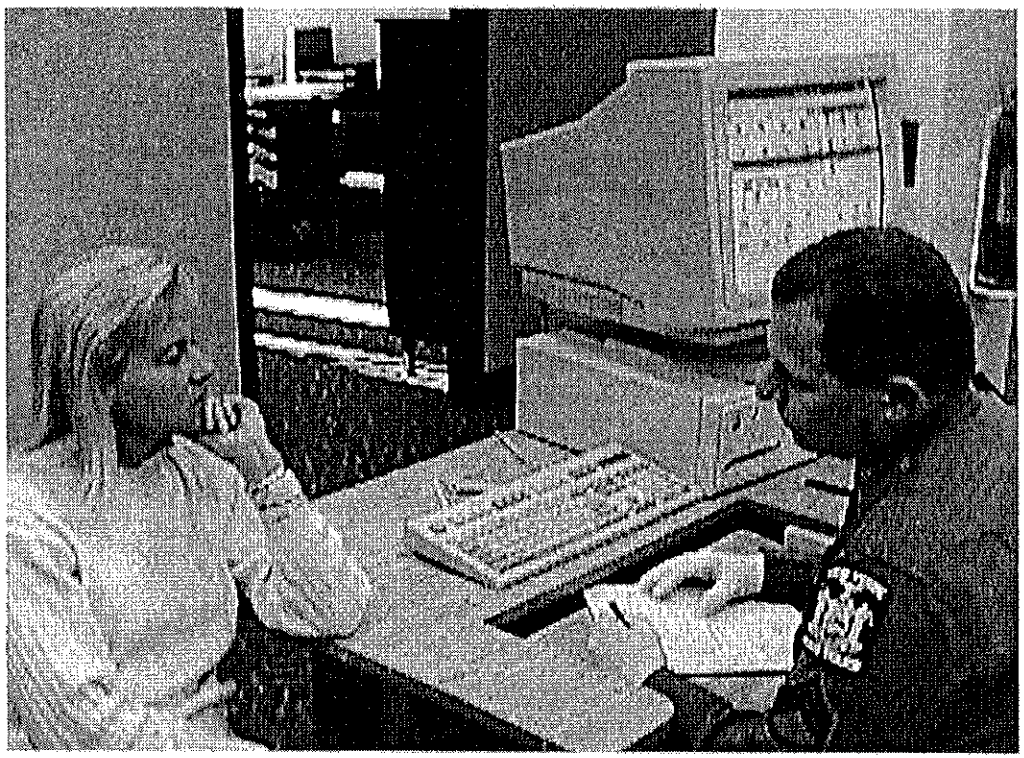


Drug Evaluation Steps (continued)

2. Interview of the arresting officer

Drug Evaluation Steps (continued)

3. The preliminary examination



Drug Evaluation Steps (continued)

3. The preliminary examination

PAGE____ OF____

DR NUMBER:

EVALUATOR:

CONTROL #:

BOOKING #:

DRUG INFLUENCE EVALUATION

ARRESTEE'S NAME (Last, First, MI)	AGE	SEX	RACE	ARRESTING OFFICER (Name, Badge, District)

DATE EXAMINED/TIME/LOCATION	BREATH RESULTS: ☐ Refused RESULTS ☐ Instrument	CHEMICAL TEST ☐ Both Tests Refused ☐ Urine ☐ Blood
MIRANDA WARNING GIVEN: ☐ Yes ☐ No Given by:	What have you eaten today? When?	What have you been drinking? Time of last drink? How much?
Time Now? When did you last sleep? How long?	Are you sick or injured? ☐ Yes ☐ No	Are you diabetic or epileptic? ☐ Yes ☐ No
Do you take insulin? ☐ Yes ☐ No	Do you have any physical defects? ☐ Yes ☐ No	Are you under the care of a doctor/dentist? ☐ Yes ☐ No
Are you taking any medication or drugs? ☐ Yes ☐ No	ATTITUDE	COORDINATION
SPEECH	BREATH	FACE

CORRECTIVE LENS: ☐ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft	Eyes: ☐ Normal ☐ Bloodshot ☐ Watery	Blindness: ☐ None ☐ R. Eye ☐ L. Eye	Tracking: ☐ Equal ☐ Unequal

PUPIL SIZE: ☐ Equal ☐ Unequal (explain)	HGN Present: ☐ Yes ☐ No	Able to follow stimulus: ☐ Yes ☐ No	Eyelids: ☐ Normal ☐ Droopy

Drug Evaluation Steps (continued)

4. Examination of the eyes

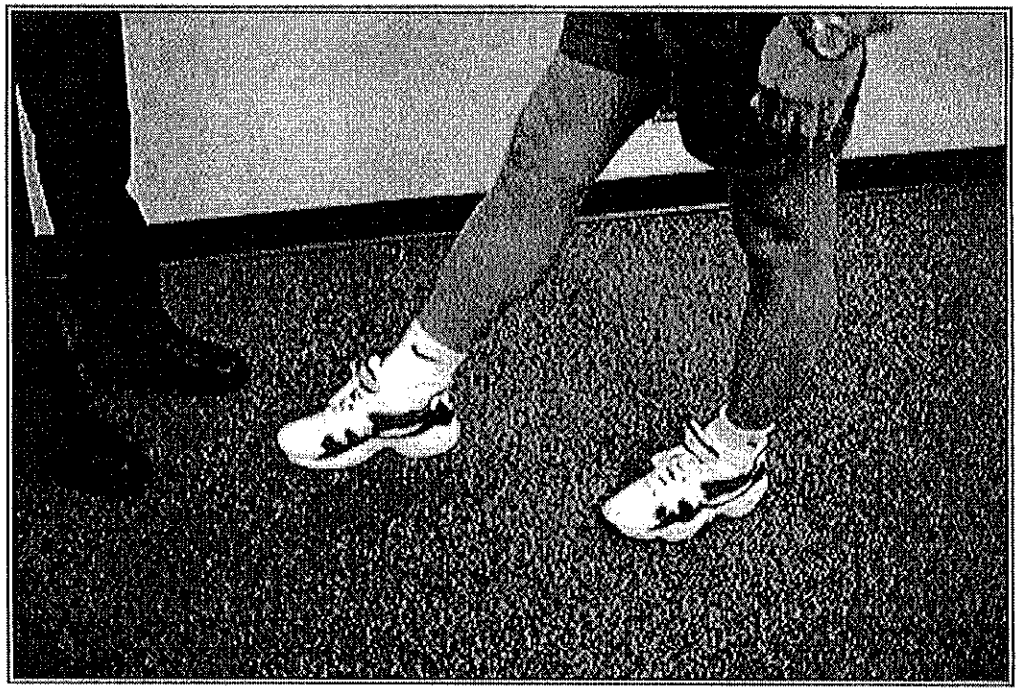
Drug Evaluation Steps (continued)

4. Examination of the eyes

HGN Lack of Smooth Pursuit	Right Eye	Left Eye	Vertical Nystagmus? ☐ Yes ☐ No
Max. Deviation			Convergence Right Eye ◯ Left Eye ◯
Angle of Onset			

Drug Evaluation Steps (continued)

5. Divided attention tests

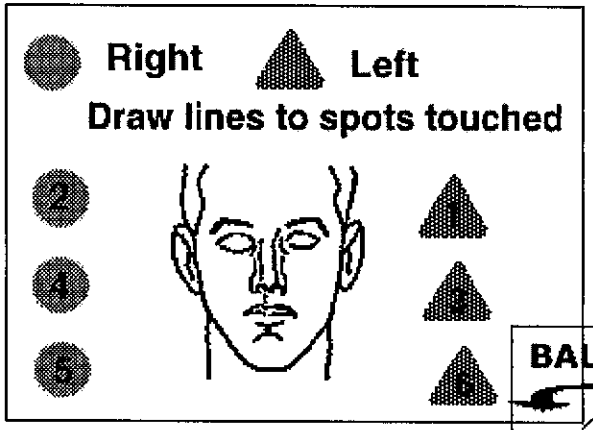


Drug Evaluation Steps (continued)

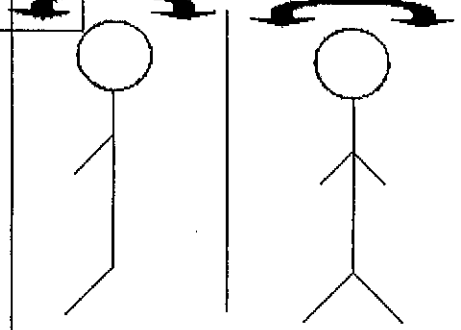
5. Divided attention tests

ONE LEG STAND:

L	R	
☐	☐	Sways while balancing.
☐	☐	Uses arms to balance.
☐	☐	Hopping.
☐	☐	Puts foot down.



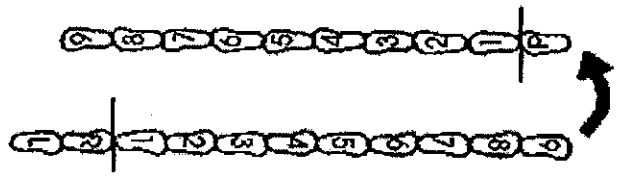
BALANCE EYES CLOSED



INTERNAL CLOCK:

_____Estimated as 30 sec.

WALK AND TURN TEST



Cannot keep balance _____

Starts too soon_____

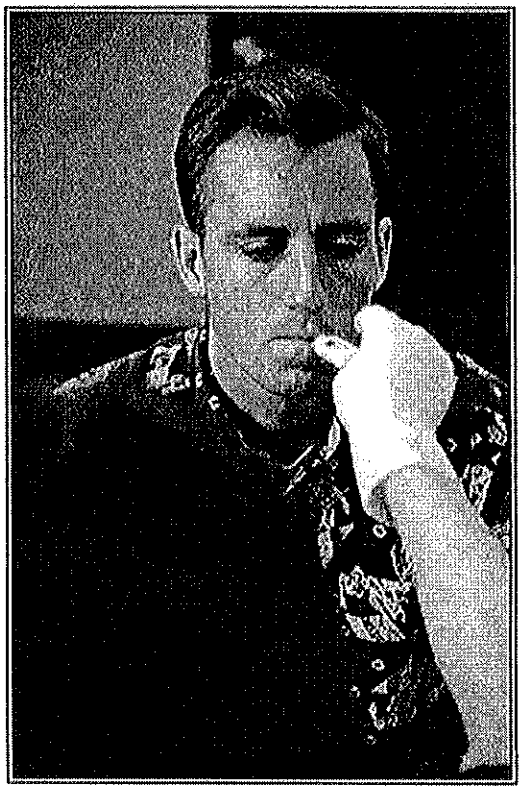
	1st Nine	2nd Nine
Stops Walking		
Misses Heel-Toe		
Steps Off Line		
Raises Arms		
Actual Steps Taken		

Describe Turn

Cannot do Test (explain)

Drug Evaluation Steps (continued)

6. Examination of vital signs



Drug Evaluation Steps (continued)

6. Examination of vital signs

PULSE & TIME

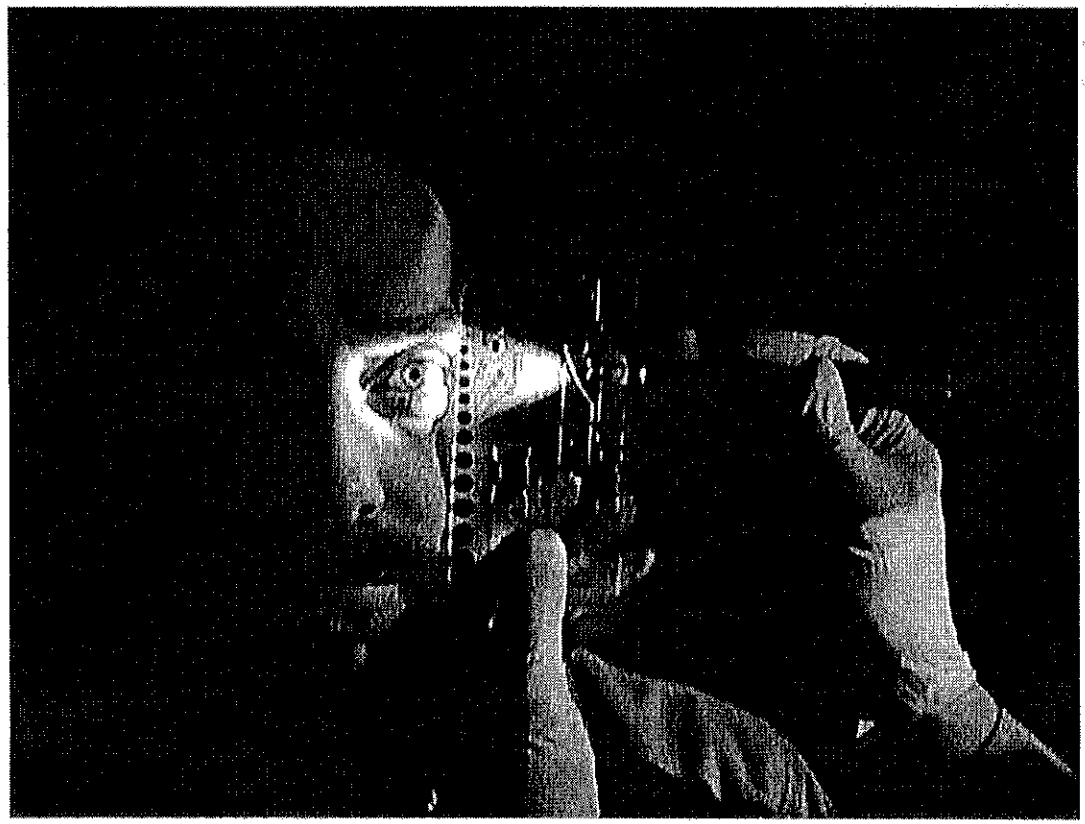
1. _____/_____
2. _____/_____
3. _____/_____

BLOOD PRESSURE: _____/_____

TEMP _____ °

Drug Evaluation Steps (continued)

7. Dark room examinations



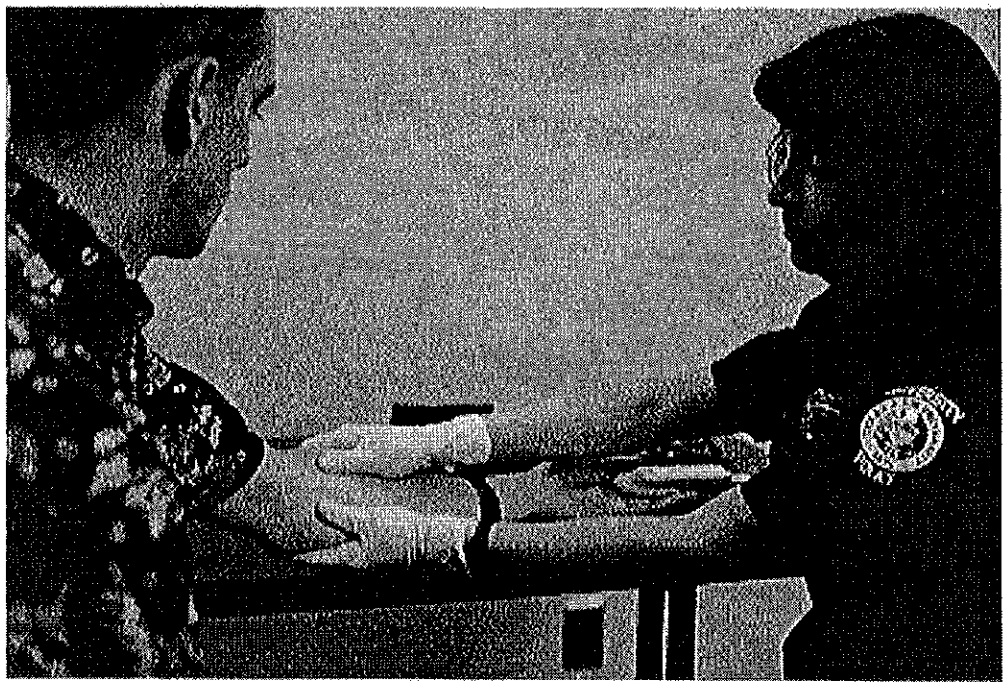
Drug Evaluation Steps (continued)

7. Dark room examinations

PUPIL SIZE	Room Light	Darkness	Indirect	Direct	NASAL AREA
Left Eye					
Right Eye					ORAL CAVITY
HIPPUS ☐ Yes ☐ No		REBOUND DILATION ☐ Yes ☐ No			Reaction to Light

Drug Evaluation Steps (continued)

8. Examination of muscle tone



Drug Evaluation Steps (continued)

8. Examination of muscle tone

MUSCLE TONE:

☐ Near Normal ☐ Flaccid ☐ Rigid

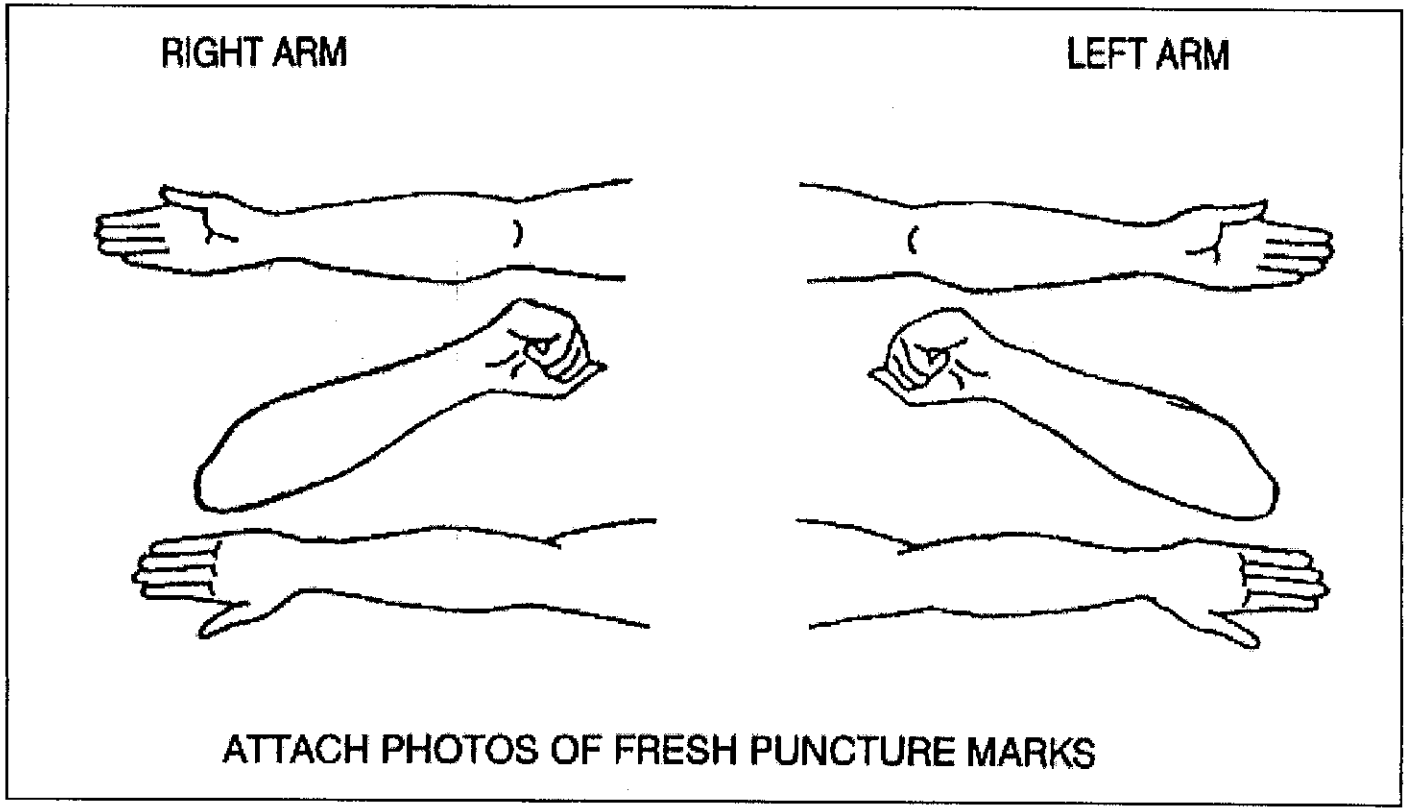
Comments

Drug Evaluation Steps (continued)

9. Examination for injection sites

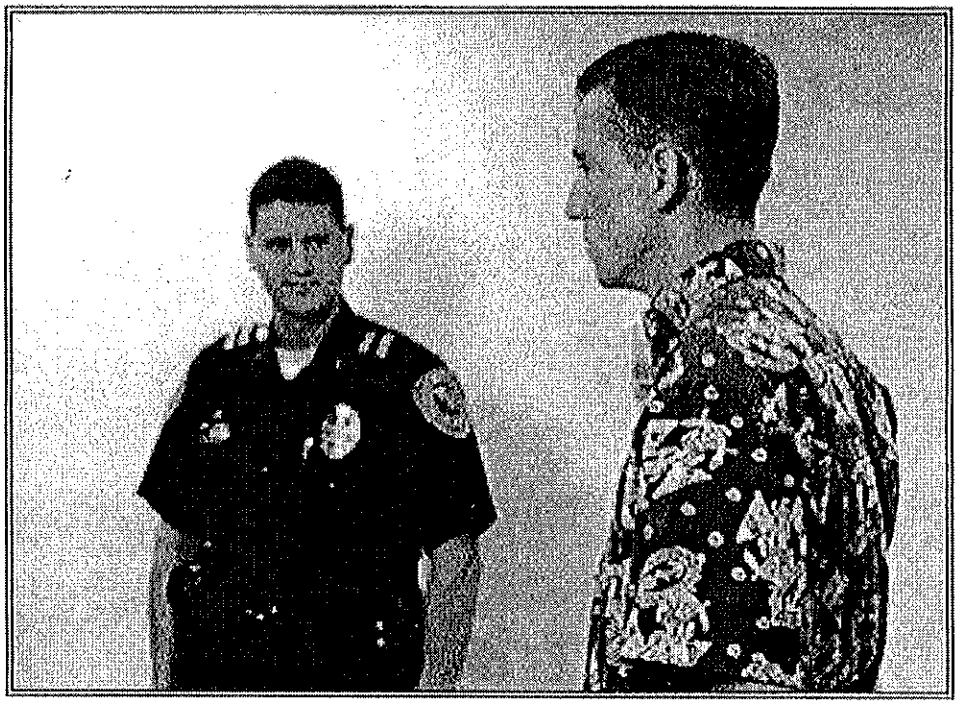
Drug Evaluation Steps (continued)

9. Examination for injection sites



Drug Evaluation Steps (continued)

10. Suspect's statements and other observations



Drug Evaluation Steps (continued)

10. Suspect's statements and other observations

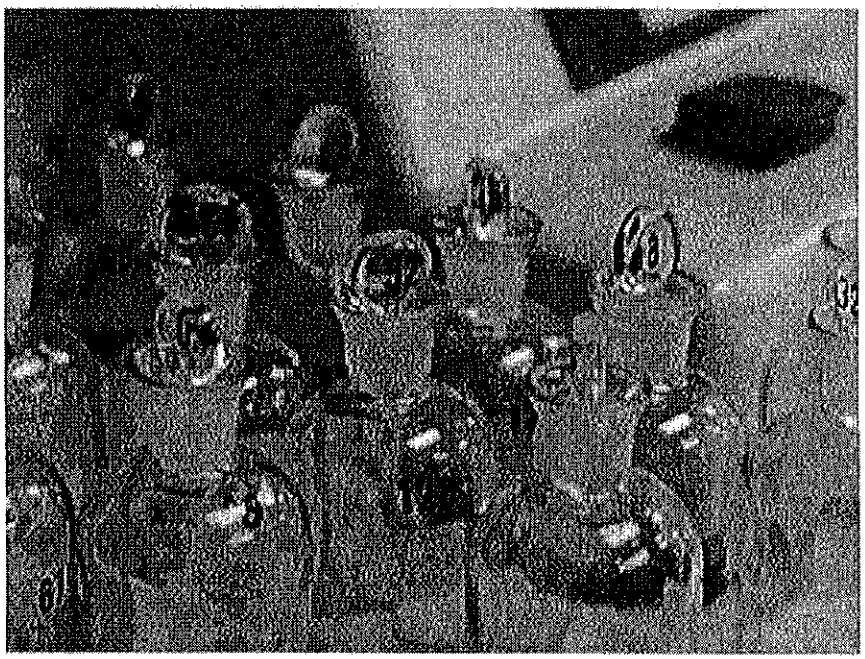
What medicine or drug have you been using? How much?	Time of use?	Where were the drugs used? (Location)	
DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED
OFFICER'S SIGNATURE	DISTRICT	ID NUMBER	REVIEWED BY

Drug Evaluation Steps (continued)

11. The opinion of the evaluator

Drug Evaluation Steps (continued)

12. The toxicological examination



Interview of Arresting Officer: Issues Concerning Suspect's Behavior

- Was suspect operating a vehicle?
- What actions, maneuvers, etc. were observed?
- Was there a collision?
- Was suspect observed smoking, drinking or eating?
- Was suspect inhaling any substance?
- How did suspect respond to stop command?
- Did suspect try to conceal or throw away any items?
- What has been suspect's attitude and demeanor?

Interview of Arresting Officer: Suspect's Statements

- Has suspect complained of illness or injury?
- Has suspect used drug-related "street terms" or slang?
- How has suspect responded to questions?
- Is suspect's speech slurred, slow, thick, rapid, mumbled, etc.?
- What, specifically, has suspect said?

Interview of Arresting Officer: Physical Evidence

- What items or materials were uncovered during search of suspect 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 suspect's BAC?

Overview of the Preliminary Examination

- Questions
- Observations of face, breath and speech
- Initial checks of the eyes
- The first check of the pulse

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?

Initial Checks of the Eyes

- Check pupil size
- Assessment of tracking ability
- Initial estimate of nystagmus angle of onset

Eye Examinations

Horizontal Gaze Nystagmus

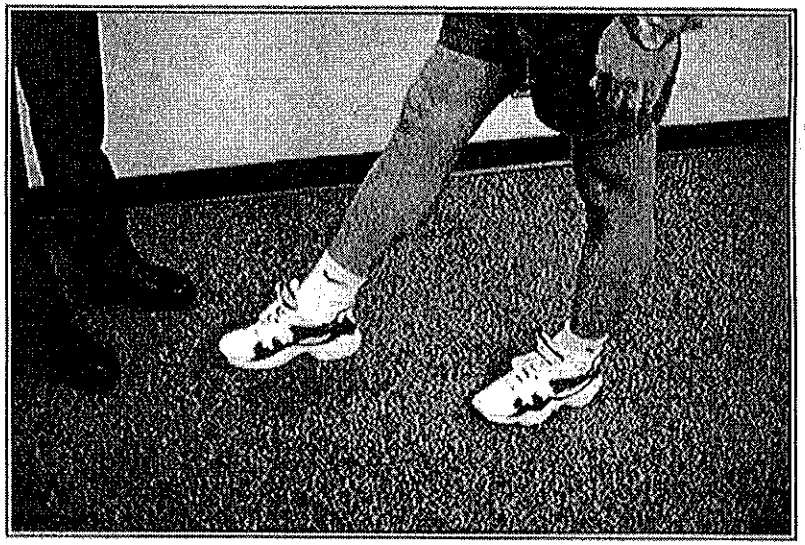
Vertical Nystagmus

Eye Examinations (continued)

Lack of Convergence

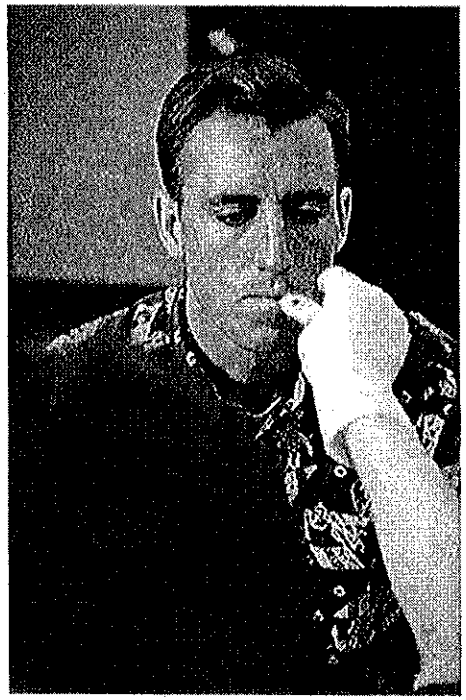
Divided Attention Tests

- Romberg Balance
- Walk and Turn
- One Leg Stand
- Finger to Nose



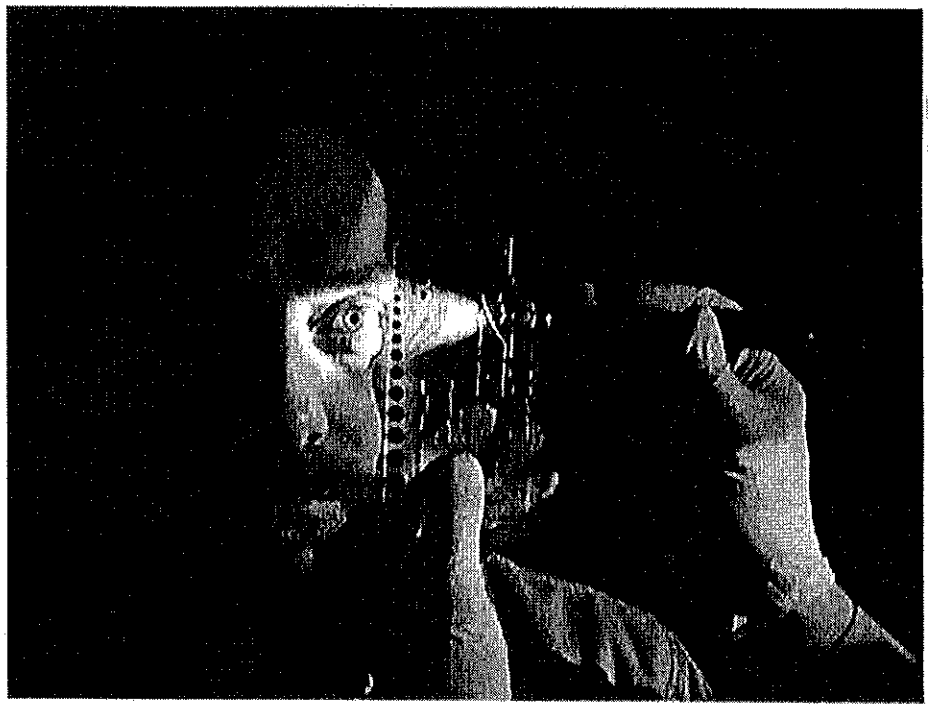
Vital Signs Measurements

- Blood pressure
- Pulse
- Temperature



Dark Room Checks of Pupil Size

- Room light
- Near-total darkness
- Indirect light
- Direct light



One Hour and Forty-Five Minutes

SESSION V

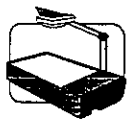
EYE EXAMINATIONS: NYSTAGMUS, CONVERGENCE, PUPIL SIZE AND REACTION TO LIGHT

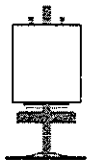
SESSION V EYE EXAMINATIONS: NYSTAGMUS, CONVERGENCE, PUPIL SIZE AND REACTION TO LIGHT

Upon successfully completing this session, the participant will be able to:

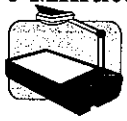
- State the purposes of various eye examinations in the Drug Evaluation and Classification Process.
- Describe the administrative procedures for the eye examinations.
- Describe the clues of interest in each eye examination.
- Conduct the eye examinations and note the clues that come to light.
- Prepare 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

Aides	Lesson Plan	Instructor Notes
  **V-0A&B** (Session Objectives)	EYE EXAMINATIONS	Total Lesson Time: Approximately 105 Minutes Session title on wall chart. Briefly review the content, objectives and activities of this session. NOTE: ADD SECTION ON PHYSIOLOGY OF THE EYE
 **15 Minutes**  **V-1** ("The Eye Examina-ions")	A. Purposes of the Eye Examinations 1. The principal purpose of all of the eye examinations is to obtain articulable facts indicating the presence or absence of specific categories of drugs. a. Certain drug categories usually cause the eyes to react in specific ways. b. Other drug categories usually do not cause those reactions. 2. The tests of <u>horizontal and vertical nystagmus</u> provide important indicators of the drug categories that may or may not be present. a. If Horizontal Gaze Nystagmus is observed, it is likely that the suspect may have taken alcohol or another CNS depressant, PCP, an inhalant, or a combination of those.	Ask students "What is the cause of Horizontal Gaze Nystagmus?" HGN <u>is caused by</u> the inability of the eyes to maintain a visual fixation as the eyes are moved to the side.

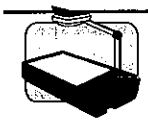
Aides	Lesson Plan	Instructor Notes
	b. If Vertical Nystagmus is observed, the implication may be that the suspect took PCP, or fairly large doses of alcohol or other Depressants or Inhalants.	Point out that it is very unlikely that a suspect would exhibit vertical nystagmus without also exhibiting HGN.
	c. By comparing the suspect'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.	Clarification: If the onset angle is significantly inconsistent with the BAC, the implication may be that the suspect has also taken PCP, an inhalant, or some CNS depressant other than alcohol.
	d. The consistency of onset angle and BAC can be compared using the following formula: BA = 50 - A	Write the formula on the chalkboard or flip-chart. Note: Emphasize that this is not an absolute mathematical formula. It is a statistical approximation sometimes referred to Tharps Equation. Explanation: BA = 100 x blood alcohol (i.e., if blood alcohol is 0.10%, BA = 10) A = onset angle (in degrees) Example: If onset angle is 35 degrees, then BA = 50 - 35 = 15. The corresponding blood alcohol concentration would be approximately 0.15%.
	e. Keep in mind that this formula is only a statistical approximation. It is not an exact relationship for all subjects at all times.	Emphasize this point: The formula can easily be "off" by 0.05% or more, even though the subject has consumed no drug other than alcohol.

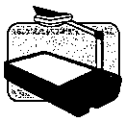
Aides	Lesson Plan	Instructor Notes
	f. The purpose of comparing BAC and onset angle is to obtain a gross indication of the possible presence of another Depressant, or PCP, or an Inhalant.	Emphasize that many other facts will also be considered that will help to determine whether PCP, inhalants or depressants may be present.
	3. The check for Lack of Convergence can provide another clue as to the possible presence of Depressants, PCP, or Inhalants.	
	4. Lack of Convergence is also an indicator of the possible presence of Cannabis.	Point out that a Drug Recognition Expert might begin to suspect the presence of cannabis if lack of convergence was observed but no nystagmus was observed.
	5. The checks of pupil size and reaction to light provide useful indicators of the possible presence of many drug categories.	
	a. Depressants, Stimulants and Narcotic Analgesics will usually cause the pupils to react very slowly or not visibly at all to light.	
	b. Stimulants and Hallucinogens usually will cause the pupils to dilate.	
	c. Cannabis usually causes dilation of the pupils, although this isn't always observed.	Point out that pupil dilation due to cannabis isn't always observed in laboratory studies, but this may be due to the fact that laboratory dose levels are less than "street" doses.
	d. Some specific Inhalants may cause pupil dilation.	

Aides	Lesson Plan	Instructor Notes
	e. Narcotic Analgesics will usually cause observable constriction of the pupils.	
	6. You will also check for <u>hippus</u> and <u>rebound dilation</u>.	Print on chalkboard: "HIPPUS" "REBOUND DILATION".
	a. "Hippus" means a rhythmic pulsating of the pupils as they dilate and constrict within fixed limits.	
 **V-2** "Hippus And Rebound"	b. "Rebound dilation" means the pupils pulsate in size, growing steadily larger on the expansion pulsations.	Note: Instructors are encouraged to use additional visual aides to demonstrate if necessary (i.e., balloon, videos, etc.).
	c. Hippus occurs under various conditions, including -- at times -- withdrawal from Narcotic Analgesics.	Point out that these terms are defined in the glossary at the front of the Student's Manual.
	d. Rebound dilation has been reported with persons under the influence of Cannabis.	Solicit students' comments and questions concerning the purposes of the eye examinations.
 **50 Minutes**	B. Procedures and Cues	
 **V-3** ("HGN Procedures and Cues")	1. Horizontal Gaze Nystagmus test consists of <u>three separate checks</u>, administered independently to each eye.	
 **V-4A** ("Lack of Smooth Pursuit")	a. The first check is for "lack of smooth pursuit".	
	o If the subject is wearing eyeglasses, have him or her remove them.	<u>Select</u> a student, and demonstrate the first check of HGN on that student.

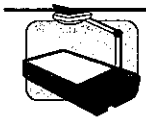
Aides	Lesson Plan	Instructor Notes
	o If the subject is wearing contact lenses, note that fact on the report, but don't have the subject remove them.	
	o Position the stimulus about 12 -15 inches in front of subject's face.	
	o Hold the tip of the stimulus slightly above the level of the subject's eye.	Point Out that this procedure ensures that the subject's eyes will be wide open and easy to observe.
	o Instruct the subject to hold the head still and follow the stimulus with the eyes.	
	o Move the stimulus smoothly, all the way to the left side and back all the way to the right side.	Point out that the stimulus should be moved at a speed that requires 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 4 seconds to move from the extreme left to the extreme right.
	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.	
	o When doing this, don't 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 fashion.	

Aides	Lesson Plan	Instructor Notes
	b. While the eyeball is moving, examine it for evidence of a lack of smooth pursuit.	Use these or similar analogies: (1) A smoothly pursuing eyeball will move without friction, much the way that a windshield wiper glides across the windshield when it is raining steadily. An eyeball showing lack of smooth pursuit will move in a fashion similar to a wiper across a dry windshield. (2) A smoothly pursuing eyeball will roll in the socket the way that a marble or ball bearing would glide smoothly across a polished pane of glass. An eyeball exhibiting lack of smooth pursuit would move more like that marble rolling over a sheet of heavy gauge sandpaper.
	c. Also, check to be sure that both 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. d. Students' initial practice of the check for lack of smooth pursuit.	Excuse the student volunteer and thank him or her for participating. Instruct students to work in pairs, taking turns checking each other's eyes for lack of smooth pursuit. Monitor, coach and critique the students' practice. Allow this practice to continue for only about 2 minutes.

Aides	Lesson Plan	Instructor Notes
 **V-4B** ("Distinct...At Maximum")	e. The second check is for "distinct jerking at maximum deviation". o Again position the stimulus as before. o Move the stimulus all the way to the left side and hold it there so that the subject's eye is turned as far to the side as possible. o Hold the eyeball at that position for approximately 4 seconds, to check carefully for any jerking that may be present. 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 jerking is present. f. With this cue, the examiner looks for a <u>very distinct</u>, unmistakable jerking. o A slight or barely visible tremor is not sufficient to consider this cue present. o A definite, throbbing jerking must be seen.	<u>Select</u> a student and demonstrate the second check of HGN on that student. Excuse the student volunteer and thank him or her for participating.

Aides	Lesson Plan	Instructor Notes
	g. Students' initial practice of the check for distinct jerking at maximum deviation.	Instruct students to work in pairs, taking turns checking each other's eyes for distinct jerking at maximum deviation. Monitor, coach and critique the students' practice. Allow this practice to continue for only about 2 minutes.
 **V-4C** ("Onset Angle")	h. The final check is for the "angle of onset".	
	o Position the stimulus as before.	Select a student and demonstrate the third check of HGN on that student.
	o Slowly move the stimulus to the left side, carefully watching the eye for the first sign of jerking.	Note: Stimulus should be moved at a speed that requires four seconds to travel from center all the way out to the side.
	o When you think that you see the eyeball jerk, stop moving the stimulus and hold it perfectly still.	
	o Verify that the eyeball is, in fact, jerking.	Point out that, if the eye is not jerking, it will be necessary to resume moving the stimulus slowly to the side, again observing for the first sign of jerking.
	o Once you have established that you have located the point of onset, estimate the angle.	Point out that angle estimation simply requires practice.

Aides	Lesson Plan	Instructor Notes
	o Then, repeat the process for the right eye. o Then, again check onset for the left eye, and again for the right.	
		Exhibit a template. Point out that the template will be used during practice. Excuse the student volunteer and thank them for participating. Emphasize that if the clues of nystagmus are markedly different for the two eyes, a neurological or other medical problem (such as a head injury) may be present.
	i. Students' initial practice of angle estimation.	Instruct students to work in pairs, taking turns estimating angles of each other's eyes. Instruct students that they are to try to draw their partners' eyes to three different angles: 30 degrees 35 degrees 40 degrees Students will check their accuracy using the template. Monitor, coach and critique the students' practice. Allow this practice to continue for only about 3 minutes.

Aides	Lesson Plan	Instructor Notes
 **V-5** ("Vertical Nystagmus")	2. The Vertical Nystagmus test is very simple, and consists of a single check.	Select a student and demonstrate the vertical nystagmus test on the student.
	a. Position the stimulus horizontally, about 12 -15 inches in front of the subject's face.	
	b. Instruct the subject to hold the head still and follow the object with the eyes only.	
	c. Raise the object until the subject's eyes are elevated as far as possible.	
	d. Watch closely for evidence of jerking.	Point out that the examiner should keep the subject's eyes elevated for about 4 seconds to verify that the jerking really is present. Excuse the student volunteer and thank them for participating.
	e. Students' initial practice of the Vertical Nystagmus test.	Instruct students to work in pairs, taking turns administering the vertical nystagmus test to each other. Monitor, coach and critique the students' practice. Allow this practice to continue for only about 2 minutes.
 **V-6 and V-6A** (Lack of Convergence)	3. The test for Lack of Convergence is also very simple.	Select a student and demonstrate the test for lack of convergence on that student.

Aides	Lesson Plan	Instructor Notes
	a. Position the stimulus about 12-15 inches in front of the student's face, with the stimulus pointing toward the nose.	
	b. Instruct the subject to hold the head still and follow the object with the eyes only.	
	c. Keep the object 12-15 inches away from the subject's nose, and start to move the object slowly in a circle, approximately the same size as the suspect's face.	
		Point out 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 circular motion is clockwise or counter-clockwise.
	d. Once you have verified that the subject is tracking the object, move it slowly and steadily and touch the bridge of the nose.	Note: Hold stimulus on bridge of nose for one (1) second.
	e. Carefully observe the subject's eyes to determine whether both eyes converge on the bridge of the nose.	Excuse the student volunteer and thank them for participating.
	f. Students' initial practice of the test for lack of convergence.	Instruct students to work in pairs, taking turns testing each other's eyes for lack of convergence. Monitor, coach and critique the students' practice.

Aides	Lesson Plan	Instructor Notes
		Allow this practice to continue for only about 2 minutes.
 V-7 ("Pupil Size")	4. Estimation of <u>pupil size</u> requires use of the pupillometer.	<u>Exhibit</u> a pupillometer. Write on flipchart or chalkboard "The Four Lighting Conditions".
	a. For the check in room light. Hold the pupillometer alongside the subject's eye. Instruct the subject to focus on a specific point behind the DRE and slightly above the subject's eye level. Utilize the same point for the dark room examinations.	<u>Select</u> a student and demonstrate pupil size estimation using the student. Explain to the students that the pupils will automatically constrict as objects move closer to them. This is called accommodation. This should not be confused with pupillary light reflex which is the pupil's normal reaction to changes in light. Demonstrate the accommodation reflex by having the students focus on an object very close and one at a distance.
	b. Make sure that the pupillometer is even with the eyeball (neither closer to you nor farther from you than is the subject's eyeball).	<u>Point out</u> that the "normal" size of a pupil is about 3.0 - 6.5 mm.
	c. Move the pupillometer up or down until you find the darkened circle that appears to be approximately the same size as the subject's pupil. Check the left eye and then the right eye.	

Aides	Lesson Plan	Instructor Notes
		Excuse the student-volunteer and thank him or her for participating.
	d. Students' initial practice of pupil size estimation.	Instruct students to work in pairs, taking turns checking each other's pupils. Monitor, coach and critique the students' practice. Allow this practice to continue for only about 2 minutes.
	e. 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.	Select a student to participate in demonstrations of darkroom pupil estimations.
	f. For the check under near total darkness, hold your finger over the tip of the penlight, so that only a reddish glow emerges.	Demonstrate this.
	g. The next check will be of pupil size under indirect light. Shine the light across (but not into) the subject's eye.	Demonstrate how to shine the light across the student's eye. Demonstrate how to use the pupillometer to estimate the size of the student's pupil.
	You can do this by holding the penlight about three to four inches from the side of the suspect's face, and shining the light at right angles to the face. Shine the light so that there is a slight crescent shaped shadow in the corner of the eye and on the nose.	Emphasize that the light should be shined across the subject's eye, not directly into it, and the light should be close enough to the subject's face to illuminate only the eye socket.

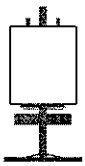
Aides	Lesson Plan	Instructor Notes
	This will ensure that the light shines across the suspect's eye, but not in it.	
	h. For the check under direct light, bring the light from the side of the subject's face, directly into the eye.	Demonstrate this. Emphasize that the penlight should be positioned so that the beam just "fits" the eye socket.
	5. Assessment of the pupil's reaction to light takes place immediately before the check of pupil size under direct light.	
	a. Once again, start by bringing the uncovered light from the side of the subject's face directly into his or her left eye.	Demonstrate this.
	b. As you bring the beam of light directly into the subject's eye, note how the pupil reacts.	Demonstrate this.
	c. Under ordinary conditions, the pupil should react very quickly, and constrict noticeably when the light beam strikes the eye.	
	d. Under the influence of certain categories of drugs, the pupil's reaction may be very sluggish, or there may be no visible constriction at all.	Emphasize: We consider the pupil's reaction to be slow if it takes more than one second to reach full constriction.

Aides	Lesson Plan	Instructor Notes
	e. Hold the direct light on the subject's eye for 15 seconds to assess pupil reaction.	
	f. Also check for hippus or rebound dilation during this 15 seconds period.	
	g. When you have completed this process for the left eye, repeat it for the right eye.	Excuse the student volunteer and thank him or her for participating.
	h. Students' initial practice in assessing the pupil's reaction to light.	Instruct the students to work in pairs, taking turns shining the light into each other's eye and observing the pupil's reaction. Remind students to position the penlight so that the beam exactly "fits" the eye socket when the beam is brought directly into the eye. Monitor, coach and critique the students' practice. Allow the practice to continue for only about 2 minutes. Solicit students' comments and questions concerning the eye examinations.
15 Minutes	C. Demonstrations	
	1. Demonstration of Horizontal Gaze Nystagmus.	Select two students to come before the class.
	a. Check for lack of smooth pursuit.	Instruct one student to demonstrate the administration of horizontal gaze nystagmus to the other student.

Aides	Lesson Plan	Instructor Notes
	b. Check for distinct jerking at maximum deviation.	Coach and critique the student administrator's performance. Make sure that the student administrator checks both eyes.
	c. Estimation of onset angle.	When the student administrator has completed the HGN test, instruct the student administrator to draw the student subject's eye to an angle of 35 degrees. Check the accuracy of this estimate, using the template. Excuse the two students and thank them for participating.
	2. Demonstration of Vertical Nystagmus and Lack of Convergence.	Select two other students to come before the class. Instruct one student to check the other for vertical nystagmus. Coach and critique the student administrator's performance. Instruct the second student to check the eyes of the first student for lack of convergence. Coach and critique the student administrator's performance. Excuse the two students and thank them for participating.
	3. Demonstration of pupil size checks and test for reaction to light.	Select two other students to come before the class.
	a. Pupil size estimation under room light.	Instruct one student to check the other's pupils under room light.

Aides	Lesson Plan	Instructor Notes
		Coach and critique the student administrator's performance. Instruct the second student to demonstrate how to perform the dark room checks of pupil size.
	b. Darkroom checks of pupil size. o near total darkness o indirect light o direct light	Coach and critique the student administrator's performance. Point out that assessment of the pupil's reaction to light takes place in conjunction with the direct light check. Excuse the two students and thank them for participating. Solicit students' comments and questions concerning these demonstrations of the eye examinations.
5 Minutes	D. Documentation Procedures	Instruct students to turn to the Standardized Drug Influence Evaluation Form in their manuals.
 **V-8** (Sample Eye Data)	1. A brief examination of the eyes is made during the Preliminary Examination. a. Check for equal pupil size. b. Assessment of tracking ability. c. Initial assessment of Nystagmus.	
	2. The next section of the Form is devoted to the Eye Examinations.	Point out that section of the Form.

Aides	Lesson Plan	Instructor Notes
	a. Horizontal Gaze Nystagmus	Emphasize that all three checks of the HGN test must be documented for each eye.
	b. Vertical Nystagmus	Point out that "yes" implies that vertical nystagmus was observed, "no" implies that it was not observed.
	c. Lack of Convergence	Point out that it will be necessary to diagram the movement of the eyes.
	3. The darkroom eye examinations are documented in a subsequent section of the Form.	Point out the location of that section. Emphasize that all darkroom checks of the eyes must be performed and documented independently for each eye. Solicit students' comments and questions concerning procedures for documenting the eye examinations.
20 Minutes	E. Practice	Instruct students to practice in pairs. Each student will conduct a complete set of eye examinations on his or her partner.
	1. Preliminary eye exams	Students then will "reverse roles".
	a. Check for equal pupil size.	Tell the students to record their estimations of their partners' pupil sizes on the standard Drug Influence Evaluation Form.
	b. Assessment of tracking ability.	Monitor, coach and critique students' practice.

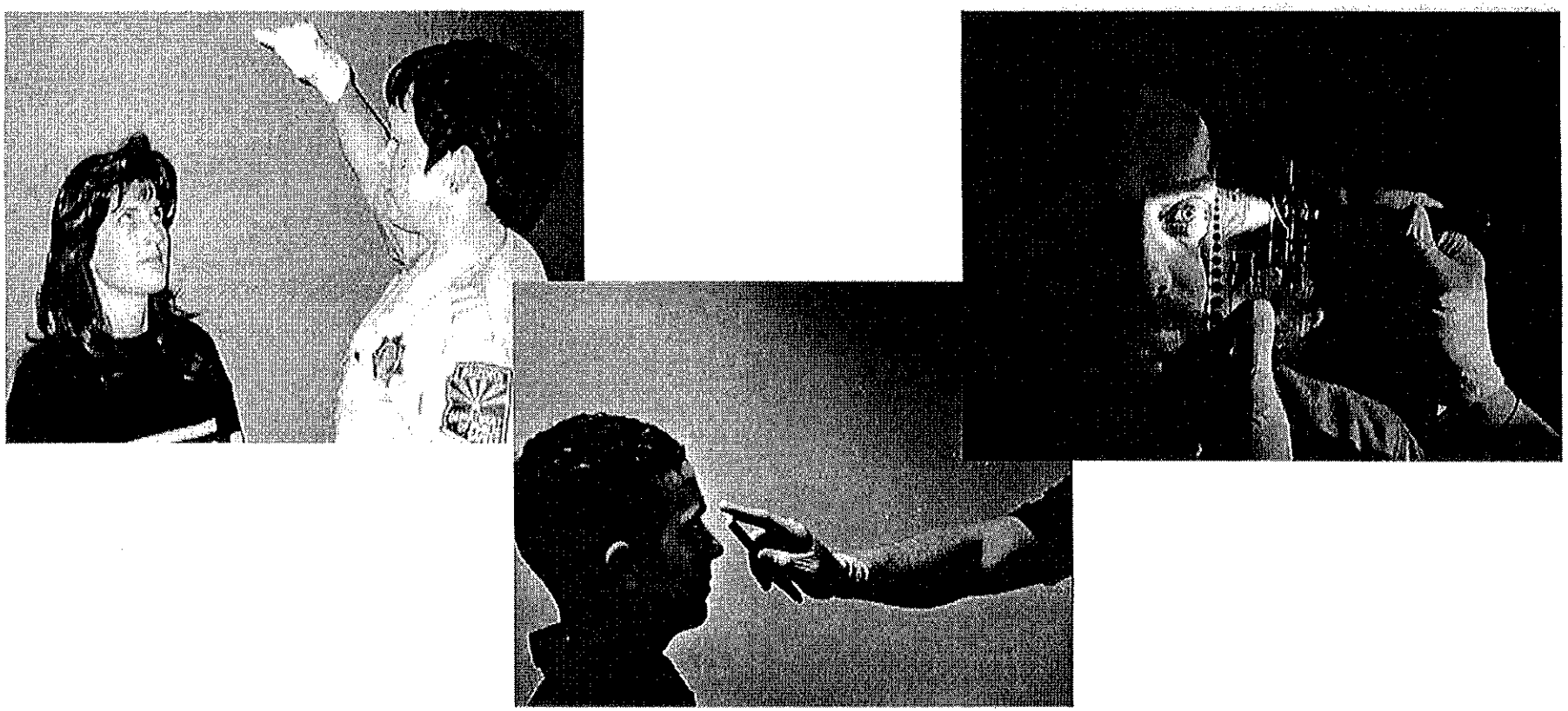
Aides	Lesson Plan	Instructor Notes
	c. Initial estimation of Nystagmus onset angle.	Make sure each student administers a complete series of eye examinations at least once.
	2. Eye exams.	
	a. Horizontal Gaze Nystagmus	
	b. Vertical Nystagmus	
	c. Lack of Convergence	
	3. Pupil Size Estimations a. Room light b. Near total darkness c. Indirect light d. Direct light	NOTE: If possible, the training room should be at least somewhat darkened for this final stage of practice.
	4. Reporting out of Pupil Size Estimations.	Instructor: While the student's practice is still going on, print the matrix at the end of this session on the chalkboard or flip-chart. Tell students that they should refer to the Drug Influence Evaluation forms on which they recorded their partners' pupil sizes. Tell the students that we will tabulate the pupil sizes of everyone in the class, for each of the four lighting conditions. For simplicity, tell the students that we will tabulate the left eye pupil sizes only.
	a. Room light tabulation.	Direct the students' attention to the first column of the matrix.

Aides	Lesson Plan	Instructor Notes
		Say: "Let's concentrate now **only** on the <u>room light</u> estimations." Ask: "How many of you found that your partners had pupils of 2.0mm or less in room light?" (Get a show of hands; count them; print the number in the first box of the first column. Then ask: "How many had partners with a 2.5mm pupil in room light?" (Count the hands and print the number in the 2nd box.) Continue this until you get to the last box in the 1st column: "How many had partners with pupils of 7.5mm or larger?" (Count the hands; print the number.)
	b. Near total darkness tabulation.	Repeat this process for each of the other three lighting conditions.
	c. Indirect light tabulation.	
	d. 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	indirect light	direct light
≤ 2.0				
2.5				
3.0				
3.5				
4.0				
4.5				
5.0				
5.5				
6.0				
6.5				
7.0				
≥ 7.5				

Session V

Eye Examinations



Eye Examinations: Nystagmus, Convergence, Pupil Size, and Reaction to Light

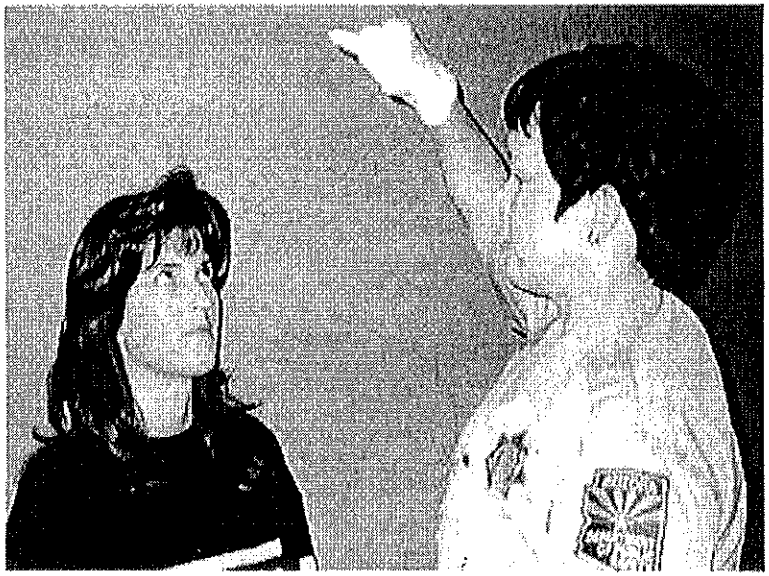
Upon successfully completing this session, the participant will be able to:

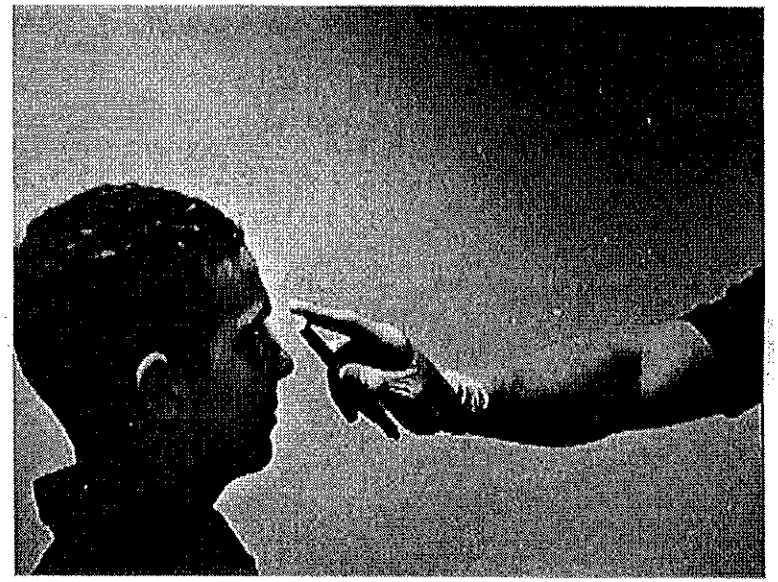
- State the purposes of various eye examinations in the Drug Evaluation and Classification process
- Describe the administrative procedures for the eye examinations

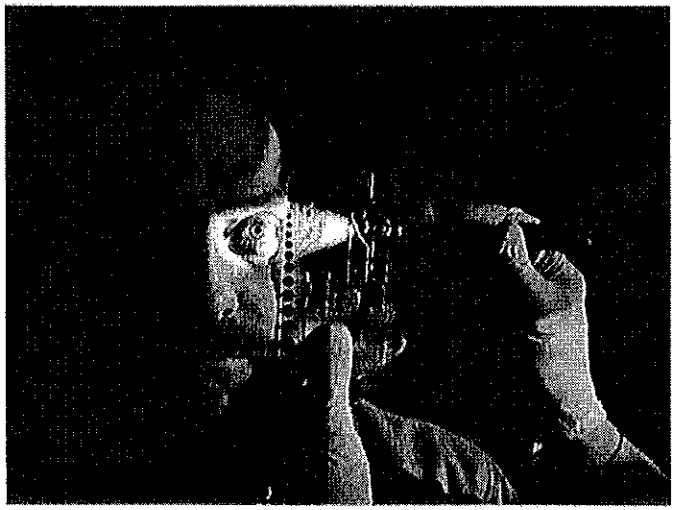
Eye Examinations: Nystagmus, Convergence, Pupil Size, and Reaction to Light (continued)

- Describe the clues of interest in each eye examination
- Conduct the eye examinations and note the clues that come to light
- Prepare complete, clear and accurate records of the eye examinations

The Eye Examinations







"Hippus" and "Rebound"

- Hippus - a rhythmic pulsating of the pupils as they dilate and constrict within fixed limits.

- Rebound - pupils pulsate in size, growing steadily larger on the expansion pulsations.

Three Clues of Horizontal Gaze Nystagmus

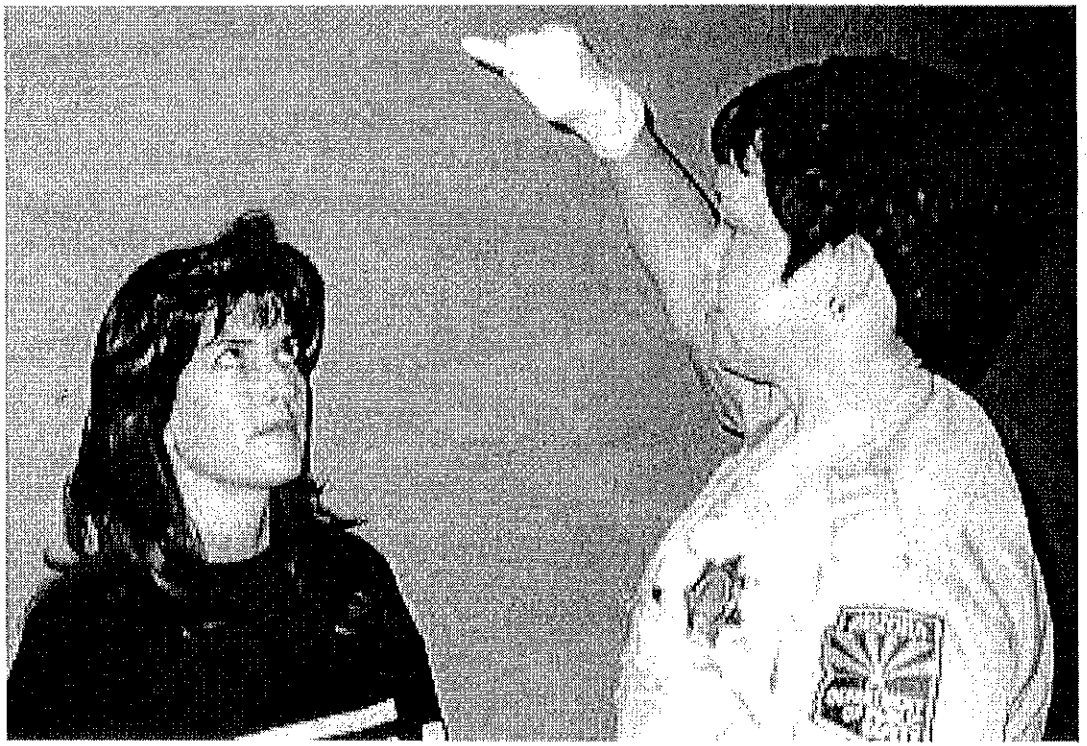
1. Lack of smooth pursuit
2. Distinct nystagmus at maximum deviation
3. Angle of onset of nystagmus

First Clue:
Lack of Smooth Pursuit

Second Clue: Distinct Nystagmus at Maximum Deviation

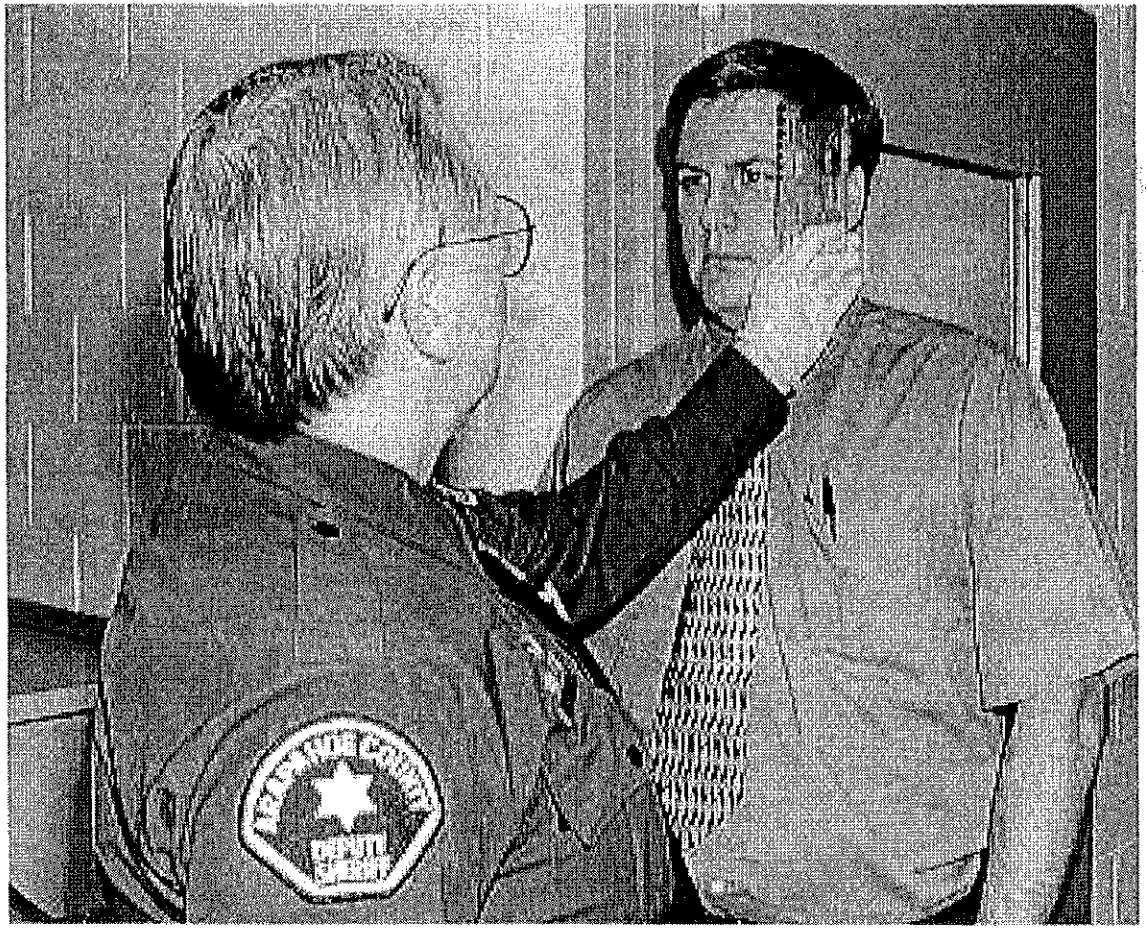
Third Clue:
Angle of Onset of Nystagmus

Vertical Nystagmus



Lack of Convergence

Estimation of Pupil Size



Sample Eye Examination

CORRECTIVE LENS: ☐ None ☑ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft REMOVED	**EYES:** ☐ Normal ☑ Bloodshot ☐ Watery	**BLINDNESS:** ☑ None ☐ R. Eye ☐ L. Eye	**TRACKING:** ☑ Equal ☐ Unequal
PUPIL SIZE: ☑ Equal ☐ Unequal (explain)	**HGN PRESENT:** ☑ Yes ☐ No	**ABLE TO FOLLOW STIMULUS:** ☑ Yes ☐ No	**EYELIDS:** ☐ Normal ☑ Droopy

HGN	RIGHT EYE	LEFT EYE
Lack of Smooth Pursuit	YES	YES
Max. Deviation	YES	YES
Angle of Onset	35°	35°

VERTICAL NYSTAGMUS? ☐ Yes ☑ No

CONVERGENCE

Right Eye Left Eye

PUPIL SIZE	ROOM LIGHT	DARKNESS	INDIRECT	DIRECT
Left Eye	5.5	7.5	6.5	5.0
Right Eye	5.5	7.5	6.5	5.0

Two Hours

SESSION VI

PHYSIOLOGY AND DRUGS: AN OVERVIEW

Two Hours

SESSION VI

PHYSIOLOGY AND DRUGS: AN OVERVIEW

SESSION VI PHYSIOLOGY AND DRUGS: AN OVERVIEW

Upon successfully completing this session, the participant 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.).
- 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 Section.

Content Segments

A. Body Systems

B. Body Systems and Body Functions Relevant to Drug Evaluations

C. How Drugs Work

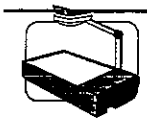
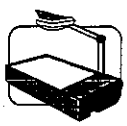
D. Physiologic Signs and Symptoms of Drugs or Medical Impairment

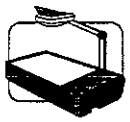
E. Medical Conditions

F. Summary

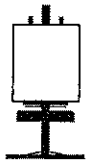
Learning Activities

- Instructor Led Presentations
- Reading Assignments

Aides	Lesson Plan	Instructor Notes
 **VI-0A&B** (Session Objectives)	PHYSIOLOGY AND DRUGS: AN OVERVIEW	Total Lesson Time: Approximately 120 Minutes Briefly review the content, objectives and activities of this session.
 **5 Minutes**	A. Introduction	
	1. Before we can understand how drugs work we must have a <u>basic</u> understanding of how the body works.	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.
	2. We will review general concepts of how the body functions in a "normal" or "standard" human.	Point out that all human beings are different and a "normal" or "standard" human does not exist. However, experience has produced a range of normal values that can be used for comparison purposes.
	3. We will briefly review the chief functions of the body systems.	
 **VI-1**	4. Primary focus will be on the systems or component parts of those systems that are examined during the drug evaluation.	o Central Nervous System o The Eyes o Blood Pressure and Pulse o Body Temperature o Balance and Coordination

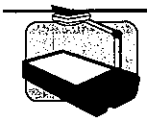
Aides	Lesson Plan	Instructor Notes
 **15 Minutes**	B. Human Physiology	
 **VI-2** Definition	1. Physiology is the study of the functions of living organisms and their parts.	
 **VI-3A** ("Murders, Inc.")	2. A convenient way of discussing human physiology is to list the **ten major systems** of the body.	
	a. The phrase "Murders, Inc." helps us remember the names of the ten systems.	
 **VI-3B** ("The Ten Systems")	b. Each letter stands for the name of one system.	Selectively reveal the systems as you discuss each of them.
	3. M stands for the MUSCULAR SYSTEM.	<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.
	a. The body has three different kinds of muscles.	
	(1) the heart, or cardiac muscle.	
	(2) smooth muscles, which control the body's involuntary operations.	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.
	(3) striated muscles, which carry out our voluntary movements.	

Aides	Lesson Plan	Instructor Notes
	b. All three types of muscles are examined at various stages of the drug influence evaluation.	
	4. U is for the URINARY SYSTEM.	Point out 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.
	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.	
	b. Kidneys filter waste or harmful products, such as drugs and their metabolites, from the blood, and dump these waste products into the bladder.	
	5. The first R in "Murders, Inc." stands for the RESPIRATORY SYSTEM.	
	a. The major parts of the Respiratory System are the lungs and the diaphragm.	
	b. The diaphragm is a smooth muscle that draws the air into the lungs and forces it out.	Point out that some drugs cause the user to breathe slowly and shallowly, while others cause rapid breathing.
	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.	Point out that important clues of drug use, i.e., odors of alcohol beverages, marijuana, chemicals, etc. may be present on a suspect's breath.

Aides	Lesson Plan	Instructor Notes
	6. D stands for the DIGESTIVE SYSTEM.	
	a. Major components of this system are the tongue, teeth, esophagus, stomach, intestines, liver and pancreas.	
	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.	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.
	7. E is for the ENDOCRINE SYSTEM.	
	a. The Endocrine system is made up of a number of different glands, that secrete **hormones**.	INSTRUCTOR, FOR YOUR INFORMATION: 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.
	b. Hormones are complex chemicals that travel through the blood stream and that control or regulate certain body processes.	Print **HORMONES** on the chalkboard or flip-chart.
	c. Some drugs can mimic the effects of certain hormones, or can react with the hormones in ways that alter the hormones' effects.	
	8. The second R in "Murders, Inc." stands for the REPRODUCTIVE SYSTEM.	

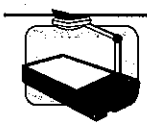
Aides	Lesson Plan	Instructor Notes
	9. S is for the SKELETAL SYSTEM. a. Consists of bones, cartilage and ligaments. b. The Skeletal System provides support to the body, permits movement, and forms blood cells.	Point out that the Reproductive and Skeletal Systems are the only major components of physiology and that are not directly involved in the drug influence evaluation.
	10. The I in "Inc" stands for the INTEGUMENTARY SYSTEM. a. Consists of the skin, hair, finger and toe nails, and accessory structures. 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.	Point out that DREs examine the skin for hypodermic injection sites, and for sweating, clamminess, and temperature.
	11. N is for the NERVOUS SYSTEM. a. This system consists of the brain, the brain stem, the spinal cord and the nerves. b. Nerves keep the brain informed of changes in the body's external and internal environments. c. Nerves also carry messages from the brain to the body's muscles, tissues and organs.	EMPHASIZE that the Nervous System is one of the most important components of physiology, as far as the drug influence evaluation is concerned. CLARIFICATION: Nerves carry messages to the brain from the sense organs (eyes, ears, nose, etc., and also from pain sensors). CLARIFICATION: The brain uses nerves to send messages commanding the heart to beat, the fingers to move, the pupils to dilate, etc.

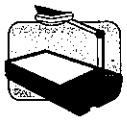
Aides	Lesson Plan	Instructor Notes
	d. The nervous system controls, coordinates and integrates all physiological processes, so that normal body functions can be maintained.	
	12. C is for the CIRCULATORY SYSTEM.	Point out that this is another very important component of physiology, as far as the drug influence evaluation is concerned.
	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.	
	b. Blood is the body's primary transport mechanism: it carries food, water, oxygen, hormones, antibodies, etc. to the body's tissues and organs.	
	c. Blood is also primarily responsible for carrying heat throughout the body.	
	d. And, blood is the main transport mechanism for bringing drugs to the brain.	
 **VI-3C** (Interrelated Body Systems)	e. The heart, of course, pumps the blood, and causes it to circulate through the body.	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.
	13. Homeostasis	Homeostasis is the dynamic balance, or steady state, involving levels of salts, water, sugars and other materials in the body's fluids.
	a. Human body is exposed to constantly changing external environment.	

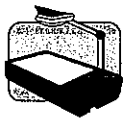
Aides	Lesson Plan	Instructor Notes
 **VI-3D** (Homeostasis).	b. Changes are neutralized by the internal environment - the blood. c. Oxygen, foods, water and other substances are constantly leaving body fluids to enter cells, while carbon dioxide and other wastes are leaving the cells to enter these fluids... d. Yet, the chemical composition of these fluids remains within very narrow limits. e. This phenomenon is called homeostasis.	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. Drugs interfere with the homeostatic mechanisms and produce signs and symptoms that can be recognized by a trained DRE.
 **45 Minutes**	C. Major Systems and Body Functions of Concern in Drug Evaluations 1. Heart and circulatory system.	
 **VI-4** Basic plan of the circulatory system.	a. Circulation is a closed system, round which blood is propelled by contractions of the heart.	

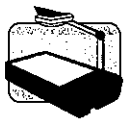
Aides	Lesson Plan	Instructor Notes
	b. Blood is driven into arteries, arteries divide into smaller and smaller branches and finally into meshwork of fine capillaries which pervade body tissues.	Point out that arteries constrict to aid distribution of blood.
	c. Meshwork joins up again to form small veins which become larger trunks as they travel centrally towards the heart.	Point out that blood does not come into direct contact with the cells, but rather stays in the blood vessels.
	d. There are two separate circulation systems:	
	(1) A systemic circulation concerned with the body as a whole and driven by the left side of the heart.	
	(2) A pulmonary circulation concerned with passage of blood through the lungs and driven by the right side of the heart.	
 **VI-5** Circulatory System	e. The heart acts as two pumps:	
	(1) Left side pumps blood through the aorta and the arteries to the tissues.	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.
	(2) Blood, after passing through the tissues, returns via the veins to the right side.	

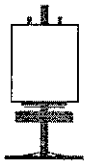
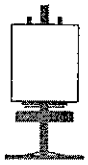
Aides	Lesson Plan	Instructor Notes
	(3) Right side pumps blood through the pulmonary artery to the lungs and returns it to the left side of the heart again via the four pulmonary veins.	Consists of the right atrium and ventricle. Note: The Pulmonary Artery is the only artery that carries de-oxygenated 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 rich in oxygen; all other veins carry blood depleted of oxygen back to the heart.
	f. The normal heart continues to beat regularly and continuously, with a rest interval never longer than a fraction of a second.	
	(1) Heart rate is the number of beats per minute.	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.
	(2) Pulse rate is the number of pulsations per minute.	For the DRE Program, the normal range is 60-90 pulsations per minute. Point out that some people may exhibit irregular (or arrhythmic) heart beats, i.e., where the interval between pulses varies.

Aides	Lesson Plan	Instructor Notes
 VI-6	(3) Blood pressure (BP) is the force of the blood circulating in the arteries.	
	(4) BP is categorized as systolic or diastolic BP.	Ask students to define "systolic" and "diastolic".
	(5) Systolic pressure is maximum force that occurs during contraction.	
	(6) Diastolic pressure represents the minimum force that occurs when the heart relaxes.	Point out that physical conditioning can also affect blood pressure and pulse rate.
	(7) Both systolic and diastolic pressures are measured and is recorded as follows: 120 systolic 80 diastolic	Demonstrate proper method of recording on flip chart or chalkboard. Point out that the normal range of BP varies widely based on a number of factors, including age. The normal range of systolic pressure is 120 to 140. The normal range of diastolic is 70 to 90.
	2. Control systems	
	a. The functions of the organs of the body are controlled in two ways:	
	(1) One, by sending "chemical messengers" known as hormones via the blood stream from an endocrine gland where they are produced.	Remind students that the hormones modify the activity of specific organs.

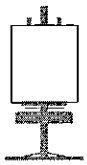
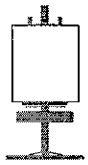
Aides	Lesson Plan	Instructor Notes
	(2) Second system of control is by means of the nervous system.	
 **VI-7** (Nerve Concept)	b. A Simplified Concept of a <u>nerve</u>.	
	(1) The nerves that carry messages to and from the brain often are pictured as "wires" that carry electrical signals.	CLARIFICATION: Nerves are often pictured as telephone or telegraph wires.
	(2) A more accurate, but still simplified concept would envision a nerve as a series of <u>broken</u> wire segments, with the segments separated by short spaces, or <u>gaps</u>.	
 **VI-7**	(3) We can imagine messages running along the "wire segments" in much the same manner that electrical impulses run along telephone wires.	Point to a "wire segment".
 **VI-7**	(4) When the message reaches the end of the "wire segment", it triggers the release of chemicals that flow across gap, and contact the next "wire segment".	Point to the close up of the gap.
	(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.	

Aides	Lesson Plan	Instructor Notes
	(6) At that gap, the message again triggers the release of chemicals that flow across to the next "wire segment", and the process continues.	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. Solicit students' questions about this concept.
 **VI-8** (How a neurotransmitter works)	c. In our simple model of nerves, each "wire segment" corresponds to a nerve cell, called a <u>neuron</u>.	
	d. The chemical that flows across the gaps separating neurons is called a <u>neurotransmitter</u>.	CLARIFICATION: neurotransmitter are the body's <u>chemical messengers</u>.
	e. The body has a number of different neurotransmitter; each carries a different chemical message.	
 Point out the cell body, the axon and the dendrite on **VI-8A**.	f. Each neuron, or "wire segment" has three main parts: (1) the cell body. (2) the axon. (3) the dendrite.	
	g. The <u>axon</u> is the part of the neuron that sends out the neurotransmitter, or chemical messenger.	
	h. The dendrite is the part that receives the neurotransmitter.	

Aides	Lesson Plan	Instructor Notes
 **VI-9** (Classification of Nerves)	i. The gap between two neurons is called a <u>synapse</u>, or <u>synaptic gap</u>. 3. Classifications of nerves. a. Some nerves carry messages <u>away from</u> the brain, to the body's muscles and organs. (1) These are called <u>Motor</u>, or <u>efferent</u> nerves. (2) The brain uses motor nerves to send commands to the heart to beat, the lungs to 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 <u>Sensory</u>, or <u>afferent</u> 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. <u>A Fundamental Notion</u>: If something interferes with the messages the brain sends along the <u>motor</u> nerves, the brain's control over the heart, the lungs, the muscles and other organs will be distorted.	Solicit students' questions about nerve cells (neurons).

Aides	Lesson Plan	Instructor Notes
	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.	Point out that, basically, this is how drugs work: they interfere with transmission or reception of the messages that travel along nerves.
 **VI-10** (Motor Nerves)	e. Focus on the Motor nerves. There are two sub-systems of motor nerves.	
	(1) The voluntary nerves send messages to the muscles that we consciously control.	On the chalkboard, 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.
	(2) The autonomic nerves send messages to the muscles and organs that we do not consciously control.	
	f. The Autonomic Sub-system divides into two groups.	Write "Sympathetic" at the end of one line, "Parasympathetic" at the end of the other.
	(1) The Sympathetic nerves command the body to react in response to fear, stress, excitement, etc.	CLARIFICATION: Sympathetic nerves control the body's "fight or flight" responses. EXAMPLES: Sympathetic nerves carry the messages that cause: o blood pressure to elevate o pupils to dilate o sweat glands to activate o hair to stand on end o heartbeat to increase & strengthen

Aides	Lesson Plan	Instructor Notes
		o blood vessels of the skin to constrict o the walls of the hollow viscera to relax (inhibiting digestion)
	(2) Parasympathetic nerves carry messages that produce relaxed and tranquil activities.	EXAMPLES: Parasympathetic nerves carry messages that cause: o pupils to constrict o heartbeat to slow o peripheral blood vessels to dilate o blood pressure to decrease o digestion to be facilitated
	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 neurotransmitter: 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.	Write "Sympathomimetic" on the chalkboard or flip chart.
	(1) Sympathomimetic drugs artificially cause the transmission of messages that produce elevated blood pressure, dilated pupils, etc.	Ask students to name a category of drugs that would be considered sympathomimetic.

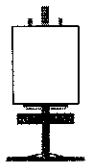
Aides	Lesson Plan	Instructor Notes
	(2) Examples: CNS Stimulants, Hallucinogens, and to some extent PCP and Cannabis.	
	j. Drugs that mimic neurotransmitters associated with parasympathetic nerves are called <u>parasympathomimetic</u> drugs.	Write "Parasympathomimetic" on the chalkboard or flip chart.
	(1) Parasympathomimetic drugs artificially cause the transmission of messages that produce lowered blood pressure, drowsiness, etc.	Ask students to name a drug category that would be considered parasympathomimetic.
	(2) Examples: Narcotic Analgesics and CNS Depressants.	
	4. Although there are more than 100 chemicals in the brain, only about two dozen probably are true neurotransmitter.	
	a. Among the primary neurotransmitter that have been identified are:	Write these neurotransmitter on the chalkboard or flip chart.
	o Norepinephrine (also called Noradrenaline)	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.
	o Acetylcholine	Acetylcholine plays a role in muscle control, and affects neuromuscular or myoneural junctions.

Aides	Lesson Plan	Instructor Notes
	o Dopamine	Dopamine plays a role in mood control and is used in treating Parkinson Disease.
	o Serotonin	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.
	o Gama Amino Butric Acid (Abbreviated GABA)	GABA inhibits various neurotransmitter and also causes a release of growth hormones.
	o Endorphins and Enkephalins	These are the body's natural pain relievers.
	b. There are many drugs that artificially induce the effects of neurotransmitter and hormones.	Solicit students' questions and comments about nerves and neurotransmitter.
30 Minutes	D. How Drugs Work	
	1. In very simple terms, drugs usually work by artificially creating natural body reactions generally associated with the work of neurotransmitter and hormones.	
	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 neurotransmitter and hormones.	Ask students: What drug do many people take to overcome artificially the drowsiness they feel in the morning?

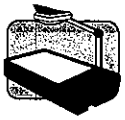
Aides	Lesson Plan	Instructor Notes
	b. Large, abusive doses of drugs may produce greatly exaggerated simulations of the natural action of hormones and neurotransmitters, sometimes with disastrous results.	Example: Cocaine (a sympathomimetic drug) may artificially create a message commanding the heart to beat so rapidly that cardiac arrest results.
	2. When a person takes a drug and artificially simulates the natural action of hormones and neurotransmitters, the body's dynamic balance is disrupted.	Remind students that the body struggles to maintain homeostasis, the dynamic balance of salts, sugars and other substances.
	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.	
	(1) Example #1: If a person takes 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.	
	(2) Example #2: If a person takes 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.	

Aides	Lesson Plan	Instructor Notes
	(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 <u>wide awake</u>, unable to fall asleep again. What has happened is that the alcohol has worn off, but the natural stimulants the body produced to counteract the alcohol are still around.
	c. We call this situation <u>being on the "downside" of the drug</u>.	Write "Downside of the Drug" on the chalkboard or flip chart.

Aides	Lesson Plan	Instructor Notes
	(1) It is not uncommon for a DRE to encounter someone on the "downside".	
		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.
	(2) The concept of "Downside" will be especially important to us when we discuss the effects of drug combinations.	DRAW this diagram on the chalkboard or flip-chart: DREs <u>do not</u> classify a subject as being "under the influence" of the downside of a drug. Solicit students' questions about <u>Downside</u>.
	3. Another interesting effect that drugs can produce is called <u>Negative Feedback</u>.	Write "Negative Feedback" on the chalkboard or flip chart.
	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.	Write "The Body Quits Producing The Natural Chemicals" on the chalkboard or flip chart.

Aides	Lesson Plan	Instructor Notes
	d. One result of this may be <u>increased tolerance</u> to the drug: since the body isn't producing its own natural chemicals, it can more easily stand the drug.	Write "Increased Tolerance" on the chalkboard or flip chart. Emphasize: Habitual users of drugs may develop <u>tolerance</u> to the drug. As a result, they may exhibit relatively little evidence of impairment on the psychophysical tests. Even <u>tolerant</u> drug users, when impaired, usually exhibit clinical evidence. (i.e. in the vital signs and eye signs - such as HGN)
 **VI-10A** (Tolerance)		
	e. Another result may be <u>physical dependence</u>, or addiction.	Write "Physical Dependence" on the chalkboard or flip chart.
	f. Example of <u>Negative Feedback</u>: When people regularly use heroin, cocaine or marijuana, their bodies may cease producing the neurotransmitter and hormones known to be crucial for proper pain relief, stress reduction, mental stability and motivation.	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.
	4. Why do people take drugs?	Pose the questions to the class. Solicit responses.
	a. In simplest terms, people take drugs because they like the feelings the drugs produce.	

Aides	Lesson Plan	Instructor Notes
	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 "Metabolite" on the chalkboard or flip chart. Instructor, for your 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 complex 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.

Aides	Lesson Plan	Instructor Notes
	b. The body uses chemical reactions to break down the drug, and ultimately to eliminate it.	Example: When we drink alcohol, we initiate a series of chemical reactions that ultimately transform the alcohol into harmless carbon dioxide and water.
	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.	Solicit students' questions and comments about how drugs work.
 **15 Minutes**	E. Medical Conditions	
  **VI-11** (Medical Conditions)	1. Certain medical conditions or injuries may cause signs and symptoms similar to those of drug impairment.	List these conditions on the chalkboard or flip chart.
	a. Head Trauma	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.

Aides	Lesson Plan	Instructor Notes
	b. Stroke	Point out 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.
	c. Diabetes Insulin shock (taking too much insulin) can produce tremors, increased blood pressure, rapid respiration, lack of coordination, headache, confusion and seizures.	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.
	d. Conjunctivitis	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.
	e. Shock	A shock victim may be dazed, uncoordinated, non-responsive.
	f. Multiple Sclerosis, and similar conditions	Multiple Sclerosis 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 face or extremities, weakness, double vision, ataxia, etc.
	g. Carbon Monoxide poisoning	

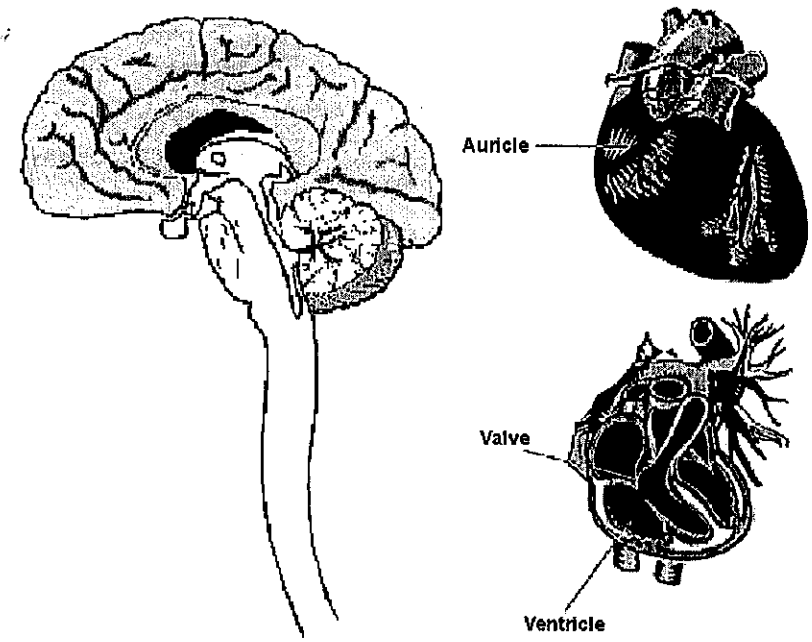
Aides	Lesson Plan	Instructor Notes
	h. Seizures i. Endocrine disorders j. Neurological conditions k. Psychiatric conditions l. Infections	
	2. Normal conditions can affect vital signs. a. Exercise b. Excitement c. Fear d. Anxiety e. Depression f. Other	Review physiologic changes that may be mistaken 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.
	3. Point out that often times signs and symptoms can be contradictory.	
	a. Drug combinations may have an additive effect.	Total effect is greater that the sum of the effects taken independently.
	b. Drug combinations may cause unexpected effects.	For example, a CNS stimulant/ CNS depressant combination may cause the suspect to look and act like a "wide awake drunk".
	c. Drug combinations may be used to mask symptoms.	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.

Aides	Lesson Plan	Instructor Notes
	d. Misinterpretation of symptoms of disease or injury in combination with consumption of alcohol.	Suspect alcohol, however, impairment is not consistent with BAC.
 **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.	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 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 ___."

Aides	Lesson Plan	Instructor Notes
	b. The body maintains homeostasis (equilibrium) by constantly adjusting to changes in the external and internal environment:	Point out that body functions as a total unit in an integrated and coordinated manner.
	(1) When drugs are introduced into the body this process comes into play.	
	(2) When drugs interact in the body they tend to:	
	o speed things up, or	Point out that this is a very simplistic overview of how drugs work.
	o slow things down, or	
	o confuse signals, or	
	o block signals, or	
	o some combination of the above.	
	(3) The effects of drugs can be detected and/or observed in the drug evaluation.	
	2. Drug evaluations	
	a. Detailed instructions on procedures and expected results will be covered in following sessions.	Solicit and answer students' questions.
 **VI-12** (Physiological Pursuit)	3. Physiological Pursuit	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.

Session VI

Physiology and Drugs: An Overview



Physiology and Drugs: An Overview

Upon successfully completing this session, the participant 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.)

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 ate the end of this section

Bodily Functions Examined During Drug Evaluation

- Central nervous system
- The eyes
- Blood pressure and pulse
- Balance and coordination
- Body temperature

Physiology:

The study of the functions of living organisms and their parts

Murders, Inc.

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

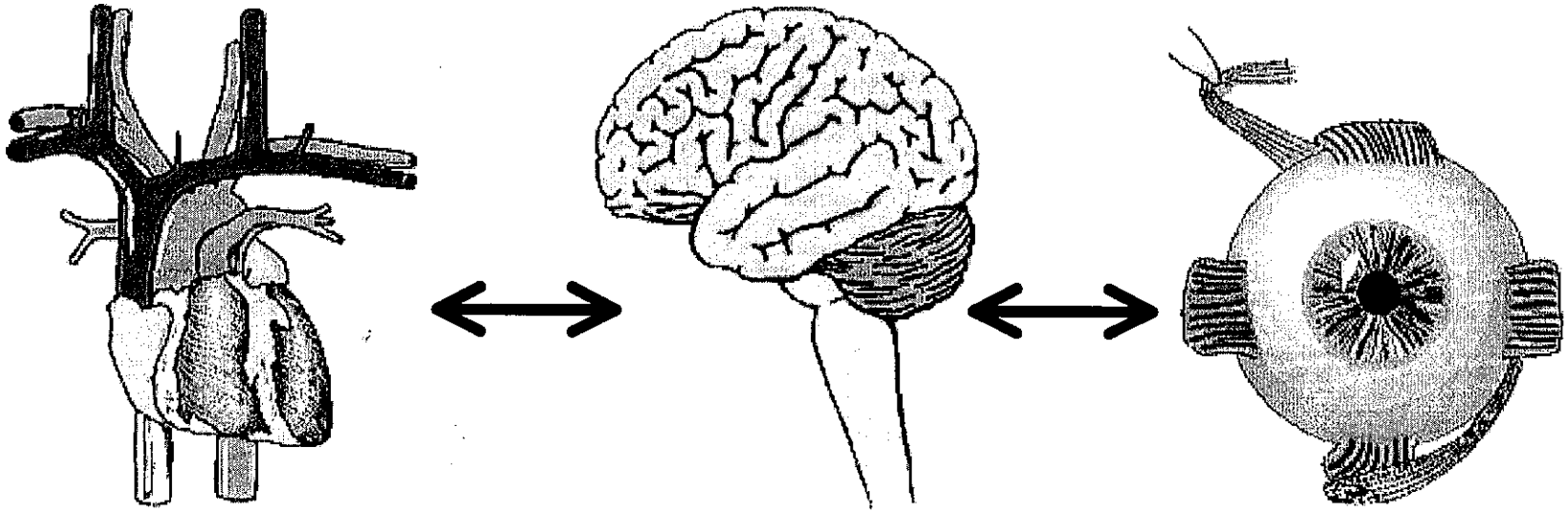
I is for Integumentary System

N is for Nervous System*

C is for Circulatory System*

***For DRE officers, these are key systems**

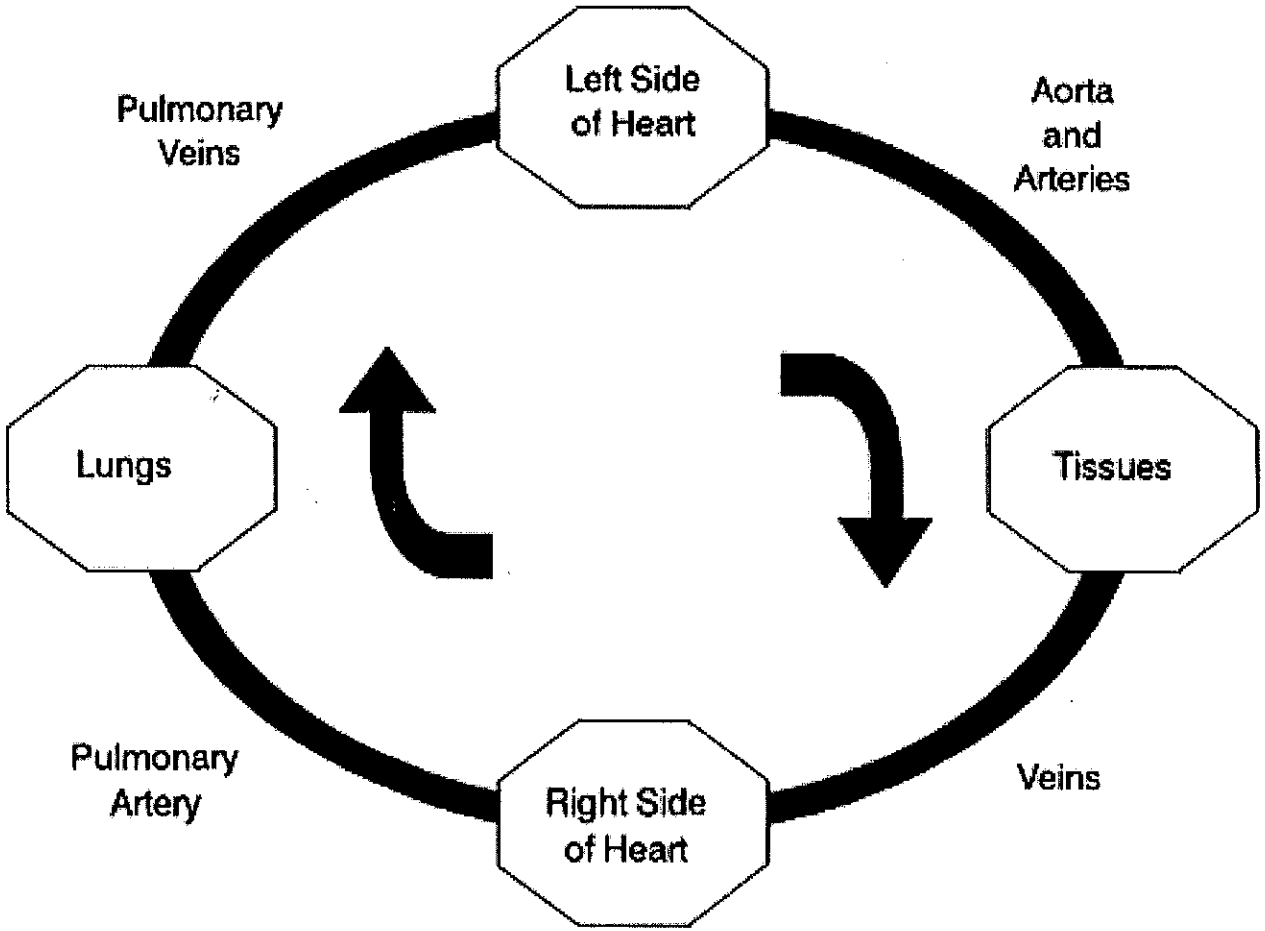
Interrelated Body Systems



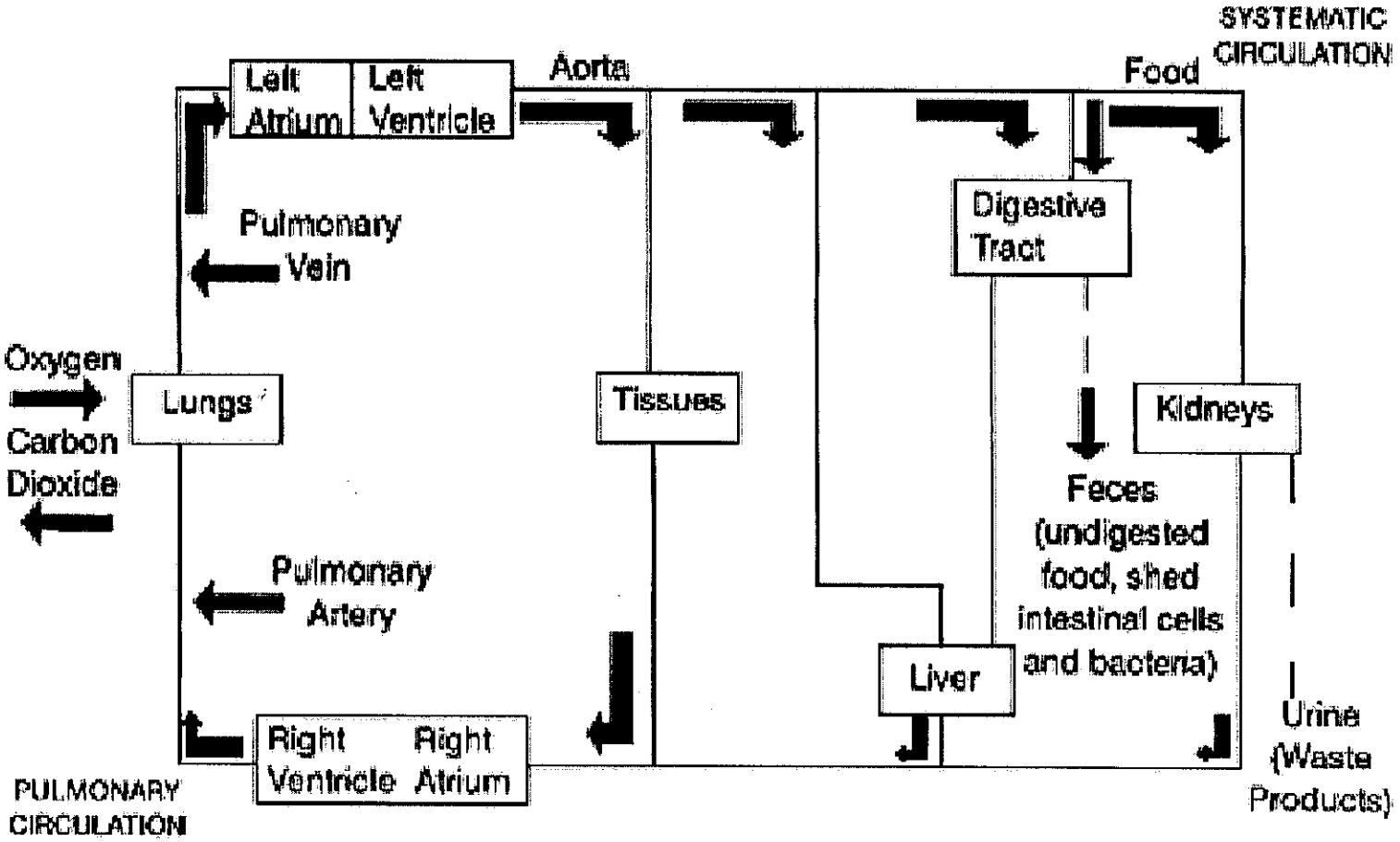
Homeostasis:

Dynamic balance or steady state involving levels of salts, water, sugars and other material in the body's fluids

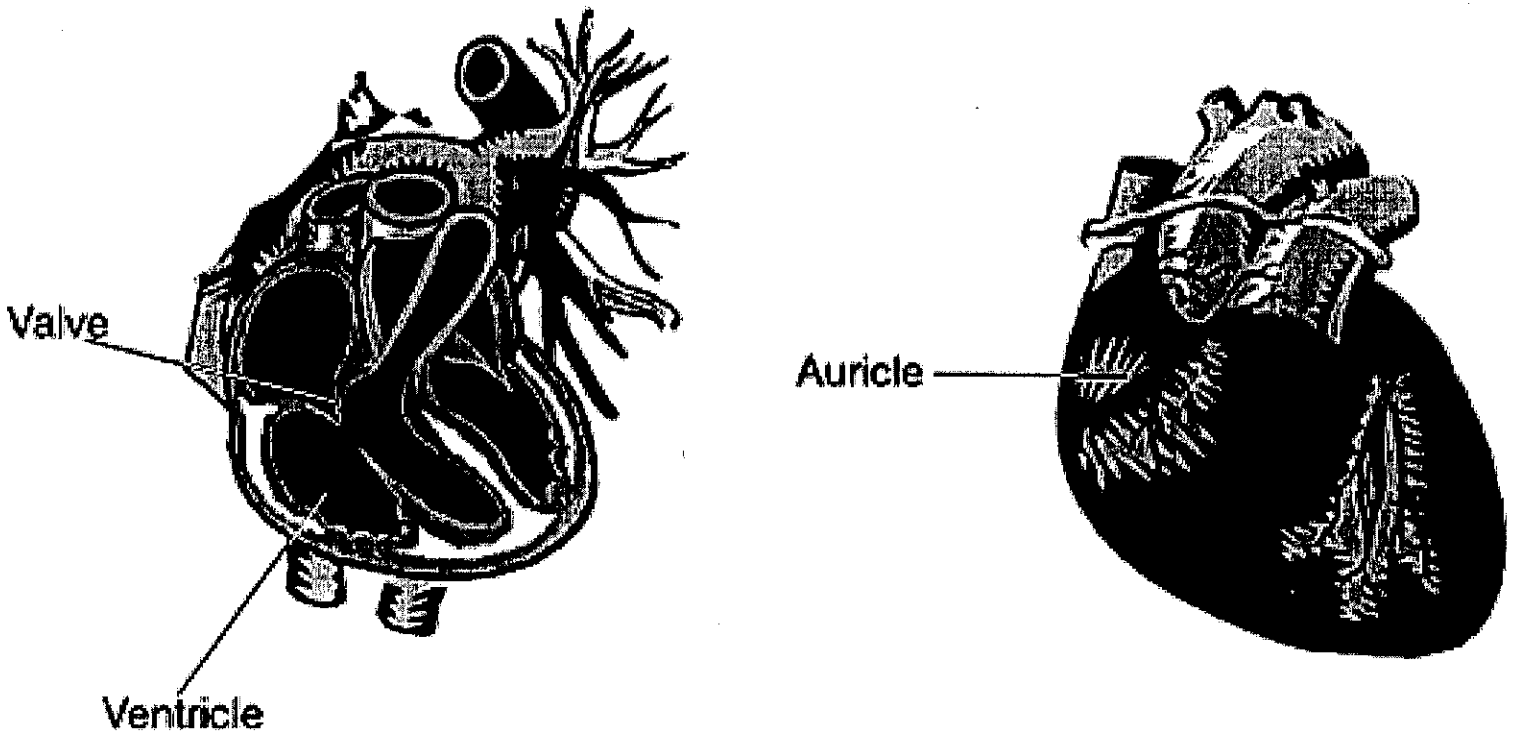
Basic Plan of the Circulatory System



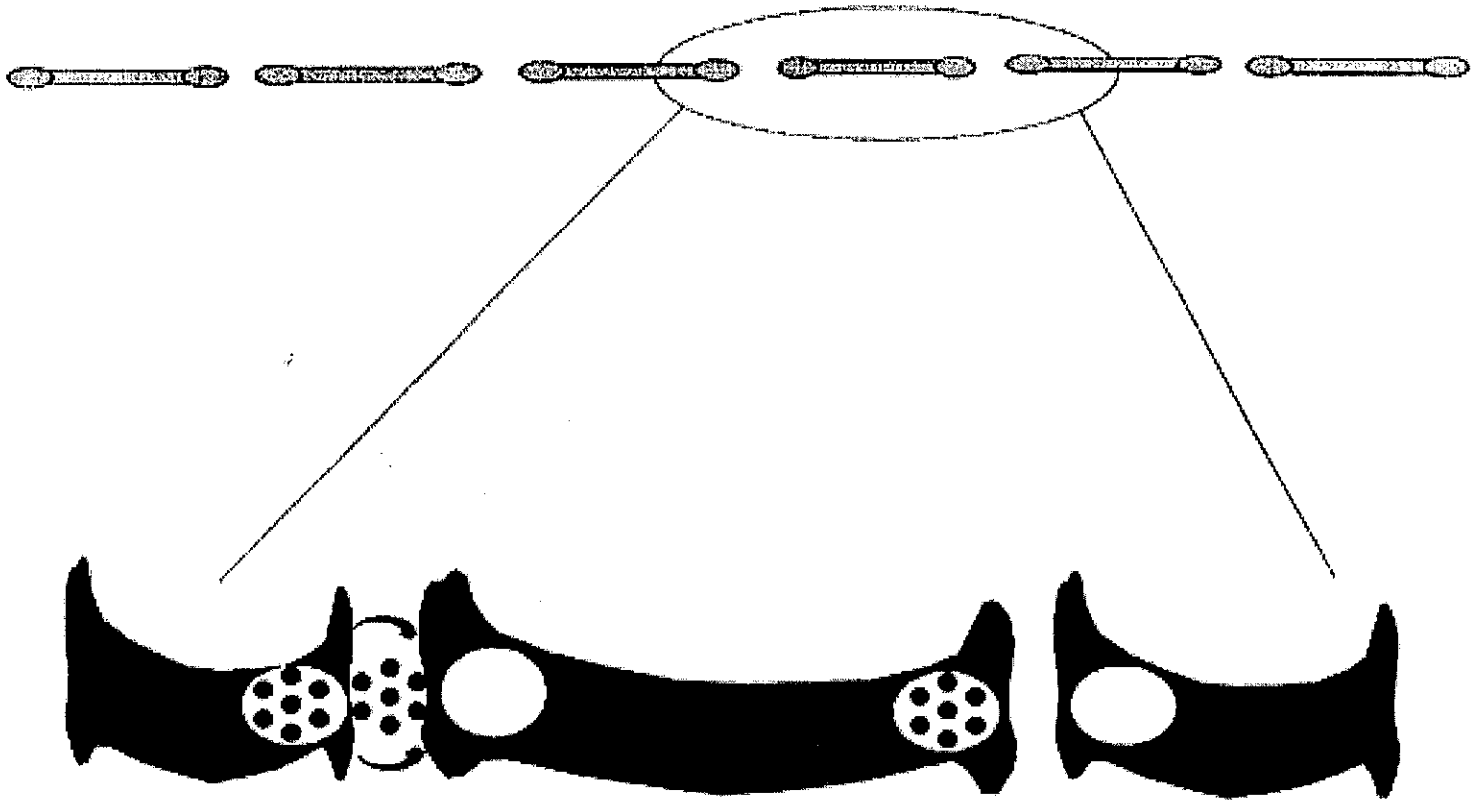
Circulatory System



The Heart



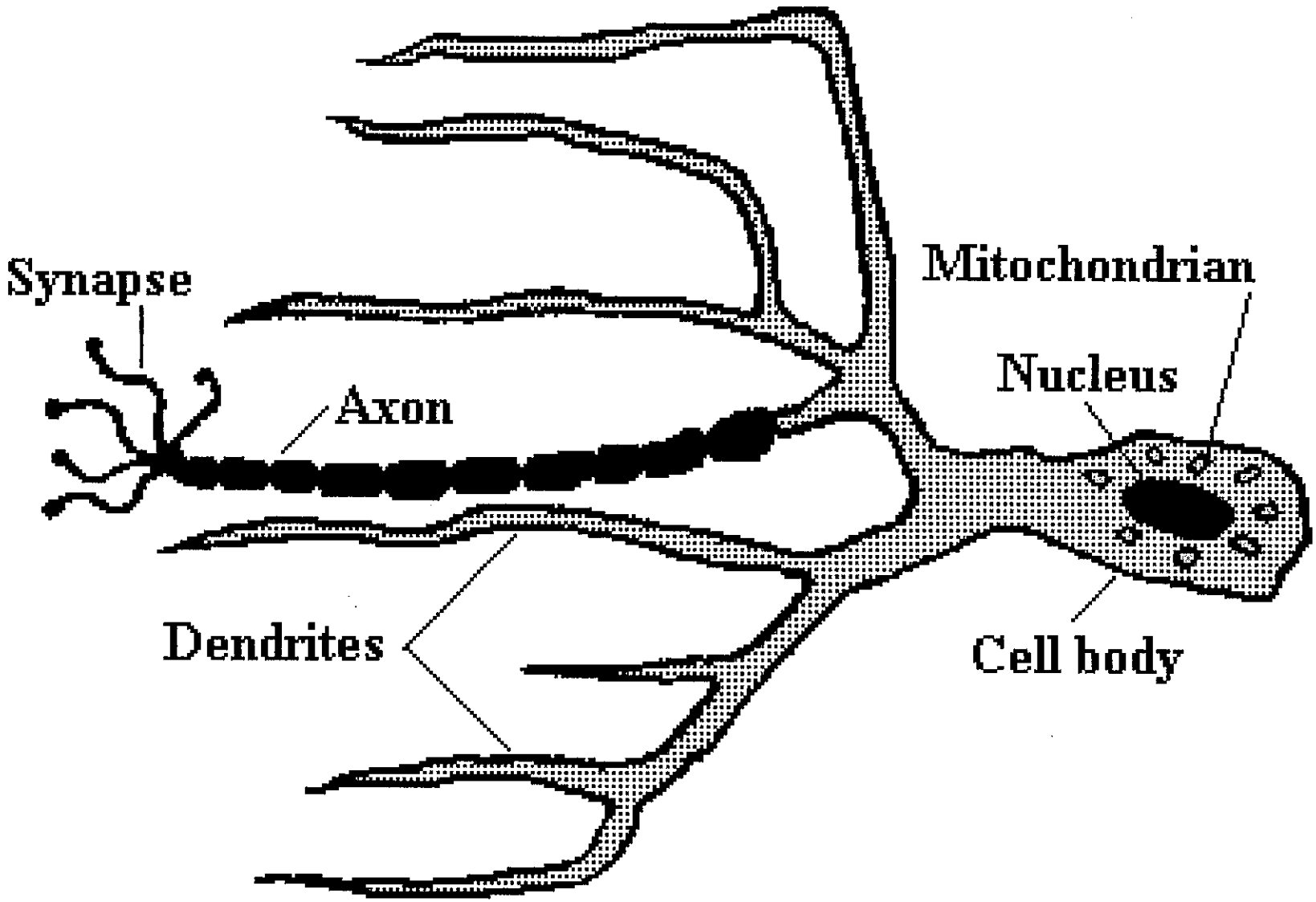
A Simple Concept of a Nerve



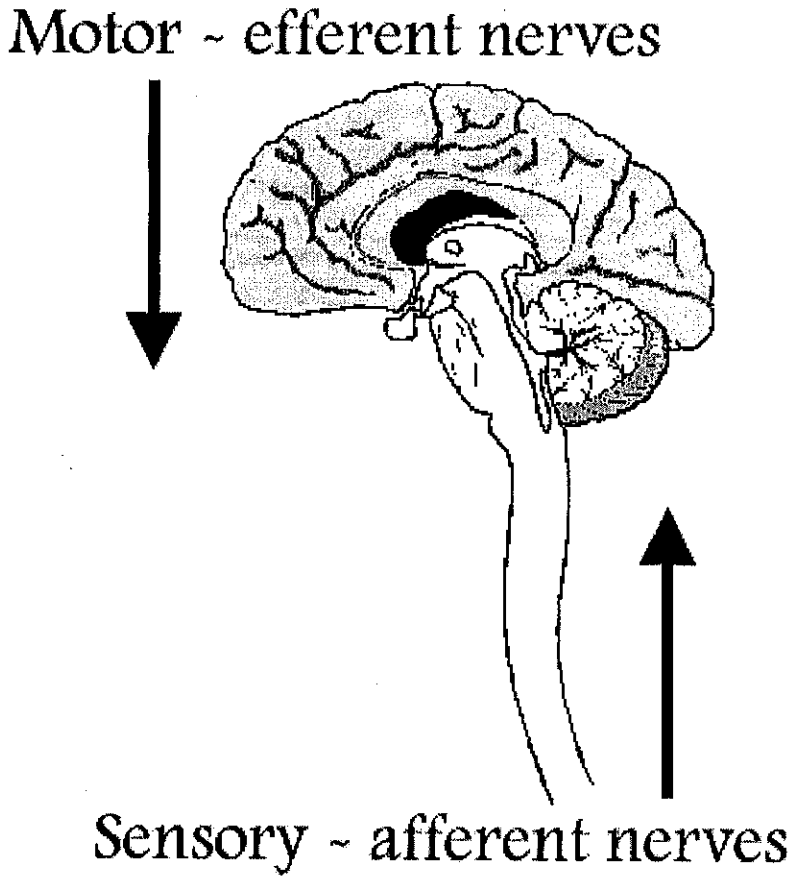
How a Neurotransmitter Works

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


Synapse
Axon
Dendrites
Mitochondrian
Nucleus
Cell body

Classification of Nerves



Motor Nerves

- Voluntary
- Autonomic

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.).

Medical Conditions

- Head Trauma
- Stroke
- Diabetes
- Conjunctivitis
- Shock
- Multiple Sclerosis, and similar conditions

Physiological Pursuit

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 flipchart or chalkboard, mark as follows:

	Score	
Questions	Home	Visitor
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. Tape the overhead with the questions to the overhead projector.

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 stars 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. <u>"No coaching from the audience."</u>

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 by releasing hormones into the bloodstream. DRE's should never write a report stating the suspect was under the influence of the "downside" 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 fit into receptor sites on the dendrite and cause 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.

Two Hours

SESSION VII

EXAMINATION OF VITAL SIGNS

SESSION VII EXAMINATION OF VITAL SIGNS

Upon successfully completing this session, the participant will be able to:

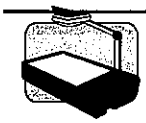
- Explain the purposes of the various vital signs examinations in the drug evaluation and classification process.
- Explain the administrative procedures for these examinations.
- Explain the cues obtained from these examinations.
- Document the examinations of vital signs accurately and completely.
- Correctly answer the "topics for study" at the end of this Section.

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

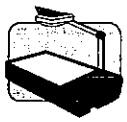
Aides	Lesson Plan	Instructor Notes
	EXAMINATIONS OF VITAL SIGNS	Total Lesson Time: Approximately 120 Minutes Session title on wall chart.
 **VII-0** (Session Objectives)		Briefly review the content, objectives and activities of this session.
 **5 Minutes**	A. Purposes of the Examinations	
	1. The Vital Signs that are relevant to the Drug Evaluation and Classification Process include:	
	a. Pulse rate b. Blood pressure c. Temperature	<u>Point out</u> these vital signs on the wall chart.
	2. Different types of drugs affect these vital signs in different ways.	
	a. Certain drugs tend to "speed up" the body and <u>elevate</u> these vital signs.	<u>Clarification</u> o pulse may quicken o blood pressure may rise o temperature may rise
	b. Other drugs tend to "slow down" the body and <u>lower</u> these vital signs.	<u>Clarification</u> o pulse may slow o blood pressure may drop o temperature may fall
	3. Systematic examination of the vital signs gives us much useful information concerning the possible presence or absence of various categories of drugs.	

Aides	Lesson Plan	Instructor Notes
 **75 Minutes**  **VII-1** ("Pulse Definitions")	B. Procedures and Cues 1. Measurement of pulse rate. a. <u>Pulse</u> is the expansion and relaxation of an artery generated by the pumping action of the heart. b. <u>Pulse Rate</u> is the number of pulsations in an artery per minute. c. An <u>artery</u> is a strong, elastic blood vessel that carries blood <u>from the heart</u> to the body tissues. d. A <u>vein</u> is a blood vessel that carries blood <u>back to the heart</u> from the body tissues. e. When the heart contracts, it squeezes blood out of its chambers into the arteries. f. The surging blood causes the arteries to expand.	<u>Point out</u> that pulse rate is equal to the number of contractions of the heart per minute. <u>Instructor, for your information</u>: 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.

Aides	Lesson Plan	Instructor Notes
	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.	Emphasize: The "surge" can be felt as the blood is squeezed from the heart through an artery. The pulse cannot be felt in a vein.
	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.	Demonstrate this, by holding your fingers on your own radial artery.
	i. Pulse is easy to measure, once you locate an artery close to the surface of the skin.	
 **VII-2** ("Radial Artery")	j. One convenient pulse point involves the radial artery.	
	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.	Point to the radial artery pulse point on your own wrist.
	o Hold your left hand out, with the palm down.	Demonstrate this.
	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.	Demonstrate this.
	o Allow your left hand to curl downward.	Demonstrate this.
	o You should be able to feel the pulse in your radial artery.	Ask students whether they can feel their pulses. Coach any students who have difficulty in locating the pulse.

Aides	Lesson Plan	Instructor Notes
 **VII-3** ("Brachial Artery")	k. Another pulse point involves the brachial artery.	
	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.	Point to the brachial artery pulse point in your own arm. Instruct students to roll up their sleeves, if necessary, to expose their brachial artery pulse points.
	o Hold your left hand out, with the palm up.	Demonstrate this.
	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.	Demonstrate this.
	o You should be able to feel the pulse in your brachial artery.	Ask students whether they can feel their pulses. Coach any students who have difficulty locating the pulse.
	l. Another pulse point involves the carotid artery.	
	o The carotid artery can be located in the neck, on either side of the Adam's apple.	Point out the carotid artery pulse point on your own neck.
	o Place the tips of your right hand's index and middle fingers alongside the right side of your Adam's apple.	Demonstrate this.

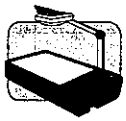
Aides	Lesson Plan	Instructor Notes
	o You should be able to feel the pulse in your carotid artery.	Ask students whether they can feel their pulses. Coach any students who have difficulty locating the pulse.
	m. Basic do's and don'ts of measuring pulse.	Note, however, that there is wide variation in "normal" human pulse rate.
	o Don't use your thumb to apply pressure while measuring a subject's pulse.	Point out 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.
	o If you use the carotid artery pulse point, don't apply pressure to both sides of the Adam's apple: this can cut off the supply of blood to the brain.	
	o When measuring the pulse rate, use time intervals of 30 seconds.	Point out 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.
 **VII-3A** (Pulse Technical Terms)	n. Some technical terms associated with pulse rate:	
	(1) Tachycardia: Abnormally rapid heart rate.	
	(2) Bradycardia: Unusually slow heart rate.	
	(3) Arrhythmia: Abnormal heart rhythm.	

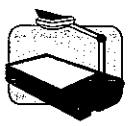
Aides	Lesson Plan	Instructor Notes
	o. Students' initial practice at measuring pulse rate.	Instruct students to work in pairs, taking turns measuring each other's pulse. Tell students to record on paper their partner's pulse rate. Monitor, coach and critique the students' practice. Allow the practice to continue for only about 5 minutes.
		PRINT the following lists on the chalkboard or flip-chart: 50 or less___ 76-78__ 52-54___ 80-82__ 56-58___ 84-86__ 60-62___ 88-90__ 64-66___ 92-94__ 68-70___ 96-98__ 72-74___ 100 or more__ TABULATE the numbers of students whose pulse rates were in each of the listed intervals. POINT OUT that the "normal range" of pulse rate is 60-90 beats per minute.
 **VII-4** ("Blood Pressure Definitions")	2. Measurement of blood pressure. a. Blood Pressure is the force that the circulating blood exerts on the walls of the arteries. o Blood pressure is measured in **millimeters of mercury**.	

Aides	Lesson Plan	Instructor Notes
	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.	Point out that 120 millimeters is approximately four and three-quarter inches.
	o We commonly abbreviate "millimeters of mercury" as **mmHg**.	Print "mmHg" on the chalkboard or flip-chart. Instructor, for your information: "Hg" is the chemical symbol for the element mercury. It comes from Hydrargyrum, the Latin word for mercury.
	b. Blood Pressure changes constantly as the heart contracts and relaxes.	
	c. Blood Pressure reaches its maximum as the heart contracts and sends the blood surging through the arteries. This is called the systolic pressure.	
	d. Blood Pressure reaches its minimum when the heart is fully expanded. This is called the diastolic pressure.	
	e. It is always necessary to measure and record both the systolic and diastolic blood pressure.	Remind students that "systolic" is the higher number, "diastolic" the lower number. Memory aid: Systolic: "S" for "Superior" Diastolic: "D" for "Down"

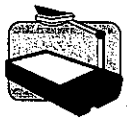
Aides	Lesson Plan	Instructor Notes
	f. The device used for measuring blood pressure is called a sphygmomanometer.	Exhibit a sphygmomanometer. Write "SPHYGMOMANOMETER" on the chalkboard or flip chart.
	g. The sphygmomanometer has a special cuff that can be wrapped around the subject's arm and inflated with air pressure.	Select 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. 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. Instruct the student to elevate the arm and squeeze the fist several times; explain that this helps to drain blood from the arm.
	h. As the pressure in the cuff increases, the cuff squeezes tightly on the arm.	Wrap the cuff around the student volunteer's arm and inflate it.
	i. When the pressure gets high enough, it will squeeze the artery completely shut.	Ask the student volunteer whether they can feel the pressure of the cuff.
	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.	Ask students: "What artery is located in the crease of the elbow?" (Point to that location on the student volunteer's arm).
	k. If we slowly release the air in the cuff, the pressure on the arm and on the artery will start to drop.	Release the pressure in the cuff on the student volunteer's arm.

Aides	Lesson Plan	Instructor Notes
	1. Eventually, the pressure will drop enough so that blood will once again start to flow through the artery. o Blood will start flowing in the artery once the pressure inside the artery equals the pressure outside the artery. o The two pressures will become equal when the air pressure in the cuff drops down to the systolic pressure. o When that happens, blood will spurt through the artery each time the heart contracts.	Ask students: "How far must the pressure in the cuff drop before the blood can start to squeeze through the artery. Ask students: "What would happen if we allowed the pressure in the cuff to drop down to the systolic level, and held the air pressure at that level?" Point out that the blood would spurt through the artery each time the heart contracted, but would cease flowing when the heart expanded. Ask students: "How far down must the air pressure in the cuff drop before the blood will flow through the artery continuously?"

Aides	Lesson Plan	Instructor Notes
	o Once the air pressure in the cuff drops down to the diastolic level, the blood will flow continuously through the artery.	
 **VII-5** ("The Basics of Blood Pressure Measure-ment")	m. Overview of procedures for measuring blood pressure.	
	o Apply enough air pressure to the cuff to cut off the flow of blood through the artery.	Demonstrate, using the student-volunteer (apply pressure to the cuff).
	o Slowly release the air pressure until the blood just begins to spurt through the artery: that level will be the systolic pressure.	Slowly release the pressure in the cuff.
	o Continue to release the air pressure until the blood flows continuously through the artery: that level will be the diastolic pressure.	Ask students: (1) "How can we tell when the blood starts to spurt through the artery?" (2) "How can we tell when the blood is flowing continuously through the artery?"

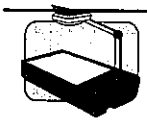
Aides	Lesson Plan	Instructor Notes
	n. We can <u>listen</u> to the spurting blood, using a <u>stethoscope</u>.	<u>Exhibit</u> a stethoscope.
	o Apply the stethoscope to the skin directly above the artery.	<u>Demonstrate</u>, using the student volunteer.
	o Apply pressure to the cuff, enough to cut off the flow of blood.	<u>Inflate</u> the cuff on the student volunteer's arm.
	o When no blood is flowing through the artery, we hear <u>nothing</u> through the stethoscope.	
	o Slowly release the air from the cuff, letting the pressure start to drop.	<u>Release</u> the air in the cuff.
	o When we drop to the systolic pressure, we start to hear a <u>spurting</u> sound.	<u>NOTE</u>: This begins as a clear, tapping sound.
	o As we continue to allow the air pressure to drop, the surges of blood become steadily longer.	<u>NOTE</u>: The sounds take on a swishing quality, and become fainter.
	o When we drop to the diastolic pressure, the blood flows steadily and all sounds cease.	Excuse the student volunteer and thank them for participating.
 **VII-6** ("Korotkoff Sounds")	o. The sounds that we listen to are called <u>Korotkoff Sounds</u>. They are divided into 5 phases.	

Aides	Lesson Plan	Instructor Notes
	o Phase 1 - the first appearance of clear, tapping sounds that gradually increase in intensity.	Point out that the beginning of Phase 1 corresponds to the systolic pressure.
	o Phase 2 - the sounds change to a murmur and take on a swishing quality.	
	o Phase 3 - the sounds develop a loud, knocking quality (not quite as clear as the Phase 1 sounds).	
	o Phase 4 - the sounds become muffled and again have a faint swishing quality.	
	o Phase 5 - the sounds cease.	Point out that the beginning of Phase 5 corresponds to the diastolic pressure.
 VII-7 ("Sphygmomanometer")	q. Familiarization with the sphygmomanometer.	Hand out stethoscopes and sphygmomanometers (one per each student is desirable. At a minimum, there should be one for every four students).
 VII-7	o The compression cuff contains an inflatable rubber bladder.	Point out the components of the sphygmomanometer on visual. Point out that blood pressure cuffs come in three sizes, child, adult and extra large, depending on the size of the bladder.
	o A tube connects the bladder to the manometer, or pressure gauge.	Clarification: The manometer displays the air pressure inside the bladder.

Aides	Lesson Plan	Instructor Notes
	o Another tube connects the bladder to the pressure bulb, which can be squeezed to inflate the bladder. o The pressure control valve permits inflation of the bladder and regulates the rate at which the bladder is deflated. - To inflate the bladder, the pressure control valve must be twisted all the way to the right. - When the valve is twisted all the way to the right, air can be pumped into the bladder, but no air can escape from the bladder. - To deflate the bladder, twist the valve to the left. - The more the valve is twisted to the left, the faster the bladder will deflate.	Demonstrate this.
 **VII-8** ("Details")	r. Details of blood pressure measurement.	

Aides	Lesson Plan	Instructor Notes
	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 louder.	Select a student to serve as a blood pressure subject. Demonstrate the procedures using the student.
	o The manometer (pressure gauge) may be clipped on the subject's sleeve, so that it is readily viewable.	
	o Twist the pressure control valve all the way to the right.	
	o Put the stethoscope earpieces in your ears.	Make sure the earpieces are turned forward, i.e., toward the nose.
	o Place the diaphragm or bell of the stethoscope over the brachial artery.	
	o Rapidly inflate the bladder to a pressure of at least 180.	Point out that, if the subject's blood pressure is very elevated, it may be necessary to inflate the bladder to a higher pressure.
	o Twist the pressure control valve slightly to the left to release the pressure slowly.	EMPHASIZE the need to release the pressure slowly. If the pressure drops too fast, the needle will sweep down the gauge too quickly to be read accurately.

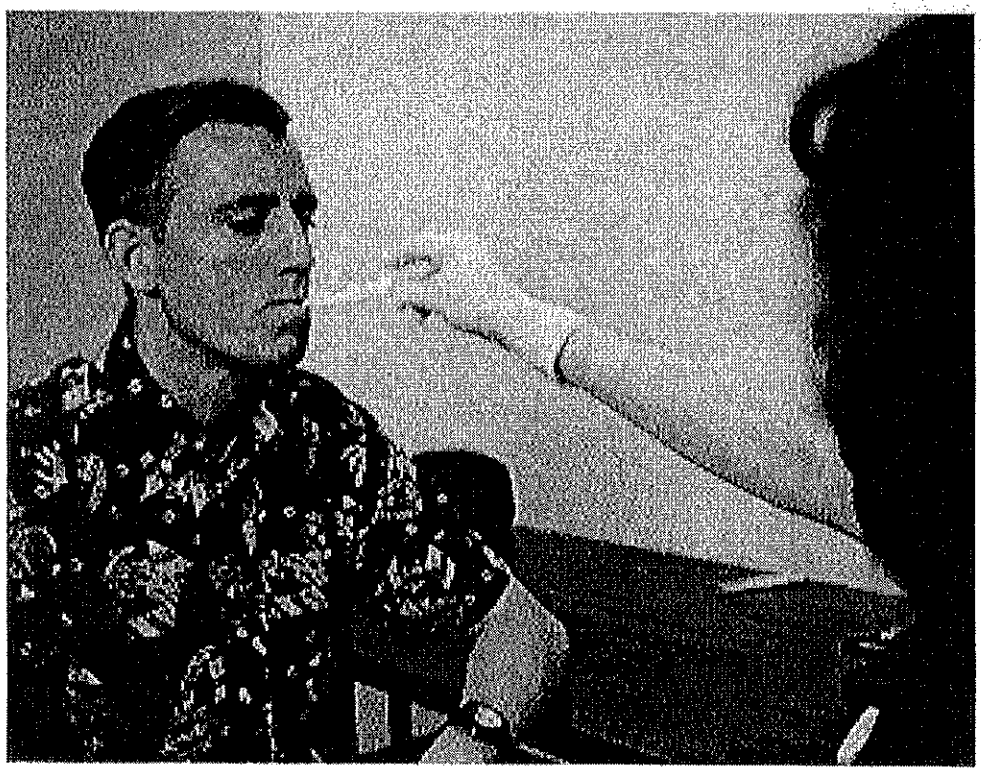
Aides	Lesson Plan	Instructor Notes
		The pressure should be released at a speed that takes one full second for the needle to move a single gradation (i.e., 2 millimeters of mercury) on the gauge.
	o Keep your eyes on the gauge and listen for the Korotkoff sounds.	Point out that the needle on the pressure gauge generally will "bounce" slightly when blood starts to spurt through the artery. Excuse the student and thank him or her for participating. Solicit students' questions concerning these procedures. Point out that "normal" values of blood pressure are: Systolic 120 - 140 Diastolic 70 - 90 Note, however, that "normal" people can have significantly different blood pressures: there is wide variation in human blood pressure.
	s. Do's and Don'ts of blood pressure measurement. 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. o Hold the bell of the stethoscope with your fingers; don't slide it under the cuff: that will distort the measurement.	

Aides	Lesson Plan	Instructor Notes
 **VII-9** (Blood Pressure Technical Terms)	t. Some technical terms associated with blood pressure: (1) Hypertension: Abnormally high blood pressure. (2) Hypotension: Abnormally low blood pressure.	
	u. Students initial practice at measuring blood pressure.	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. Monitor, coach and critique the students' practice. Allow this practice to continue for only about 10 minutes.
	3. Measurement of temperature.	
	a. Temperature is measured orally using an electronic thermometer.	Exhibit this.
	b. Make sure that a fresh disposable mouthpiece is used each time.	Solicit students' comments and questions concerning this overview of procedures and cues.
 **15 Minutes**	C. Demonstrations	
	1. Pulse rate measurement demonstrations.	Select two students to come before the class.

Aides	Lesson Plan	Instructor Notes
	a. Radial artery pulse point. Instruct the first student to measure the second student's pulse using the radial artery pulse point. (Simultaneously, the instructor should measure the subject's pulse using a carotid artery pulse point).	
	b. Carotid artery pulse point.	Instruct the second student to measure the first student's pulse using the carotid artery pulse point. (Simultaneously, 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.

Session VII

Examinations of Vital Signs



Examination of Vital Signs

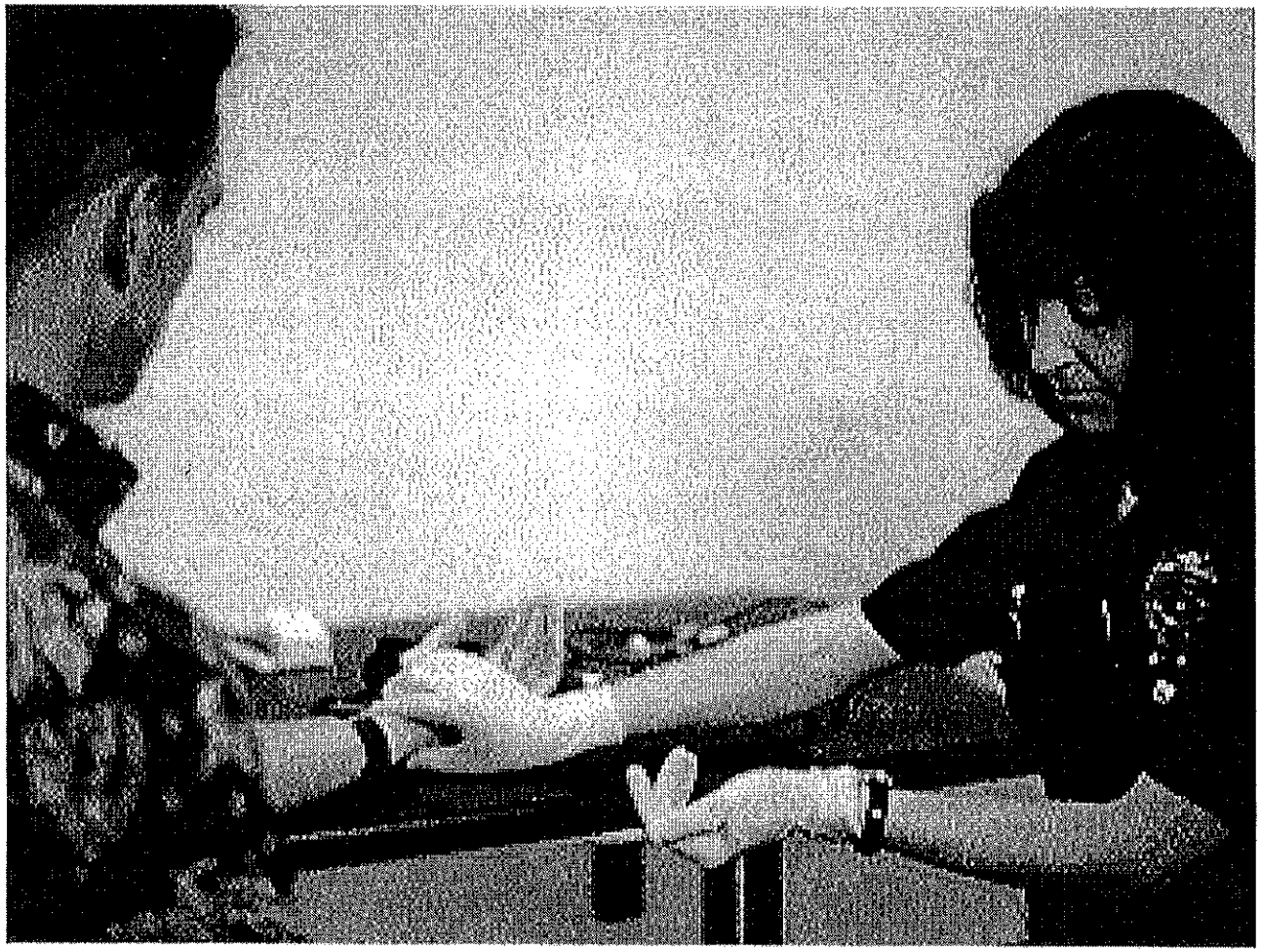
Upon successfully completing this session, the participant will be able to:

- Explain the purposes of the various vital signs examinations in the drug evaluation and classification process
- Explain the administrative procedures for these examinations
- Explain the cues obtained from these examinations
- Document the examinations of vital signs accurately and completely
- Correctly answer the "topics for study" at the end of this section

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
- Vein
  - A strong, elastic blood vessel that carries blood from the heart to the body's tissues
- Artery
  - A blood vessel that carries blood back to the heart from the body's tissues

Radial Artery Pulse Point



Brachial Artery Pulse Point

Technical Terms Associated With Pulse Rate

- Tachycardia

  Abnormally rapid heart rate

- Bradycardia

  Abnormally slow heart rate

- Arrhythmia

  Abnormal heart rate rhythm

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

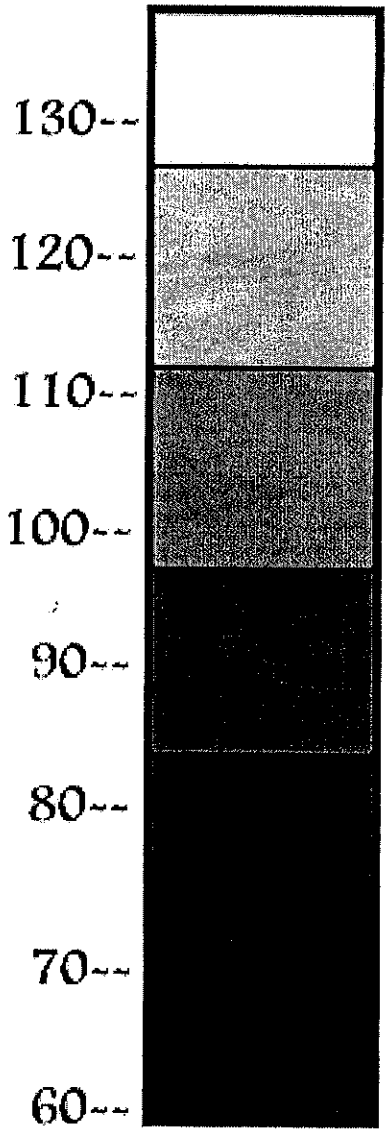
- Diastolic Pressure

  The minimum pressure, reached when the heart is fully expanded

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

Korotkoff Sounds



Phase 1 begins Systolic
Clear, tapping sounds

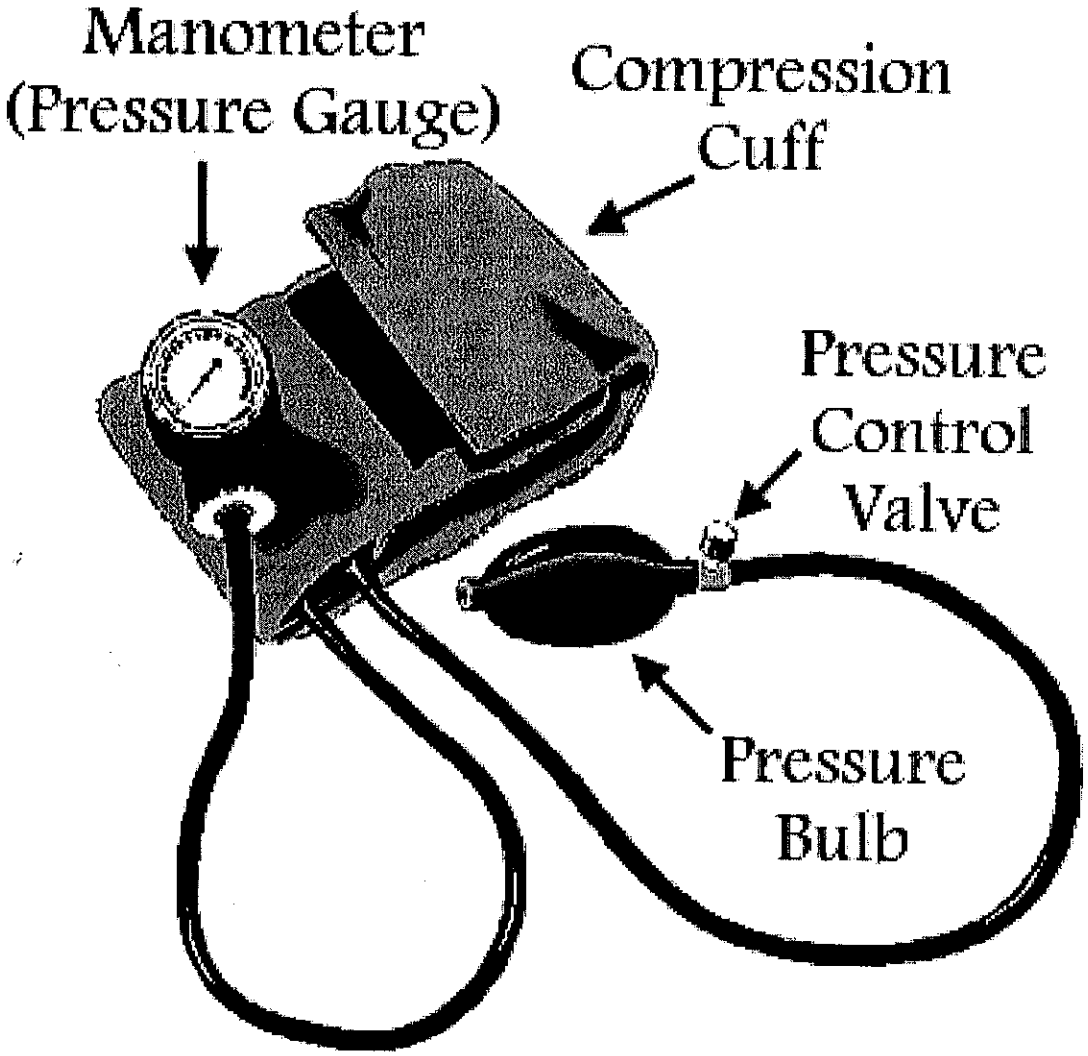
Phase 2 begins
Sounds change to murmur, take on a "swishing" quality

Phase 3 begins
Sounds develop a loud, knocking quality

Phase 4 begins
Sounds become muffled, "swishing"

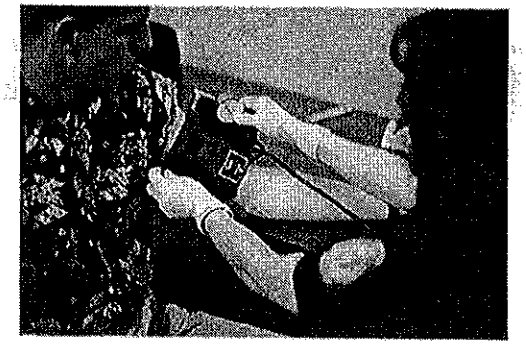
Phase 5 begins Diastolic
The sounds cease

Sphygmomanometer



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
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



Technical Terms Associated With Blood Pressure

- Hypertension

  Abnormally high blood pressure

- Hypotension

  Abnormally low blood pressure

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 participant will be able to describe the sequence in which examinations and other activities are performed in the Drug Evaluation and Classification process.

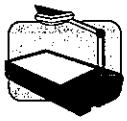
Content Segments

A. Live Demonstrations

B. Video Demonstrations

Learning Activities

- Instructor Led Presentations
- Instructor Led Demonstrations
- Video Presentations
- Reading Assignments

Aides	Lesson Plan	Instructor Notes
  **VIII-0** (Session Objective)	DEMONSTRATIONS OF THE EVALUATION SEQUENCE	Total Lesson Time: Approximately 105 Minutes Session title on wall chart. <u>Briefly</u> review the objective, content and activities of this session.
 **70 Minutes**	A. Live Demonstrations	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. <u>NOTE</u>: Instructors should conduct at least two <u>complete</u> demonstrations of the evaluation sequence, articulating each step in the process. <u>Instruct</u> students to follow along with copies of the report form.
	1. Preliminary Examination. a. Preliminary eye checks o equal tracking o equal pupil size o blindness o eyelids o initial check for Nystagmus	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. <u>Ask</u> each question, exactly as it should be asked during an actual preliminary examination.

Aides	Lesson Plan	Instructor Notes
		Explain the kinds of clues and evidence that may be gleaned during the preliminary examination.
	b. First measurement of pulse rate.	Check the student subject's eyes for tracking, equal pupil size, eyelids. Conduct a check of the student subject's pulse. Solicit students' comments or questions about the preliminary examination. Excuse the student subject and thank them participating in the demonstration.
	2. Eye Examinations (Room Light). a. Horizontal Gaze Nystagmus b. Vertical Nystagmus c. Lack of Convergence	Select another student or a volunteer drinker to serve as the "subject" for the eye examinations. Conduct a complete demonstration of an eye examination. Explain the kinds of clues and other evidence that may be gleaned during the eye examinations. Solicit students' comments or questions about the eye examinations. Excuse the student subject and thank him or her for participating in the demonstration.

Aides	Lesson Plan	Instructor Notes
	3. Psychophysical Tests. a. Romberg Balance b. Walk and Turn c. One Leg Stand d. Finger to Nose	Select another student or a volunteer drinker to serve as the "subject" for the psychophysical tests. Conduct a complete set of psychophysical tests on the student subject. Explain the kinds of clues and other evidence that may be gleaned during the psychophysical tests. Solicit students' comments or questions about the psychophysical tests. Excuse the student subject and thank them for participating in the demonstration.
	4. Vital Signs Examinations. a. Blood Pressure b. Temperature c. Second Check of Pulse	Select another student to serve as the "subject" for the vital signs examination. Conduct a complete set of vital signs examinations on the student subject. Explain the kinds of clues and other evidence that may be gleaned during the vital signs examinations. Solicit students' comments or questions about the vital signs examination. Excuse the student subject, and thank them participating in the demonstration.

Aides	Lesson Plan	Instructor Notes
	5. Dark Room Examinations.	Point out that this portion of the Drug Evaluation and Classification Process is to be carried out in a darkened room. However, this demonstration will be conducted in normal room light, so that all students can observe the proper procedures for using the pen light. Select another student to serve as the "subject" for the dark room examination.
	a. Pupil Size Examinations o room light o darkness o indirect light o direct light	Conduct a complete set of "dark room" examinations on the student subject.
	b. Reaction to Light c. Check of Nasal Area d. Check of Oral Cavity	Explain the kinds of clues and other evidence that may be gleaned during the dark room examinations. Point out that the checks of the oral and nasal cavities actually are part of the examination for signs of ingestion. Solicit students' comments or questions about the dark room examinations. Excuse the student subject and thank them for participating in the demonstration.
	6. Examination for Muscle Tone and Injection Sites; Third Check of Pulse.	Select another student to serve as the "subject" for this portion of the examination.

Aides	Lesson Plan	Instructor Notes
		Point out that heroin is not the only drug that abusers inject: "Puncture marks" in the skin may also be found on the arms (and elsewhere) of abusers of several other drugs. Explain how to check for injection sites and muscle rigidity. Conduct a complete examination for injection sites and muscle rigidity on the student subject. Solicit students' comments or questions about this portion of the examination. Excuse the student subject, and thank them participating in the demonstration.
	7. Final Interview. a. Statements made by subject b. Behavior during entire evaluation	Explain the kinds of clues and other evidence that may be gleaned during the final interview. Give examples of typical statements or behaviors of drug impaired subjects. Solicit students' comments or questions about the final interview.
	8. Opinions of Evaluator.	Point out that students subsequently will learn the clues and indicators of the various categories of drugs. Solicit students' comments and questions concerning the entire Drug Evaluation and Classification Process.

Aides	Lesson Plan	Instructor Notes
		NOTE: Be sure to conduct at least two complete, live demonstrations of the Drug Evaluation and Classification Process.
 **10 Minutes**	B. Review of the 12-Step Process (Video)	

Session VIII

Demonstrations of the Evaluation Sequence

Demonstrations of the Evaluation Sequence

Upon successfully completing this session, the participant will be able to:

- Describe the sequence in which examinations and other activities are performed in the Drug Evaluation and Classification process

One Hour and Forty-Five Minutes

SESSION IX

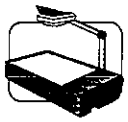
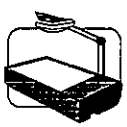
CENTRAL NERVOUS SYSTEM DEPRESSANTS

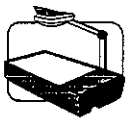
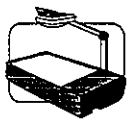
SESSION IX CENTRAL NERVOUS SYSTEM DEPRESSANTS

Upon successfully completing this session, the participant 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.
- Explain the symptoms, observable signs and other effects associated with this category.
- Explain the typical time parameters, i.e., onset and duration of effects, associated with this category.
- State the clues that are likely to emerge when the drug evaluation and classification process 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 Section.

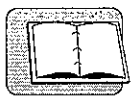
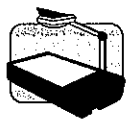
Content Segments		Learning Activities	
A.	Overview of the Category	o	Instructor Led Presentations
B.	Possible Effects	o	Review of Drug Evaluation and Classification Exemplars
C.	Onset and Duration of Effects	o	Reading Assignments
D.	Overdose Signs and Symptoms	o	Video Presentations
E.	Expected Results of the Evaluation	o	Slide Presentations

Aides	Lesson Plan	Instructor Notes
  **IX-0A&B** (Session Objectives)  **20 Minutes**	CENTRAL NERVOUS SYSTEM DEPRESSANTS A. Overview of the Category. 1. Central Nervous System Depressants slow down the operations of the brain. a. Depressants first affect those areas of the brain that control a person's conscious, voluntary actions. b. As the dose is increased, depressants begin to affect the parts of the brain that control the body's automatic processes. o heartbeat o respiration o etc. 2. The CNS depressant category includes the single most commonly abused drug in America. a. Alcohol has been used and abused since prehistoric times.	Total Lesson Time: Approximately 105 Minutes Session title on wall chart. Briefly review the objectives, content and activities of this session. Point out that other common names for CNS Depressants are "downers" and "sedative-hypnotics". Judgment, inhibitions and reaction time are some of the things that CNS Depressants affect first. Ask this question: "What is the single most commonly abused drug?"
 **IX-1** ("Alcohol - - The Most Familiar CNS Depressant")		

Aides	Lesson Plan	Instructor Notes
	b. Alcohol and its effects are familiar to most Americans.	
	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.	Point out that the remainder of this session will focus on the non-alcohol CNS depressants.
	3. Non-Alcohol CNS depressants have been around for more than 150 years.	
 **IX-2** ("Chloral Hydrate -- The First CNS Depressant Other Than Alcohol")	a. The first non-alcohol CNS depressant was chloral hydrate.	
	b. It was developed in 1832.	Chloral Hydrate was derived from alcohol.
	c. It is commonly referred to as "Mickey Finn" or "Knockout drops" because of its fast acting effects.	Clarification: "Mickey Finn" was a well known British prizefighter of the 19th Century.
	d. Chloral hydrate is still produced and prescribed today.	"Felsule" and "Noctec" are two registered brand names of chloral hydrate.
 **IX-3** (Major Types of Non-Alcohol CNS Depressants).	4. There are six major subcategories of CNS depressants other than alcohol.	

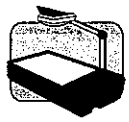
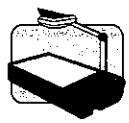
Aides	Lesson Plan	Instructor Notes
	a. Barbiturates	More than 250 different barbiturates have been produced. Of these, about 50 have been accepted for medical use.
	o derivatives of barbiturate acid	
	o first produced in 1864	
	o in very common use and abuse today	
	b. Non-barbiturates	
	o synthetic compounds with a variety of chemical structures	Note: Chloral Hydrate belongs to the non-barbiturate subcategory.
	o avoid some of the undesirable side effects of barbiturates	i.e. sleepiness or drowsiness
	o still produce physical and psychological dependence.	
	c. Anti-Anxiety Tranquilizers	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.
	o first produced in 1950	
	o in very wide spread use	
	o frequently abused	
	d. Anti-depressants	Point out that it is not a contradiction to call one subcategory of CNS Depressants the Anti-depressants. It is psychological depression that they are "anti". Prozac is an anti-depressant but generally doesn't have psycho-active properties or side effects.
	o sometimes called the "mood elevators"	

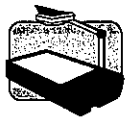
Aides	Lesson Plan	Instructor Notes
	e. Anti-psychotic tranquilizers	Point out that the anti-psychotic tranquilizers are generally more powerful than the anti-anxiety tranquilizers.
	o sometimes called the "major tranquilizers"	The most familiar Anti-Psychotic Tranquilizer is "Thorazine".
	o Anti-Psychotic 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.	
	f. Combinations of the other five subcategories.	
	5. Examples of specific common CNS Depressants.	Note: Briefly review these examples. Emphasize that students are not expected to memorize the names of these various CNS depressants. But, if they see these names, they should be able to recognize them as depressants.
 IX-4A	a. The Barbiturates	
	o Secobarbital (Trade name "Seconal") (Street names "reds"; "red devils"; "RDs"; "fender benders"; "F-40s")	Mainly manufactured by Eli Lilly Pharmaceutical Co. The code "F40" is used by Eli Lilly to designate one capsule version of Seconal.

Aides	Lesson Plan	Instructor Notes
	o Pentobarbital (Trade name "Nembutal") (Street names "yellows"; "yellow jackets")	Mainly manufactured by Abbot Pharmaceutical Co.
	o Amobarbital (Trade name "Amytal") (Street names "blues"; "blue heavens")	Mainly manufactured by Eli Lilly.
	o Amosecobarbital (Trade name "Tuinal") (Street names "rainbows"; "Christmas trees")	Manufactured by Eli Lilly Note: this is a combination of Amobarbital and Secobarbital.
	o Phenobarbital (Many trade names) (Street name "pink ladies")	Manufactured by many companies, one of which is Smith, Kline and French. Phenobarbital has been called the "Model T" of sedatives: it was first introduced in 1912.
		According to the "Physician's Guide to Psychoactive Drugs", 1 ounce of 80-proof alcohol is equivalent to about 15 milligrams of Phenobarbital.
		If available: display 35mm slides of these various drugs.
 IX-4B	b. The Non-Barbiturates	
	o Chloral Hydrate (Trade names "Felsule"; "Noctec") (Street names "Knock out drops"; "Mickey Finn")	Point out that primary medical use for the Non-Barbiturates is the treatment of insomnia.

Aides	Lesson Plan	Instructor Notes
	o Glutethimide (Trade name "Doriden") o Methyprylon (Trade Name "Noludar")	Note: the absence of street names implies only that illicitly manufactured versions of these drugs are not common. The legally manufactured versions are abused, however.
	o Methaqualone (Trade names "Parest"; "Quaalude"; "Sopor"' "Optimil"; "Mandrax") (Street name "ludes") o Ethchlorvynol (Trade name "Placidyl") o Diphenhydramine Hydrochloride (Trade names "Benadryl"; "Sominex") o Ethinamate (Trade name "Valmid")	Note: methaqualone continues to be pharmaceutically manufactured in Mexico, trade name "Mandrax".
	o Paraldehyde (Trade name "Paral") o Carisoprodol (Trade name "Soma") o Diphenhylhydantoin Sodium (Trade name "Dilantin") o Gama Hydroxy Butarate (Street name "GHB", "Liquid X")	If available: display 35mm slides of these various drugs.
 IX-4C	c. The Anti-Anxiety Tranquilizers	

Aides	Lesson Plan	Instructor Notes
	o Chlordiazepoxide (Trade name "Librium") o Diazepam (Trade name "Valium") o Alprazolam (Trade name "Xanax") o Lorazepam (Trade name "Ativan") o Triazolam (Trade name "Halcion") o Flurazepam (Trade name "Dalmane") o Estazolam (Trade name "ProSom") o Temazepam (Trade name "Restoril") o Oxazepam (Trade name "Serax") o Clonazepam (Trade name "Clonopin") o Flunitrazepam (Trade name "Rohypnol") (Street Name "Roofies", "Roches")	Point out that tens of millions of prescriptions for these anti-anxiety tranquilizers are written in America each year. If available: display 35mm slides of these various drugs.
 IX-4D	d. The Anti-Depressants o Phenelzine Sulfate (Trade name "Nardil") o Amitriptyline Hydrochloride (Trade names "Elavil"; "Endep")	

Aides	Lesson Plan	Instructor Notes
	o Desipramine Hydrochloride (Trade names "Norpramin"; "Pertofrane")	
	o Doxepin Hydrochloride (Trade names "Adapin"; "Sinequan")	
	o Fluoxetine (Trade name "Prozac")	Prozac generally does not have psychoactive properties in therapeutic doses.
	o Imipramine (Trade name "Tofranil")	
 IX-4E	e. The Anti-Psychotic Tranquilizers	
	o Lithium Carbonate (Trade name "Lithane")	
	o Lithium Citrate	
	o Droperidol (Trade names "Inapsine"; "Innovar")	
	o Haloperidol (Trade name "Haldol")	
	o Chlorpromazine (Trade name "Thorazine")	
 IX-4F	f. The Combinations	
	o Chlordiazepoxide in combination with Amitriptyline (Trade name "Limbitrol")	Point out that "Limbitrol" is a combination of an Anti-Anxiety Tranquilizer and an Anti-Depressant.

Aides	Lesson Plan	Instructor Notes
	o Perphenazine in combination with Amitriptyline Hydrochloride (Trade name "Triavil")	Point out that "Triavil" is a combination of an Anti-Psychotic Tranquilizer and an Anti-Depressant.
	o Chlordiazepoxide Hydrochloride in combination with Clidinium Bromide (Trade name "Librax")	
 IX-5	6. Methods of ingestion of CNS Depressants.	
	a. Most common and easiest method is orally.	
	b. Some abusers prefer to use intravenous injection for Barbiturates.	
	c. Some abusers experience a "flash" or "rush" from intravenous injection of Barbiturates, that they do not experience from oral ingestion.	
	d. The injection paraphernalia used for Barbiturates are very similar to those used for Heroin.	Examples: o spoon, for heating and dissolving the barbiturate. o cotton, for filtering the solution when drawing it into the needle. o hypodermic syringe. o tourniquet.

Aides	Lesson Plan	Instructor Notes
	e. However, the Barbiturate abuser will use a wider gauge hypodermic needle, because the barbiturate solution is thicker than the heroin solution.	Note: The "gauge" of a hypodermic needle indicates the width of the needle's inside diameter. The smaller the number, the wider the needle. For example, a 16 gauge needle is larger in diameter than a 20 gauge needle.
	f. The injection sites on the skin of a Barbiturate abuser appear quite different from those of an Heroin addict.	
	g. A large swelling, about the size of a quarter or fifty cent piece frequently will appear at the Barbiturate injection site.	Point out that these effects result from the skin's reaction to the high alkaline content of the barbiturate solution.
	h. Necrosis may occur: i.e., a decaying of the body's tissue at the injection site.	If available, display a 35mm slide showing ulcerated injection sites.
	I. The dead tissue may begin to separate from the living tissue, producing ulcerations.	Point out that these ulcerations resemble burns placed on the skin by the tip of a cigarette.
	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.	
	k. Barbiturate abusers often will inject in parts of the body other than the forearm, and will commonly exhibit the characteristic swellings at random locations on the extremities.	Solicit students' questions and comments about the overview of CNS depressants.

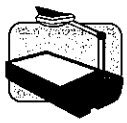
Aides	Lesson Plan	Instructor Notes
 **5 Minutes**  **IX-6**	B. Possible Effects	
	1. CNS Depressants produce impairments of the human mind and body that essentially mirror alcohol impairment.	Point out that these effects will not necessarily appear in a predictable sequence as dose increases.
	a. reduce social inhibitions	
	b. impair the ability to divide attention	Clarification: impede the person's ability to concentrate on more than one thing at a time.
	c. slow reflexes	
	d. impede judgment and concentration	
	e. impair vision	Elaboration: ability to focus eyes may be impaired; "double vision" may develop.
	f. impair coordination	
	g. cause speech to become slurred and incoherent	Emphasize: 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.
	h. produce a variety of emotional effects, such as euphoria, depression, suicidal tendencies, laughing or crying without provocation, etc.	

Aides	Lesson Plan	Instructor Notes
	2. Analogy: a person under the influence of CNS Depressants is like a 45 rpm record played at 33 1/3.	
	3. Generally speaking, a person under the influence of CNS Depressants will look and act drunk.	Solicit students' questions and comments concerning possible effects of CNS depressants.
15 Minutes	C. Onset and Duration of Effects	
 **IX-7** ("Onset and Duration Classes")	1. Depressant drugs can be grouped loosely into four classes, based on how quickly they take effect and how long their effects last.	Selectively reveal.
	a. <u>Ultrashort</u>: very fast acting, very brief effects.	
	o take effect in a matter of seconds.	
	o effects last only a few minutes.	
	o very rarely are the "drugs of choice" for drug abusers.	<u>Ask</u> students: "Why is there little or no street abuse of the <u>ultrashort</u> CNS depressants"? Solicit responses. 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.

Aides	Lesson Plan	Instructor Notes
	o ultrashort depressants are sometimes used at the beginning of a surgical operation, in conjunction with an inhaled anesthetic.	Clarification: to provide a momentary sedation to ease the patient's anxiety and allow for the proper administration of the anesthetic.
	o psychiatrists sometimes use ultrashort depressants at the beginning of a session, to reduce the client's inhibitions and foster a free and open communication.	
	o common example of an ultrashort depressant is thiopental sodium, brand name "Pentothal".	Point out that this is sometimes called "truth serum".
	b. Short: fairly fast acting, effects last for several hours.	
	o generally take effect in 10-15 minutes.	
	o effects last for approximately 4 hours.	
	o this is the most commonly abused class of CNS Depressants.	Point out that short acting depressants are attractive to many drug abusers because: o they produce effects reasonably quickly. o the effects last long enough to "enjoy". o the effects don't last so long that the user is in a prolonged state of impairment.

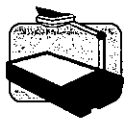
Aides	Lesson Plan	Instructor Notes
	o short acting Depressants frequently are prescribed as a treatment for insomnia. o they also may be used as a pre-anesthetic medication to calm a patient prior to surgery. o common example of a short acting Depressant: Secobarbital, brand name "Seconal". c. Intermediate: relatively slow acting, but prolonged effects. o generally take effect in about 30 minutes. o effects typically last about 6-8 hours. o fairly often abused, especially by users who desire a longer lasting state of intoxication. o medical use of this class of drugs is similar to that of short acting Depressants. (i.e., treat insomnia, etc.) o common example of an intermediate Depressant: amobarbital, brand name "Amytal".	

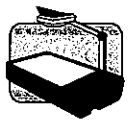
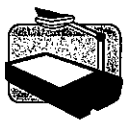
Aides	Lesson Plan	Instructor Notes
	o a popularly abused drug is Amobarbital in combination with Secobarbital.	Point out that this amo-secobarbital ("Tuinal") combination offers a fast acting drug (10-20 minutes onset, thanks to the Seconal) with prolonged effects (up to 8 hours, thanks to the Amytal).
	d. Long: delayed but long lasting effects.	
	o generally take effect about one hour after ingestion.	
	o effects typically last 8-14 hours.	
	o generally not the "drugs of choice" for abusers.	Ask students: "Why don't drug abusers usually prefer the long acting depressants?"
	o however, some people will abuse the long acting Depressants if the more popular short and intermediate types are not readily available.	Solicit students' questions and comments about the overview of CNS depressants.
	o long acting depressants are used medically in the control of epilepsy and of other conditions that can cause convulsions.	
	o they can also be used to provide continuing sedation to patients suffering from extreme anxiety.	
	o example of a long acting Depressant: Barbital, brand name "Veronal".	

Aides	Lesson Plan	Instructor Notes
	2. Alcohol as a specific example.	Ask students: "How would you classify alcohol in terms of the onset and duration of its effects?" Probe question: Suppose an average person drank two shots of whiskey. How long would it be before he or she started to feel the effects? (solicit responses). Probe question: How long would the average person continue to feel the effects of those two shots? (solicit responses). Guide students toward the conclusion that alcohol would be classified as a short or short to intermediate depressant.
 **IX-8** (examples of short to intermediate depressants)	3. Other examples of short to intermediate Depressants.	
	a. Barbiturates o Seconal ("reds") o Nembutal ("yellows") o Tuinal ("rainbows") o Amytal ("blues")	Point out that these are frequently abused CNS depressants, but they are not the only depressants that are abused.
	b. Non-barbiturates o Noctec or Felsule ("Mickey Finn") o Doriden o Noludar	

Aides	Lesson Plan	Instructor Notes
	o Quaalude ("ludes") o Placidyl o Valmid o Equanil or Miltown o Soma c. Anti-anxiety tranquilizers o Valium o Librium o Xanax o Serax	
 **5 Minutes**	D. Overdose Signs and Symptoms 1. Overdoses of Central Nervous System Depressants produce symptoms essentially identical to those of alcohol overdoses. a. Subject will become extremely drowsy and may pass out. b. The heartbeat (pulse) will slow. c. Respiration will become shallow. d. Skin may feel cold and clammy. 2. One major danger with CNS Depressant overdoses is death from respiratory failure. a. A sufficiently high dose of CNS Depressant will suppress the portions of the brain that control respiration.	

Aides	Lesson Plan	Instructor Notes
	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.	
	c. With other Depressants, it is relatively easy to take a fatal overdose.	Point out that CNS depressants are often used as a means of suicide.
	3. Another major danger with CNS Depressants occurs when they are combined with alcohol.	
	a. There is at least an additive effect when alcohol and another Depressant are taken together.	
	b. With many CNS Depressants, there may be a more than additive effect.	Clarification: 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.
	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.	
	d. It is not possible to predict how great an effect will occur when Alcohol is mixed with another Depressant.	
	e. However, it is clear that the combination is always risky.	Solicit students' questions and comments concerning overdoses of CNS depressants.

Aides	Lesson Plan	Instructor Notes
60 Minutes  **IX-9A** ("SFST evidence")	E. Expected Results of the Evaluation 1. Observable evidence of impairment. a. Standardized field sobriety tests. o Horizontal Gaze Nystagmus will be present with suspects under the influence of CNS Depressants. o Vertical Nystagmus <u>may</u> be present, with high doses, of Depressants. o Performance on Walk and Turn and One Leg Stand will be similar to that of suspects impaired by alcohol. o Performance on Romberg and Finger to Nose tests will be similar to that of suspects impaired by alcohol.	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. <u>Point out</u> that suspect's perception of time (on Romberg) may be slowed, i.e., may estimate "30 seconds" after more than 30 seconds have elapsed.
 **IX-9B** ("General Indicators")	b. General indicators o drowsiness o droopy eyes (ptosis) o thick, slurred speech o uncoordinated o fumbling o slow reactions, sluggish o muscle tone - flaccid	<u>Note</u>: speech may also be incoherent. <u>Analogy</u>: drunken behavior without the odor of alcoholic beverages. <u>But remind students</u>: suspects may have consumed alcohol <u>and</u> some other CNS depressant. Hence, odor of alcoholic beverage may also be present.

Aides	Lesson Plan	Instructor Notes
 **IX-9C** ("Eye Examinations")	2. Evidence associated with the Physiologic Examinations. a. Eye examinations o Lack of Convergence generally will be present	
	o pupil size generally will be normal	Exception: Methaqualone or Soma usually will cause pupils to dilate.
	o pupillary reaction to light will be slowed	
 **IX-9D** ("Vital Signs Examinations")	b. Vital signs examinations o blood pressure will be down	Possible exceptions: Methaqualone and alcohol may cause the pulse to be increased.
	o pulse will be down	
	o body temperature generally will be normal	
 **IX-10** ("CNS Depressant Symptomatology Chart")	3. Summary	
	4. Demonstrations a. Video tape demonstrations	Show video tape of subject(s) under the influence of CNS Depressants. Relate behaviors and observations to the CNS Depressant Symptomatology Chart.
	b. Drug Evaluation and Classification Exemplar Demonstrations	Refer students to the exemplars found at the end of section IX of their student manuals.

Aides	Lesson Plan	Instructor Notes
		Relate the items on the exemplars to the CNS Depressant Symptomatology Chart. Solicit students' questions or suggestions concerning Expected Results of the Evaluation of subjects under the influence of Depressants.

Session IX

Central Nervous System Depressants

Central Nervous System Depressants

Upon successfully completing this session, the participant 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

Central Nervous System Depressants (continued)

- Explain 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
- State the clues that are likely to emerge when the drug evaluation and classification process 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 Section

Alcohol - The Most Familiar CNS Depressant

Chloral Hydrate ("Mickey Finn"):

The first non-alcohol CNS depressant

Major Types of Non-alcohol CNS Depressants

- Barbiturates
- Non-barbiturates
- Anti-anxiety tranquilizers
- Anti-depressants
- Anti-psychotic tranquilizers
- Combinations

Specific Barbiturates Examples

Drug	Brand Name	Street Names
Secobarbital	Seconal	Reds, Red Devils, RDs, Fender Benders, F-40's
Pentobarbital	Nembutal	Yellows, Yellow Jackets
Amobarbital	Amytal	Blues, Blue Heavens
Amosecobarbital	Tuinal	Rainbows, Christmas Trees
Phenobarbital	(many)	Pink Ladies

Specific Non-Barbiturates Examples

Drug	Brand Name	Street Names
Chloral Hydrate	Felsule, Noctec	Knock Out Drops, Mickey Finn
Glutethimide	Doriden	
Methyprylon	Noludar	
Methaqualone	Parest, Quaalude, Sopor, Optimil, Mandrax	Ludes
Ethclorvynol	Placidyl	
Diphenhydramine Hydrochloride	Benadryl, Sominex	
Ethinamate	Valmid	
Paraldehyde	Paral	
Carisoprodol	Soma	
Diphenhylhydantoin Sodium	Dilantin	
Gama Hydroxy Butarate		GHB, Liquid X

Specific Anti-Anxiety Tranquilizers Examples

Drug	Brand Names	Street Names
Chlordiazepoxide	Librium	
Diazepam	Valium	
Alprazolam	Xanax	
Lorazepam	Ativan	
Triazolam	Halcion	
Flurazepam	Dalmane	
Estazolam	Prosom	
Temazepam	Restoril	
Oxazepam	Serax	
Clonazepam	Clonopin	
Flunitrazepam	Rohypnol	Roofies, Roches

Specific Anti-Depressants Examples

Drug	Trade Name
Phenelzine Sulfate	Nardil
Amitriptyline hydrochloride	Elavil, Endep
Desipramine hydrochloride	Norpramin, Pertofrane
Doxepin hydrochloride	Adapin, Sinequan
Fluoxetine	Prozac
Imipramine	Tofranil

Specific Anti-Psychotic Tranquilizers Examples

Drug	Trade Name
Lithium Carbonate	Lithane
Lithium Citrate	
Droperidol	Inapsine, Innovar
Haloperidol	Haldol
Chlorpromazine	Thorazine

Specific Combinations of Depressants

- Chlordiazepoxide in combination with Amitriptyline

  Trade name: "Limbitrol"

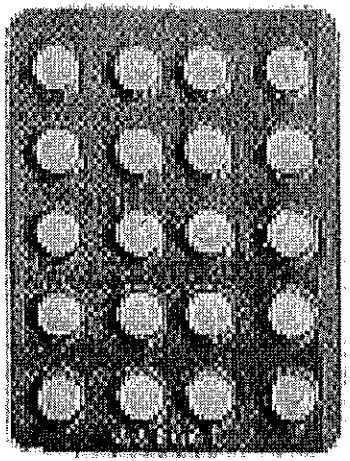
- Perphenazine in combination with Amitriptyline Hydrochloride

  Trade name: "Triavil"

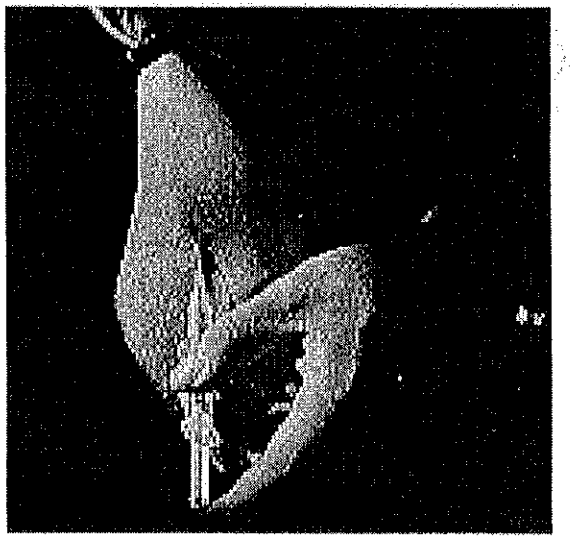
- Chlordiazepoxide Hydrochloride in combination with Clidinium Bromide

  Trade name: "Librax"

Methods of Administering CNS Depressants



Orally



Injection

Possible Effects of CNS Depressants

- Reduced inhibitions
- Inability to divide attention
- Slowed reflexes
- Poor judgment and impaired concentration
- Impaired vision
- Lack of coordination
- Slurred and incoherent speech
- Emotional instability

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

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
  - Valmid
  - Equanil or Miltown
  - Soma

Evaluation of Suspects Under the Influence of CNS Depressants

SFST Evidence

- Horizontal Gaze Nystagmus will be present
- Vertical Nystagmus may be present (with high doses for that individual)
- Impaired performance will be evident on Walk and Turn and One Leg Stand
- Impaired performance will be evident on Romberg and Finger to Nose

Evaluation of Suspects Under the Influence of CNS Depressants

General Indicators

- Drowsiness
- Droopy eyelids (ptosis)
- Thick, slurred speech
- Uncoordinated
- Fumbling
- Slow, sluggish reactions

Evaluation of Suspects Under the Influence of CNS Depressants

Eye Examinations

- Lack of convergence present
- Pupil size will be normal*
- Pupillary reaction to light will be slow

* Methaqualone and Soma will cause pupil dilation

Evaluation of Suspects Under the Influence of CNS Depressants

Vital Signs

- Blood pressure will be down
- Pulse will be down*
- Body temperature will be normal

* Quaaludes and ETOH may elevate

CNS Depressant Symptomatology Chart

HGN	Present
Vertical 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

000390

DRUG INFLUENCE EVALUATION

Page 1 of 2

EVALUATOR: MAYER, R.C.
BOOKING NO.: 002
DR.: IX-1

ARRESTEE'S NAME (LAST, FIRST, MI): COCKROFT, CAROLYN A.
AGE: 38 | SEX: F | RACE: W
ARRESTING OFFICER (NAME, SERIAL #, DIV.): HEDLUND, J. 0427/CSP

DATE EXAMINED/TIME/LOCATION: AUGUST 6, 1996 0045 8TH DIST
BREATH RESULTS: ☐ Refused Results 0.00 Instrument # 1234
CHEMICAL TEST: ☐ Both Tests Refused ■ Urine ☐ Blood

MIRANDA WARNING GIVEN: ■ Yes ☐ No
Given by: HEDLUND
What have you eaten today? When? CHICKEN SOUP 8 O'CLOCK
What have you been drinking? How much? NOTHING
Time of last drink? N/A

Time now? MIDNIGHT
When did you last sleep? How long? LAST NIGHT 6 HRS
Are you sick or injured? ☐ Yes ■ No
Are you diabetic or epileptic? ☐ Yes ■ No
Do you take insulin? ☐ Yes ■ No
Do you have any physical defects? ☐ Yes ■ No
Are you under the care of a doctor/dentist? ☐ Yes ■ No
Are you taking any medication or drugs? ☐ Yes ☐ No NONE OF YOUR BUSINESS

ATTITUDE: SULLEN, WITHDRAWN NON-RESPONSIVE
COORDINATION: POOR STUMBLING STAGGERING
SPEECH: SLURRED
BREATH: NORMAL
FACE: NORMAL

CORRECTIVE LENS: ■ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ☐ Normal ☐ Bloodshot ■ Watery
Blindness: ■ None ☐ L. Eye ☐ R. Eye
Tracking: ■ Equal ☐ Unequal
PUPIL SIZE: ■ Equal ☐ Unequal (explain)
HGN Present: ■ Yes ☐ No
Able to follow stimulus: ■ Yes ☐ No
Eyelids: ☐ Normal ■ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 60 / 0050	Lack of Smooth Pursuit	YES	YES
2. 58 / 0105	Max. Deviation	YES	YES
3. 60 / 0117	Angle of Onset	35°	35°

Vertical Nystagmus? ☐ Yes ■ No
Convergence: Right Eye ✓ Left Eye ✓

ONE LEG STAND

BALANCE EYES CLOSED: 2 2 2 2 CIRCULAR SWAY

WALK AND TURN TEST: EXTRA STEPS

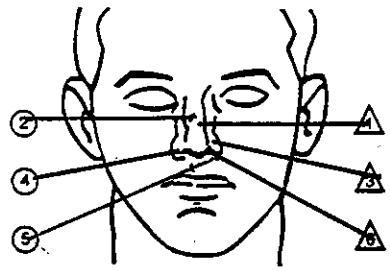
Cannot keep balance ✓
Starts too soon ✓

	1st Nine	2nd Nine
Stops Walking		
Misses Heal-Toe	✓✓	✓
Steps off Line	✓	
Raises Arms	✓✓	
Actual Steps Taken	9	11

	L	R
Sways while balancing.	☐	☑
Uses arms to balance.	☐	☑
Hopping.	☑	☐
Puts foot down.	☑	☑

INTERNAL CLOCK: 46 Estimated as 30 sec.
Describe Turn: LOST BALANCE STAGGERED TO THE RIGHT
Cannot do Test (explain): N/A
Type of Footwear: LOAFERS

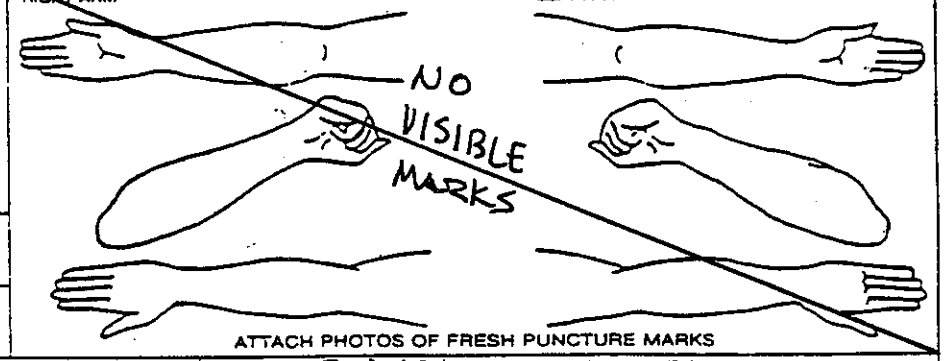
○ Right △ Left
Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	4.0	6.0	4.0	3.5
Right Eye	4.0	6.0	4.0	3.5

NASAL AREA: CLEAR
ORAL CAVITY: CLEAR
HIPPUS: ☐ Yes ■ No
REBOUND DILATION: ☐ Yes ■ No
Reaction to Light: SLOW

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 110 / 70
TEMP: 98.5°
MUSCLE TONE: ☐ Near Normal ■ Flaccid ☐ Rigid
Comments:

What medicine or drug have you been using? How much? I TOOK SOME MEDICINE MY BROTHER GAVE ME I DON'T KNOW WHAT
Time of use? I DON'T REMEMBER
Where were the drugs used? (Location) BROTHERS HOUSE

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED
AUG 6, 1996 0015 HRS	0035	0045	0125

CONTROL #	EXAMINING OFFICER	SERIAL NO	DIVISION	UNAVAILABLE DATES	REVIEWED BY
1736	R. Mayer	321	CSP		KLIMA, J.

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Officer R. Mayer	ARRESTEE: Carolyn A. Cockroft

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Carolyn A. Cockroft took place in the Intoxilyzer Room, 8th District Hqtrs, PhoenixPD

2. WITNESS: Arresting Officer - Sgt. J. Hedlund #4532 Phoenix PD

3. BREATH TEST: Sgt. Hedlund administered Intoxilyzer breath test to Cockroft, the result was 0.00%

4. NOTIFICAATION / INTERVIEW of ARRESTING OFFICER: Writer was notified by Hedlund that he had arrested subject for DUI, and suspected that she was "high on something". Sgt. Hedlund further stated that the subject had been driving at 10 mph on the LaCienda Expressway, and appeared dazed and stuporous. She performed the SFSTs poorly but exhibited no odor of an alcoholic beverage.

5. INITIAL OBSERVATIONS: Writer observed subject in the Intoxilyzer Room, she was quiet, withdrawn and slow to respond to questions. When walking towards the Intoxilyzer she stumbled and nearly fell.

6. MEDICAL PROBLEMS: None observed or stated.

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject had approximately a 2" circular sway and estimated 46 seconds as 30 seconds. Walk and Turn: Subject lost balance during the instructions, started to soon, stepped off the line, missed heel to toe, raised her arms, staggered while turning and took (11) steps instead of (9). One Leg Stand: Subject swayed, raised her arms, hopped and put her foot down. Finger to Nose: Subject missed tip of his nose on each attempt.

8. CLINICAL INDICATORS: Subject exhibited HGN and lack of convergence. Pulse was below the normal range. Systolic blood pressure was below the normal range. Pupils reacted slowly to light.

9. SIGNS of INGESTION: None were evident

10. STATEMENTS: Subject admitted to taking "some medicine" her brother gave her. She stated that she did not know what the medicine was.

11. OPINION of EVALUATOR: In my opinion Carolyn Cockroft is under the influence of a CNS Depressant and unable to operate a vehicle safely.

12. TOXICOLOGICAL SAMPLE: Subject provided a urine sample.

13. MISCELLANEOUS:

000392

Page 1 of 2

DRUG INFLUENCE EVALUATION

EVALUATOR: HALL, I
BOOKING NO: 001 DR: IX-2

ARRESTEE'S NAME (LAST, FIRST, MI): IMPELLIZZERI, MICHAEL T | AGE: 43 | SEX: M | RACE: W
ARRESTING OFFICER (NAME, SERIAL #, DIV.): LAIRD, C.D. #8825 HTD

DATE EXAMINED/TIME/LOCATION: NOV 5, 1996 / 2120 / VBPD
BREATH RESULTS: ☐ Refused Results 0.05 Instrument # 1234
CHEMICAL TEST: ☐ Urine ☒ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ☒ Yes ☐ No — Given by: LAIRD, C.D.
What have you eaten today? When? CHEESEBURGER LUNCH TIME
What have you been drinking? How much? A GLASS OF WINE
Time of last drink? 6PM

Time now? 9 o'clock
When did you last sleep? How long? LAST NIGHT 7HRS
Are you sick or injured? ☐ Yes ☒ No
Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No
Do you have any physical defects? ☐ Yes ☒ No
Are you under the care of a doctor/dentist? ☒ Yes ☐ No — FOR STRESS
Are you taking any medication or drugs? ☒ Yes ☐ No — VALIUM 4 TIMES A DAY

ATTITUDE: COOPERATIVE
COORDINATION: POOR STAGGERING
SPEECH: SLURRED THICK TONGUED
BREATH: SLIGHT ODOR OF ALCOHOLIC BEVERAGE
FACE: NORMAL

CORRECTIVE LENS: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ☐ Normal ☒ Bloodshot ☐ Watery
Blindness: ☒ None ☐ L. Eye ☐ R. Eye
Tracking: ☒ Equal ☐ Unequal
PUPIL SIZE: ☒ Equal ☐ Unequal (explain)
HGN Present: ☒ Yes ☐ No
Able to follow stimulus: ☒ Yes ☐ No
Eyelids: ☐ Normal ☒ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 60 / 2130	Lack of Smooth Pursuit	YES	YES
2. 60 / 2145	Max. Deviation	YES	YES
3. 56 / 2157	Angle of Onset	30°	30°

Vertical Nystagmus? ☐ Yes ☒ No
Convergence: Right Eye ☒ Left Eye ☐

ONE LEG STAND

BALANCE EYES CLOSED: 3 → 3, 0 → 0

WALK AND TURN TEST — "RUBBER LEGGED" WALK

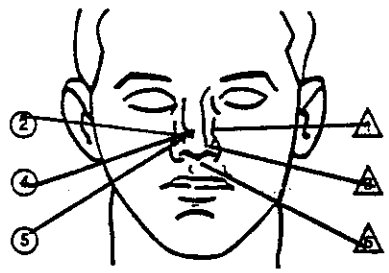
Cannot keep balance: V V
Starts too soon:

	1st Nine	2nd Nine
Stops Walking		
Misses Heal-Toe	V V	V
Steps off Line	V	V
Raises Arms	CONSTANT	CONSTANT
Actual Steps Taken	9	9

L R
☒ ☒ Sways while balancing.
☒ ☒ Uses arms to balance.
☐ ☐ Hopping.
☒ ☒ Puts foot down.

INTERNAL CLOCK: 50 Estimated as 30 sec.
Describe Turn: LOST BALANCE AND STAGGERED
Cannot do Test (explain): N/A
Type of Footwear: RUNNING SHOES

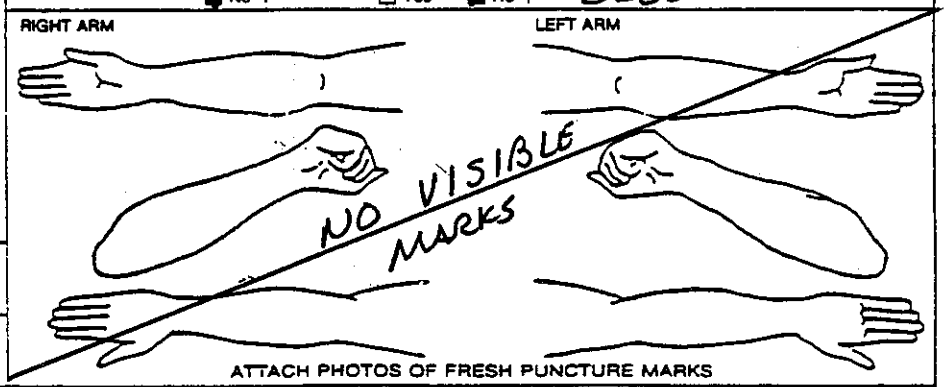
○ Right △ Left — Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	4.5	6.5	5.5	3.5
Right Eye	4.5	6.5	5.5	3.5

NASAL AREA: CLEAR
ORAL CAVITY: CLEAR
HIPPUS: ☐ Yes ☒ No
REBOUND DILATION: ☐ Yes ☒ No
Reaction to Light: SLOW

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 106 / 66 TEMP: 98.6°
MUSCLE TONE: ☒ Near Normal ☐ Flaccid ☐ Rigid
Comments:

What medicine or drug have you been using? How much? VALIUM - A COUPLE OF MY PILLS
Time of use? 6, O'CLOCK
Where were the drugs used? (Location) JOE'S TAVERN

DATE/TIME OF ARREST: NOV 5, 1996 2100
TIME DRE NOTIFIED: 2115
EVAL START TIME: 2120
TIME COMPLETED: 2205

CONTROL #: 1745
EXAMINING OFFICER: I Hall
SERIAL NO: 8825
DIVISION: HTD
UNAVAILABLE DATES:
REVIEWED BY: STUDDARD, R.

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: OfficerJohn Hall	ARRESTEE: Impellizzeri, Michael T

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Michael T. Impellizzeri, took place in the DRE room Virgina Beach PD Hdqtrs.

2. WITNESS: Arresting Officer - C.D. Laird # 8825, Virgina Beach PD. R.C. Studdard, IACP/TAP Representative

3. BREATH TEST: Writer observed Officer Laird administer GCI breath test to Impellizzeri, the result was 0.05%

4. NOTIFICAATION / INTERVIEW of ARRESTING OFFICER: Writer was conducting DRE certification training at VBPD Hqtr. Officer Laird stated that he and Mr. Studdard had come upon the subject slumped in the driver's seat of a vehicle stopped in W/B traffic lane of S.R. #175, near the intersection with Snowden River Pkwy. Officer Laird further stated subject appeared to be very drunk and performed poorly on the field sobriety tests.

5. INITIAL OBSERVATIONS: Writer observed subject seated in a slumped position in a chair next to the GCI. Subj. was mumbling, swaying, and was slow to respond to my initial questions.

6. MEDICAL PROBLEMS: None observed or stated.

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject swayed approximately 3" font to back and estimated 50 seconds as 30 seconds. Walk and Turn: Subject lost balance twice during the instructions, stepped off the line, missed heel to toe, raised arms for balance, and staggered while turning. One Leg Stand: Subject swayed, raised arms, and put his foot down. Finger to Nose: Subject missed tip of his nose on each attempt.

8. CLINICAL INDICATORS: Subject exhibited HGN and lack of convergence. One of the pulse reading was below the normal range. Blood pressure was below the normal range.

9. SIGNS of INGESTION: There was an odor of alcoholic beverage on the subjects breath.

10. STATEMENTS: Subject admitted to drinking wine and taking some Valium pills. He stated that he takes Valium (4) times per day for stress.

11. OPINION of EVALUATOR: In my opinion Michael Impellizzer is under the influence of Alcohol and another CNS Depressant and unable to operate a vehicle safely

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a blood sample.

13. MISCELLANEOUS: Subject voluntarily produced a vial containing which he identified as containing his Valium pills. He further stated that he had filled the prescription for (50) pills two days earlier. There were only 22 pills remaining.

One Hour and Forty-Five Minutes

SESSION X

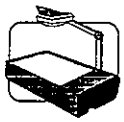
CENTRAL NERVOUS SYSTEM STIMULANTS

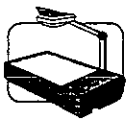
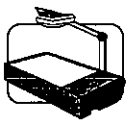
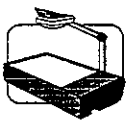
SESSION X CENTRAL NERVOUS SYSTEM STIMULANTS

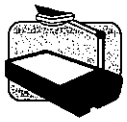
Upon successfully completing this session, the participant will be able to:

- 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 Explain 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 State the clues that are likely to emerge when the Drug Evaluation and Classification Process 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 Section.

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

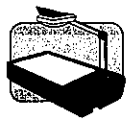
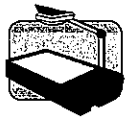
Aides	Lesson Plan	Instructor Notes
  **X-0A&B** (Session Objectives)  **25 Minutes**	CENTRAL NERVOUS SYSTEM STIMULANTS A. Overview of the Category 1. Stimulants speed up the operation of the Central Nervous System. a. "Speed Up" does <u>not</u> mean "improve". b. The "speeding up" results in increased heartbeat, pulse, respiration, blood pressure and temperature. c. All of these effects can lead to physical harm to the stimulant user. d. The "speeding up" also produces nervousness, irritability and an inability to concentrate or think clearly.	Total Lesson Time: Approximately 105 Minutes Session title on wall chart. <u>Briefly</u> review the objectives, content and activities of this session. <u>Emphasize</u> that abuse of 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>. <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.

Aides	Lesson Plan	Instructor Notes
	e. These psychological effects can lead to unpredictable and bizarre behavior by the stimulant user.	
	2. There are three major subcategories of Central Nervous System Stimulants.	
 X-1A	a. Cocaine	
 X-1B	b. The Amphetamines Examples: o Methamphetamine o Amphetamine Sulfate o Biphetamine o Desoxyn	Point out that the Amphetamines include a large number of individual drugs, only a few of which are listed on Visual X-1.
 X-1C	c. Others o Ritalin (methylphenidate hydrochloride) o Preludin (phenmetrazine hydrochloride) o Cylert (pemoline) o Caffeine	Point out 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. Point out that we will focus on Cocaine and the Amphetamines, because they are the most widely abused stimulants. But, the students should be aware that there are other stimulant drugs.
 X-2 ("Coca Plant")	3. Cocaine derives from the coca plant. a. The plant is native to South America.	Coca plant: Scientific name "Erythroxylon Coca".

Aides	Lesson Plan	Instructor Notes
	b. Cocaine is made from the leaves of the plant.	NOTE: the coca pant should not be confused with the cocoa plant, from which chocolate is made.
	c. Archaeological evidence indicates that natives of Peru chewed coca leaves 5,000 years ago.	
	d. Sigmund Freud personally experimented with Cocaine for approximately 3 years.	
	e. Small quantity of cocaine originally was included in the formula for Coca Cola.	Use of Cocaine in products such as Coca Cola was outlawed by the Pure Food and Drug Law of 1906.
	4. Amphetamines were first synthesized near the end of the 19th Century.	
 **X-3** ("Sample Amphetamines and their Medical Purposes")	a. The first use of Amphetamines for medical purposes began in the 1920's.	
	b. Initial medical application was to treat colds.	
	o Amphetamines cause the nasal membranes to shrink.	
	o This gives temporary relief from stuffy nasal passages.	Point out that much more effective drugs have been developed to treat cold symptoms. Amphetamines are no longer prescribed as cold remedies.

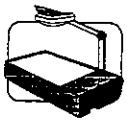
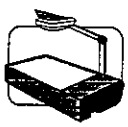
Aides	Lesson Plan	Instructor Notes
	c. Present day medical purposes for amphetamines include:	
	o control symptoms of narcolepsy	Narcolepsy: an extremely rare disorder that causes the individual to fall asleep compulsively, often several hundred times per day.
	o control certain hyperactive behavioral disorders	Example: Ritalin or Cylert are commonly prescribed for children diagnosed with ADD or similar disorders.
	o relieve or prevent fatigue to allow persons to perform essential tasks of long duration	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.
	o treat mild depression	
	o control appetite	Many over the counter appetite control products contain stimulants as their active ingredient.
	o antagonize the effects of Depressant drugs	Remind students that two drugs are antagonistic when the signs and symptoms of one are opposite to the signs and symptoms of the other.
	o prevent and treat surgical shock	
	o maintain blood pressure during surgery	
	o treat Parkinson's Disease	Parkinson's Disease: a form of paralysis characterized by muscular rigidity, tremor and weakness.

Aides	Lesson Plan	Instructor Notes
	o enhance the action of certain analgesic (pain killer) drugs d. Numerous pharmaceutical companies manufacture Amphetamines for these purposes. e. Examples of common pharmaceutical Amphetamines.	
 **X-4** ("Pharmaceutical Amphetamines")	o <u>Dexedrine</u> (dextroamphetamine sulfate) used to treat narcolepsy and hyperkinetic behavior, and for weight control. (Street names "Dexies", "Hearts")	Manufactured by Smith, Kline and French. <u>NOTE</u>: Dexedrine probably is the most commonly prescribed Amphetamine.
	o <u>Benzedrine</u> (Amphetamine sulfate) used to treat narcolepsy, hyperkinetic behavior and weight problems. (Street names "Bennies", "Whites", "Cartwheels")	Manufactured by Smith, Kline and French.
	o <u>Biphetamine</u> (combination of dextroamphetamine and Amphetamine) used in weight reduction. (Street name "Black Beauty")	Manufactured by Pennwalt Pharmaceutical Company.

Aides	Lesson Plan	Instructor Notes
	o Desoxyn (Methamphetamine hydrochloride, also known as desoxyephedrine) used in weight reduction.	Manufactured by Abbott Pharmaceutical Company. If available: display 35mm slides of these various drugs.
	f. Pharmaceutical combinations of Amphetamines and CNS Depressants.	Point out that one of the most undesirable side effects of pharmaceutical Amphetamines is insomnia. Certain manufacturers offer drugs that combine CNS Depressants with Amphetamines to offset the insomnia.
 **X-5** ("Pharmaceutical Combinations of Amphetamines and CNS Depressants")	o Dexamyl (combines dextro-amphetamine sulfate and amobarbital)	Manufactured by Smith, Kline and French. Remind students that amobarbital is a derivative of barbituric acid.
	o Eskatrol (combines dextro-amphetamine sulfate and prochlorperazine)	Manufactured by Smith, Kline and French. Prochlorperazine is a non-barbiturate CNS Depressant. If available: display 35mm slides of these various drugs.
 **X-6** ("Illicit Amphetamines")	5. Large quantities of Amphetamines are also illegally manufactured in this country. a. The two most commonly abused illicit Amphetamines are Methamphetamine and Amphetamine sulfate.	

Aides	Lesson Plan	Instructor Notes
	b. Methamphetamine is also known as Methedrine.	
	c. Its more common "street names" are "speed"; "crank"; "ice"; "crystal"; "meth"; and, "water".	If available: display 35mm slides of illicitly manufactured methamphetamine and amphetamine sulfate.
 **X-7** (Other CNS Stimulants)	6. There are some other CNS Stimulants, apart from Cocaine or the Amphetamines.	
	a. Preludin is a licitly manufactured CNS Stimulant that is not an Amphetamine.	Manufactured by Boehringer Ingelheim.
	o generic name phenmetrazine hydrochloride	
	o used in weight control	
	o has all of the basic effects of amphetamine	
	b. Ritalin is another licitly manufactured, non-Amphetamine CNS Stimulant.	Manufactured by Ciba Pharmaceutical Company.
	o generic name methylphenidate hydrochloride	
	o used to treat mild depression, hyperkinetic behavior, narcolepsy and drug induced lethargy produced by CNS depressants.	Ask students if they know of any children for whom ritalin has been prescribed.

Aides	Lesson Plan	Instructor Notes
	o has many of the basic clinical effects of Amphetamine.	If available: display 35mm slides of Preludin and Ritalin.
	c. Cylert is a third licitly manufactured, non-Cocaine and non-Amphetamine CNS Stimulant.	Manufactured by Abbott Laboratories.
	o generic name Pemoline.	
	o used to treat Attention Deficit Disorder (ADD), also known as "hyperactivity".	
	o has many of the basic clinical effects of Amphetamine.	Remind the students that we will focus on Cocaine and the Amphetamines for our discussion of CNS Stimulants and their effects.
	d. Ephedrine is a licitly manufactured stimulant used in diet aides, body building supplements. It can also be found in herbal teas and preparations.	
	e. Cathine and Cathinone are the two psychoactive chemicals derived from the Khat plant. It originates from the sub-Sahara regions of Africa.	
	f. Methcathinone is illicitly manufactured from common household chemicals. Effects are very similar to methamphetamine.	
	7. Methods of ingestion of CNS Stimulants.	

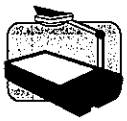
Aides	Lesson Plan	Instructor Notes
 **X-8A** (Methods of Ingestion)	a. There are a variety of ways in which the different CNS Stimulants may be ingested. b. <u>Cocaine</u> is commonly insufflated (snorted), smoked, injected and taken orally. c. In order to be smoked, a pure form of Cocaine is required. o Much of the Cocaine sold in this country is mixed with other materials, or chemically bonded to other elements. o Various chemical processes can be used to "free" the Cocaine from other elements and impurities. o One such process produces pure Cocaine in the form of small chunks. o These chunks are known as "Crack" or "Rock Cocaine".	<u>Point out</u> that the smoking of "freebased" Cocaine has become very popular. <u>NOTE</u>: the term "Crack" derives from the cracking sound produced when the chunks are burned for smoking.
 **X-8B**	d. Licitly manufactured <u>Amphetamines</u> are taken orally, in the form of tablets, capsules and liquid elixirs.	

Aides	Lesson Plan	Instructor Notes
	e. Illicitly manufactured <u>Methamphetamine</u> most commonly is injected directly into the veins, but sometimes may be snorted or taken orally.	Point out that bruising often will be seen around a Methamphetamine injection site.
	f. There is also a form of illicit Methamphetamine known as "Ice". o "Ice" is very similar to the "Crack" form of Cocaine. o Like "Crack", "Ice" comes in the forms of small, hard chunks. o "Ice" also is put in a pipe, heated and smoked.	
	g. Another crystalline, smokeable form of Methamphetamine is known as "Crystal Meth"; it is very similar to "Ice".	Point out that "Ice" tends to be clear in appearance, while "crystal meth" is less pure and has a cloudy appearance.
	h. Illicitly manufactured <u>Amphetamine sulfate</u> usually is produced in tablet form (called "Mini bennies") and is taken orally.	Solicit students' questions and comments about the overview of CNS Stimulants.
 **5 Minutes**  **X-9**	B. Possible Effects	
	1. Both Cocaine and the Amphetamines produce <u>euphoria</u>, a feeling that there are no problems.	

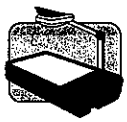
Aides	Lesson Plan	Instructor Notes
	a. A feeling of super strength, and of absolute self confidence may also be present. b. With Cocaine, but not with Amphetamines, there is an anesthetic effect, and the dulling of pain may contribute to the euphoria. 2. Stimulant users tend to become <u>hyperactive</u>, indicated by a nervousness, extreme talkativeness, and an inability to sit still. 3. Stimulants tend to <u>release inhibitions</u>, allowing users to commit acts that they normally would avoid. 4. Stimulant users <u>misperceive time and distance</u>.	<u>Example</u>: To the subject, time seems to be speeded up, so that 2 hours may seem like 2 minutes.
	5. Persons under the influence of stimulants become easily confused, and lose the <u>ability to concentrate</u> or to think clearly for any length of time.	<u>Point out</u> that this lack of concentration makes it very difficult for the user to perform divided attention tests successfully. Solicit students' questions and comments concerning possible effects of CNS Stimulants.
10 Minutes	C. Onset and Duration of Effects 1. The onset and duration of effects are quite different for Cocaine as compared to the Amphetamines.	

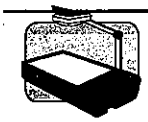
Aides	Lesson Plan	Instructor Notes
	a. Generally speaking, Cocaine's effects are much briefer than are Amphetamine's.	
	b. The time parameters of Cocaine vary with the method of ingestion.	Note: Subjects that have ingested both Cocaine and Alcohol will produce a metabolite known as "Cocaethylene". Which has a half-life of four hours possibly extending the effects of Cocaine longer than the norm.
 **X-10** ("Cocaine Time Factors")	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.	
	a. The smoker begins to feel the effects of the Cocaine virtually immediately.	
	b. The "rush", or euphoria, is reported to be very intense.	
	c. However, the euphoric effects only last 5-10 minutes after the Cocaine is smoked.	
	3. When Cocaine is <u>injected</u>, the drug is passed directly to the blood stream, where it is carried swiftly to the brain.	Note: Injection sites will be discussed in Session XVII (Narcotic Analgesics).
	a. The effects are felt within seconds.	
	b. The onset of effects is very intense.	
	c. The effects usually continue to be felt for 45-90 minutes.	

Aides	Lesson Plan	Instructor Notes
	4. When Cocaine is <u>snorted</u> (insufflated), the onset of effects is not quite as rapid as with smoking or injecting. a. The user typically feels the onset of effects within 30 seconds after snorting the drug. b. Although the "rush" occurs, it is not quite as intense as it is when the Cocaine is smoked or injected. c. The effects from snorting usually last from 30-90 minutes.	<u>Point out</u> that snorting remains a very popular method of ingesting Cocaine.
	5. <u>Oral</u> ingestion of Cocaine usually is the least preferred method. a. The user generally does not begin to feel the effects for 3-5 minutes. b. The effects are not as intense as they are with other methods of ingestion. c. However, the effects may last 15-30 minutes longer than with other methods.	<u>Clarification</u>: the effects of Cocaine taken orally may last from 45-120 minutes.
	6. With all methods of ingestion, the duration of Cocaine's effects tend to be briefer than the effects of most other drugs. a. As the effects wear off, it becomes very difficult to observe evidence of impairment.	<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 suspect's use of Cocaine. Often, much more time will have elapsed. For this reason, Cocaine use can be difficult to ascertain from a drug evaluation and classification examination.

Aides	Lesson Plan	Instructor Notes
	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.	
 **X-11** ("Methamphetamine Time Factors")	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 long lasting: the user stays "high" or "wired" for 4-8 hours following injection.	
	8. When Methamphetamine is snorted or taken orally, the onset takes longer, the rush is much less intense, and the effects are much briefer.	
	9. When Methamphetamine is smoked in the form of "Ice", the rush is very intense, and the effects are long lasting, i.e., up to 8 hours or longer.	Solicit students' comments and questions concerning time parameters of Cocaine and Methamphetamine.
 **5 Minutes**	D. Overdose Signs and Symptoms	
	1. Overdoses of Cocaine or Amphetamines can cause the pleasurable effects to turn into panic and often violent behavior.	Write on Flipchart "Cocaine Psychosis or Cocaine Delirium".

Aides	Lesson Plan	Instructor Notes
	If the overdose is caused by Cocaine, it is commonly referred to as Cocaine Psychosis or Cocaine Delirium. a. Subject may become very confused and aggressive. b. Subject may suffer convulsions and faint or pass into a coma. c. Heartbeat (pulse) will increase, possibly dramatically. d. Hallucinations may occur. 2. Death can occur from sudden respiratory failure, or from heart arrhythmia, leading to cardiac arrest. 3. Another danger is that subjects may attempt to treat Stimulant overdose with Barbiturates, possibly leading to overdose of CNS Depressants.	Example: The feeling that bugs are crawling under the skin is also known as "Coke Bugs". Note: It is important that officers are aware of this to avoid in custody deaths. Solicit students' comments and questions concerning overdoses of CNS Stimulants.
60 Minutes  **X-12A** ("SFST Evidence")	E. Expected Results of the Evaluation 1. Observable evidence of impairment. a. Standardized Field Sobriety Tests.	

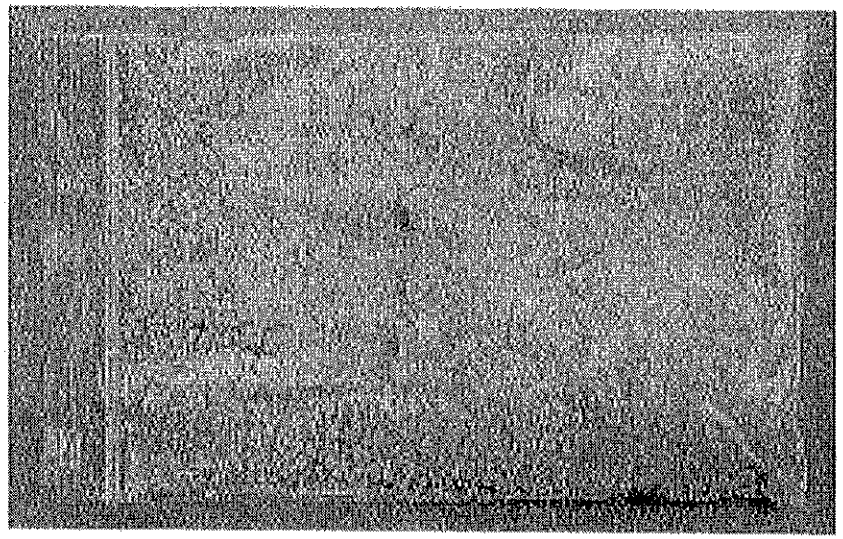
Aides	Lesson Plan	Instructor Notes
	o Horizontal Gaze Nystagmus will <u>not</u> be present with suspects under the influence of CNS Stimulants. o Vertical Nystagmus will <u>not</u> be present. o Performance on Walk and Turn and One Leg Stand may be impaired due to the suspect's hyperactivity and inability to concentrate. o Performance on Romberg and Finger to Nose tests will be impaired.	<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. Suspect may also count very rapidly on the one leg stand test. <u>Point out</u> that 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. Also, his or her finger movements may be abrupt, jerky and inaccurate.
 **X-12B** ("General Indicators")	b. General indicators. o restlessness o anxiety o euphoria o talkativeness o irritability o runny nose o redness to nasal area o grinding teeth, bruxism o leg tremors o eyelid tremors	<u>NOTE</u>: Indicators associated with the nasal area may be evident if the subject is in the habit of snorting Cocaine.
	2. Evidence associated with the physiologic examinations.	

Aides	Lesson Plan	Instructor Notes
 **X-12C** ("Eye Examinations")	a. Eye examinations. o Lack of Convergence will not be evident	
	o pupils generally will be dilated	Point out that the technical term for "dilated pupils" is Mydriasis.
	o pupil reaction to light generally will be slow	
 **X-12D** ("Vital Signs Examinations")	b. Vital signs examinations. o blood pressure generally will be elevated	
	o pulse generally will be increased	
	o body temperature generally will be elevated	
 **X-13** ("CNS Stimulant Symptomatology Chart")	3. Summary	
	4. Demonstrations	
	a. Video tape demonstrations	Show video tape of subject(s) under the influence of CNS Stimulants. Relate behavior/ observations to the CNS Stimulant Symptomatology Chart.
	b. Drug Evaluation and Classification exemplar demonstrations.	Refer students to the exemplars found at the end of Section X in their student manuals.

Aides	Lesson Plan	Instructor Notes
		Relate the items on the exemplars to the CNS Stimulant Symptomatology Chart. Solicit students' questions or comments concerning Expected Results of the Evaluation of subjects under the influence or stimulants.

Session X

Central Nervous System Stimulants



Central Nervous System Stimulants

Upon successfully completing this session, the participant will be able to:

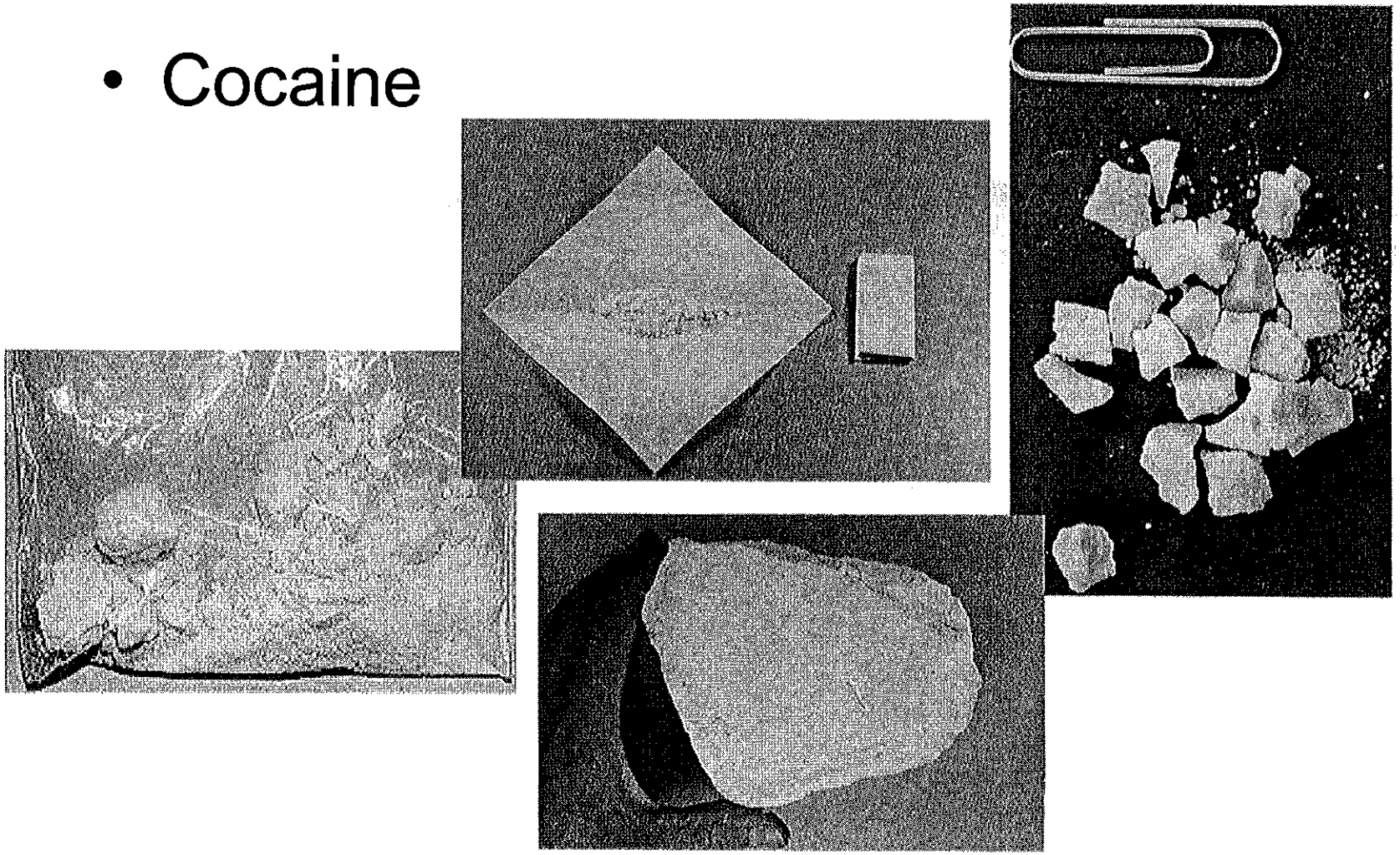
- Explain a brief history of the CNS Stimulant category of drugs
- Identify common drug names and terms associated with this category
- Identify common methods of administration for this category
- Explain the symptoms, observable signs and other effects associated with this category

Central Nervous System Stimulants (continued)

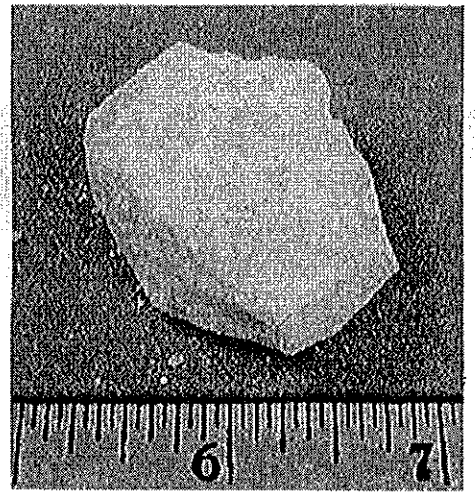
- Explain the typical time parameters, i.e., on-set and duration of effects, associated with this category
- State the clues that are likely to emerge when the drug evaluation and classification process is conducted for a person under the influence of this category of drugs
- Correctly answer the "Topics for Study" questions at the end of this section

Types of CNS Stimulants

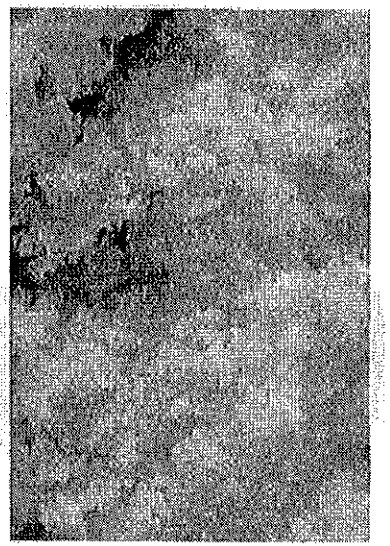
- Cocaine

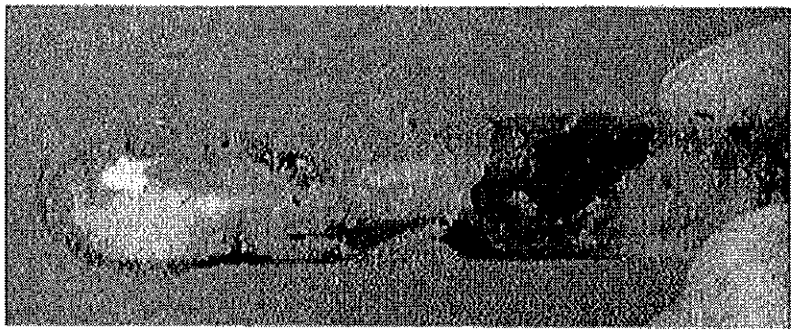


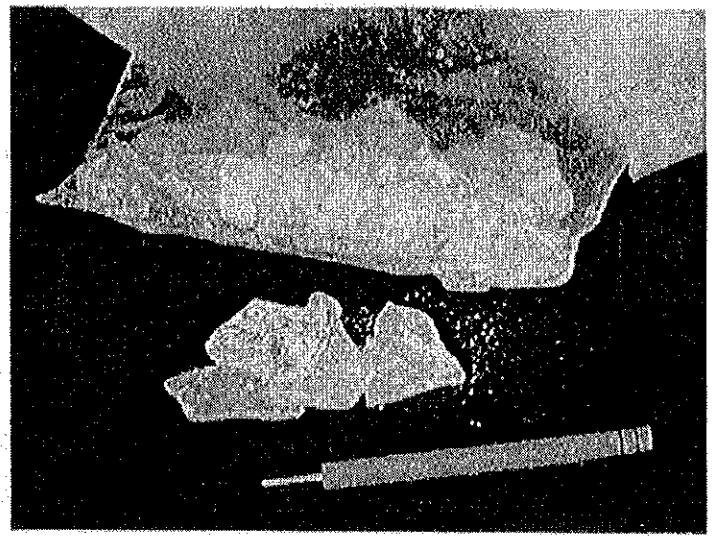
Types of CNS Stimulants (continued)



- The Amphetamines
  - Methamphetamine
  - Amphetamine Sulfate
  - Biphetamine
  - Desoxyn



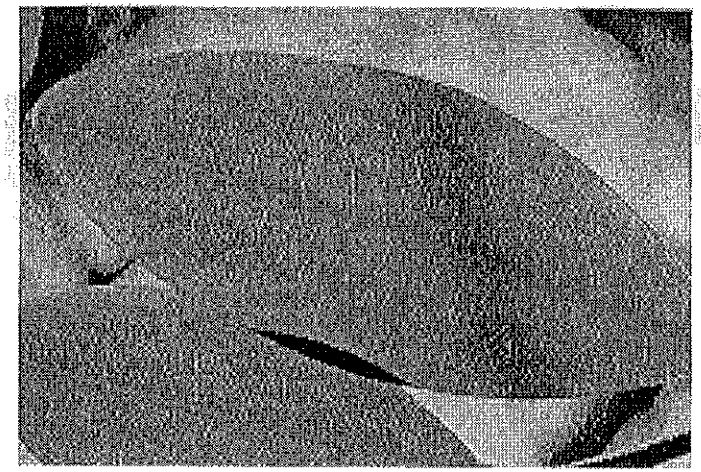


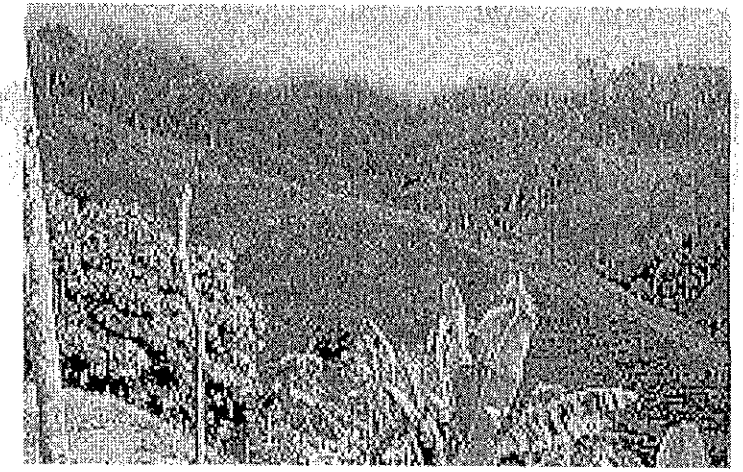


Types of CNS Stimulants (continued)

- Others
  - Ritalin
  - Preludin
  - Cylert
  - Caffeine

Coca Plant





"Erythroxylon Coca"

Medical Uses of Amphetamines

- Control symptoms of narcolepsy
- Control hyperactivity in children
- Relieve or prevent fatigue
- Treat mild depression
- Control appetite
- Antagonize effects of depressants
- Prevent and treat surgical shock
- Maintain blood pressure during surgery
- Treat Parkinson's disease
- Enhance the action of analgesic drugs

Commonly Prescribed Pharmaceutical Amphetamines

- Dexedrine
  - Dextroamphetamine Sulfate
  - Smith, Kline And French
- Biphetamine
  - Combination of Amphetamine and Dextroamphetamine
  - Pennwalt Pharmaceutical
- Benzedrine
  - Amphetamine Sulfate
  - Smith, Kline And French
- Desoxyn
  - Methamphetamine Hydrochloride
  - Abbott Pharmaceutical

Pharmaceutical Combinations of Amphetamines and CNS Depressants

- Dexamyl

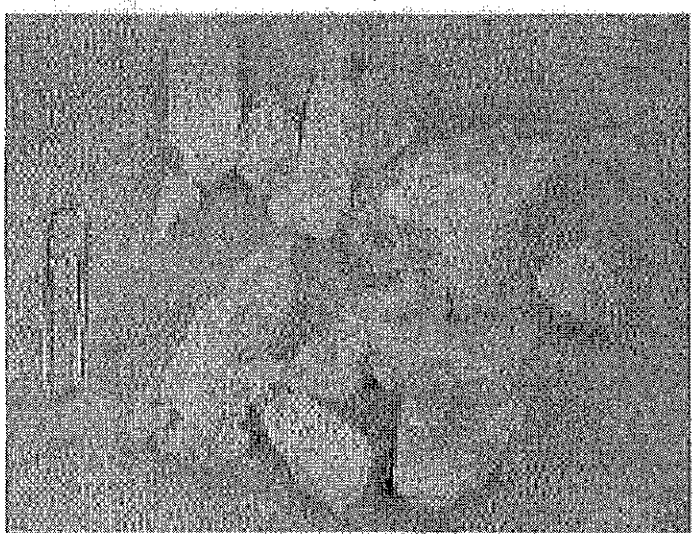
  Dextroamphetamine Sulfate and Amobarbital

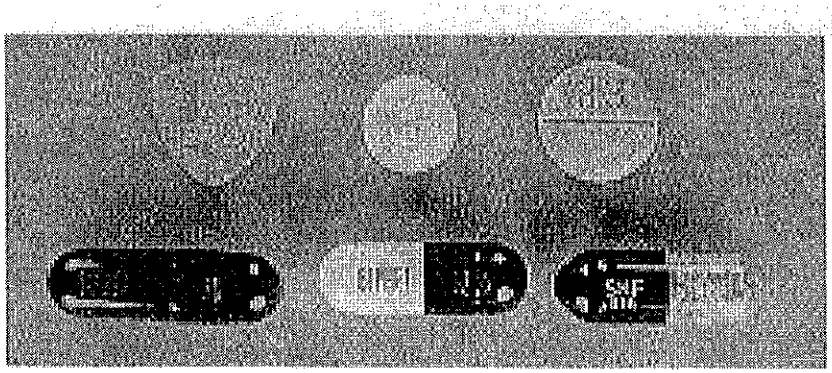
- Eskatrol

  Dextroamphetamine Sulfate and Prochlorperazine

Commonly Abused Illicit Amphetamines

Methamphetamine





Amphetamine Sulfate

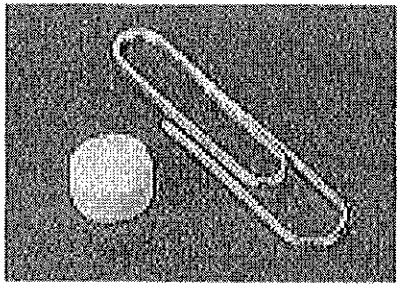
Other CNS Stimulants
(Besides Cocaine or the Amphetamines)

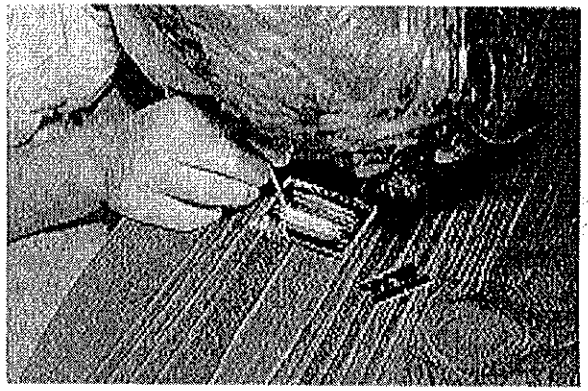
- Preludin
  - Phenmetrazine Hydrochloride
  - Boehringer Ingelheim Co.
- Ritalin
  - Methylphenidate Hydrochloride
  - Ciba Pharmaceutical
- Cylert
  - Pemoline
  - Abbott Laboratories

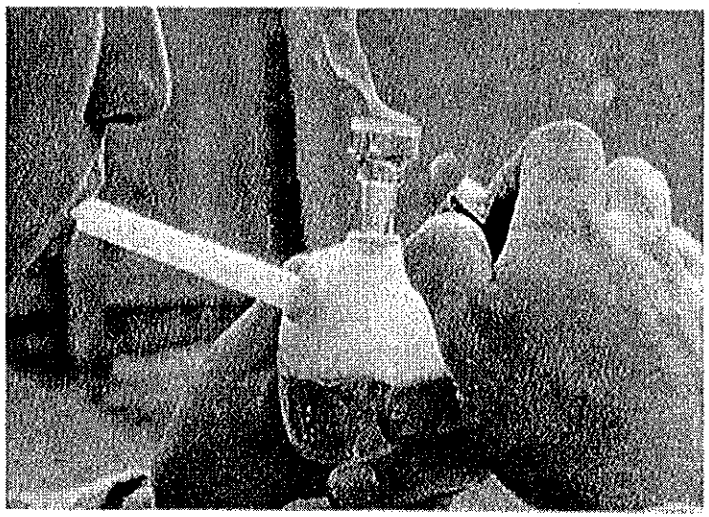
Methods of Ingesting Stimulants

Cocaine

- Snorting
- Smoking
- Injection
- Orally

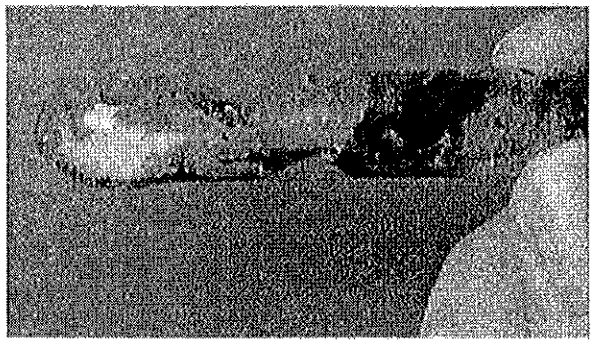




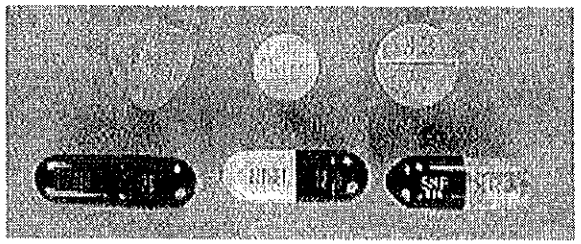


Methods of Ingesting Stimulants (continued)

- Methamphetamine
  - Injection
  - Snorting
  - Orally
  - Smoking



- Other Amphetamines
  - Orally (tablets, capsules, etc.)



Possible Effects of CNS Stimulants

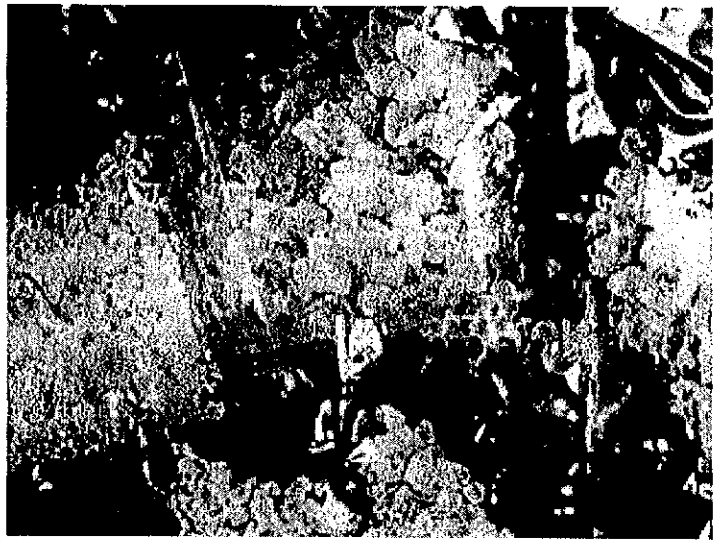
- Euphoria
- Hyperactivity
- Release of inhibitions
- Misperception of time and distance
- Inability to concentrate

Cocaine Time Factors

- Smoked (freebase)
  - Virtually immediate effects
  - Very intense "rush"
  - Effects last 5-10 minutes
- Snorted
  - Effects are felt within 30 seconds
  - Intense "rush"
  - Effects last 30-90 minutes
- Injected
  - Effects are felt within seconds
  - Very intense "rush"
  - Effects last 45-90 minutes
- Orally
  - Effects begin within 3-5 minutes
  - Effects are less intense
  - Effects last 45-120 minutes

Methamphetamine Time Factors

- Effects are felt within seconds
- "Rush" is very intense for 5-30 seconds
- Effects last 4-8 hours



Evaluation of Suspects Under the Influence of CNS Stimulants

SFST Evidence:

- HGN or Vertical Nystagmus - none
- Impaired performance will be evident on Walk and Turn and One Leg Stand
- Impaired performance will be evident on Romberg and Finger-to-Nose

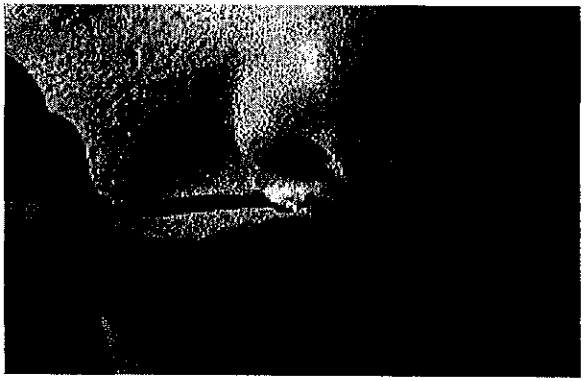
Evaluation of Suspects Under the Influence of CNS Stimulants

General indicators:

- Restlessness
- Anxiety
- Euphoria
- Talkativeness
- Irritability
- Bruxism
- Eyelid and leg tremors

If subject snorts cocaine:

- Runny nose
- Redness to nasal area



Evaluation of Suspects Under the Influence of CNS Stimulants

Eye Examinations:

- Lack of convergence - none
- Pupils will be dilated (Mydriasis)
- Pupillary reaction to light will be slow

Evaluation of Suspects Under the Influence of CNS Stimulants

Vital Signs:

- Blood pressure will be up
- Pulse will be up
- Body temperature will be up

CNS Stimulant Symptomatology Chart

HGN	None
Vertical Nystagmus	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

000436

Page 1 of 2

DRUG INFLUENCE EVALUATION

EVALUATOR: MOEN, R #6762
BOOKING NO. 007
DR. X-1

ARRESTEE'S NAME (LAST, FIRST, MI): HEDLUND, JAMES R.
AGE: 39 | SEX: M | RACE: W
ARRESTING OFFICER (NAME, SERIAL #, DIV.): ENGLE, R #9922 VSP

DATE EXAMINED/TIME/LOCATION: July 8, 1996 2230 CENTRAL TESTING
BREATH RESULTS: ☐ Refused Results 0.00 % Instrument # 1234
CHEMICAL TEST: ☐ Urine ■ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ■ Yes ☐ No
Given by: ENGLE, R.
What have you eaten today? When? CANDY BAR AROUND NOON
What have you been drinking? How much? NOTHING
Time of last drink? N/A

Time now? 8 o'clock
When did you last sleep? How long? LAST NIGHT 3HRS
Are you sick or injured? ☐ Yes ■ No
Are you diabetic or epileptic? ☐ Yes ■ No
Do you take insulin? ☐ Yes ■ No
Do you have any physical defects? ☐ Yes ■ No
Are you under the care of a doctor/dentist? ☐ Yes ■ No
Are you taking any medication or drugs? ☐ Yes ■ No

ATTITUDE: COOPERATIVE
COORDINATION: POOR STUMBLING
SPEECH: RAPID, NERVOUS
BREATH: NORMAL
FACE: NORMAL

CORRECTIVE LENS: ■ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ■ Normal ☐ Bloodshot ☐ Watery
Blindness: ■ None ☐ L. Eye ☐ R. Eye
Tracking: ■ Equal ☐ Unequal
PUPIL SIZE: ■ Equal ☐ Unequal (explain)
HGN Present: ☐ Yes ■ No
Able to follow stimulus: ■ Yes ☐ No
Eyelids: ■ Normal ☐ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 112, 2240	Lack of Smooth Pursuit	NO	NO
2. 108, 2253	Max. Deviation	NO	NO
3. 100, 2305	Angle of Onset	NONE	NONE

Vertical Nystagmus? ☐ Yes ■ No
Convergence: Right Eye / Left Eye

ONE LEG STAND: 25 (R), 21 (L)

BALANCE EYES CLOSED: 3 3 0 0

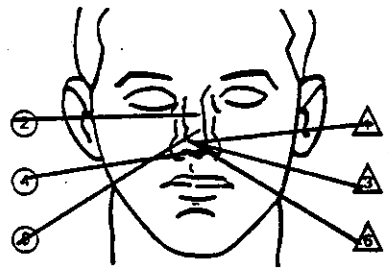
WALK AND TURN TEST: HAD DIFFICULTY STANDING STILL DURING INSTRUCTIONS

	1st Nine	2nd Nine
Cannot keep balance	V	V
Starts too soon		
Stops Walking		
Misses Heal-Toe		
Steps off Line		
Raises Arms	VVV	VV
Actual Steps Taken	9	9

L R
☐ ☑ Sways while balancing.
☑ ☑ Uses arms to balance.
☑ ☐ Hopping.
☑ ☑ Puts foot down.

INTERNAL CLOCK: 15 Estimated as 30 sec.
Describe Turn: TURNED IN ONE QUICK MOVEMENT (SWIVEL)
Cannot do Test (explain): N/A
Type of Footwear: COMBAT BOOTS

○ Right △ Left
Draw lines to spots touched

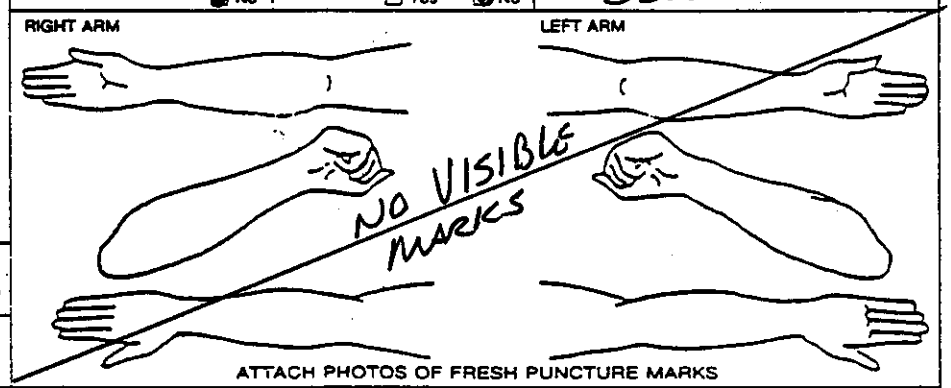


PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	6.0	8.5	7.5	6.0
Right Eye	6.0	8.5	7.5	6.0

NASAL AREA: WHITE POWDER RESIDUE IN NOSE
ORAL CAVITY: CLEAR

NYSTAGMUS: ☐ Yes ■ No
REBOUND DILATION: ☐ Yes ■ No
Reaction to Light: SLOW

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 142, 96
TEMP: 99.9 °

MUSCLE TONE: ☐ Near Normal ☐ Flaccid ■ Rigid
Comments:

What medicine or drug have you been using? How much? NOTHING I WON'T ANSWER THAT
Time of use? N/A
Where were the drugs used? (Location) N/A

DATE/TIME OF ARREST: July 8, 1996 2200
TIME DRE NOTIFIED: 2220
EVAL START TIME: 2230
TIME COMPLETED: 2310

CONTROL #
EXAMINING OFFICER: Ron Moen
SERIAL NO: 6762
DIVISION: VSP
UNAVAILABLE DATES:
REVIEWED BY: TALE, T

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Officer Ron Moen	ARRESTEE: James R. Hedlund

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of James R. Hedlund took place in the DRE Room, 3rd Precinct, Tucson PD

2. WITNESS: Arresting Officer - Officer R. Engle, #2309 Tucson PD

3. BREATH TEST: Officer Engle administered Intoxilyzer breath test to Hedlund, the result was 0.00%

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was notified by Officer Engle immediately upon completion of the breath test. Officer Engle stated subject had been apprehended for driving 110/65 zone and driving without headlights.

5. INITIAL OBSERVATIONS: Writer observed subject in the DRE room sitting next to Officer Engle. Subject rocked rocked back and forth while seated on the bench.

6. MEDICAL PROBLEMS: None observed or stated.

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject swayed approximately 3" front to back and estimated 15 seconds as 30 seconds. Walk and Turn: Subject started to soon, lost balance during instructions, raised his arms, and turned in an abrupt swivel. One Leg Stand: Subject swayed, raised his arms, hopped and put his foot down. Finger to Nose: Subject missed tip of his nose on each attempt with his right hand.

8. CLINICAL INDICATORS: Subject's pulse, blood pressure and temperature were above the normal range. His pupils were dilated and reacted slowly to light.

9. SIGNS of INGESTION: Subjects nostrils were found to contain a residue of white powder.

10. STATEMENTS: Subject denied taking any medicine or drugs. When asked, "how much coke did you snort tonight?" Subject stated "I won't answer that"

11. OPINION of EVALUATOR: In my opinion James R. Hedlund is under the influence of a CNS Stimulant and unable to operate a vehicle safely.

12. TOXICOLOGICAL SAMPLE: Subject agreed to provided a blood sample.

13. MISCELLANEOUS:

000438

EVALUATOR: JOHN, C

Page 1 of 2 **DRUG INFLUENCE EVALUATION**

BOOKING NO. 004 DR. X-2

ARRESTEE'S NAME (LAST, FIRST, MI): KOHLHEPP, KIM J. | AGE: 38 | SEX: M | RACE: W

ARRESTING OFFICER (NAME, SERIAL #, DIV.): ROBERTS, R #2468 CPD

DATE EXAMINED/TIME/LOCATION: OCT 10, 1996 2315 3RD DIST

BREATH RESULTS: ☐ Refused Results 0.100 Instrument # 1234

CHEMICAL TEST: ☐ Urine ☒ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ☒ Yes ☐ No Given by: ROBERTS, R

What have you eaten today? When? HOT DOG 1PM

What have you been drinking? How much? NOTHING

Time of last drink? N/A

Time now? MIDNIGHT When did you last sleep? How long? YESTERDAY 4HRS

Are you sick or injured? ☐ Yes ☒ No

Are you diabetic or epileptic? ☐ Yes ☒ No

Do you take insulin? ☐ Yes ☒ No

Do you have any physical defects? ☐ Yes ☒ No

Are you under the care of a doctor/dentist? ☐ Yes ☒ No

Are you taking any medication or drugs? ☐ Yes ☒ No I DON'T DO DRUGS

ATTITUDE: COOPERATIVE BUT RESTLESS

COORDINATION: POOR JITTERY STUMBLING

SPEECH: VERY TALKATIVE RAPID "TRAPPING" OVER WORDS

BREATH: NORMAL

FACE: NORMAL

CORRECTIVE LENS: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft

Eyes: ☒ Normal ☐ Bloodshot ☐ Watery

Blindness: ☒ None ☐ L Eye ☐ R. Eye

Tracking: ☒ Equal ☐ Unequal

PUPIL SIZE: ☒ Equal ☐ Unequal (explain)

HGN Present: ☐ Yes ☒ No

Able to follow stimulus: ☒ Yes ☐ No

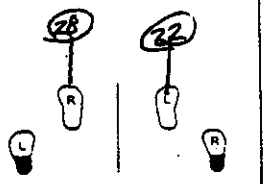
Eyelids: ☒ Normal ☐ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 100 / 2320	Lack of Smooth Pursuit	NO	NO
2. 108 / 2331	Max. Deviation	NO	NO
3. 104 / 2343	Angle of Onset	NONE	NONE

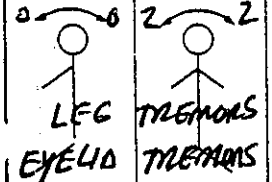
Vertical Nystagmus? ☐ Yes ☒ No

Convergence: Right Eye ← Left Eye →

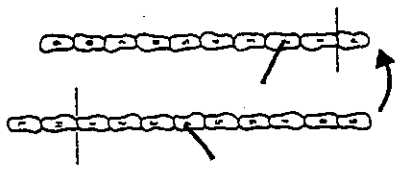
ONE LEG STAND



BALANCE EYES CLOSED



WALK AND TURN TEST



Cannot keep balance ____

Starts too soon ____

	1st Nine	2nd Nine
Stops Walking		
Misses Heel-Toe		
Steps off Line	✓	✓
Raises Arms	✓✓	✓
Actual Steps Taken	9	9

L	R	
☐	☒	Sways while balancing.
☐	☒	Uses arms to balance.
☐	☐	Hopping.
☒	☒	Puts foot down.

INTERNAL CLOCK: 12 Estimated as 30 sec.

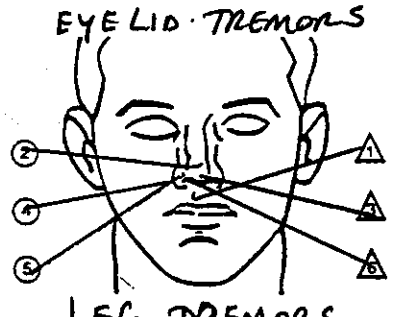
Describe Turn: SWIVEL TURN ONE QUICK MOTION

Cannot do Test (explain): N/A

Type of Footwear: STREET SHOES

○ Right △ Left

Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	6.5	9.0	8.0	6.0
Right Eye	6.5	9.0	8.0	6.0

NASAL AREA: RED RUNNY ULCERATION INSIDE NOSE

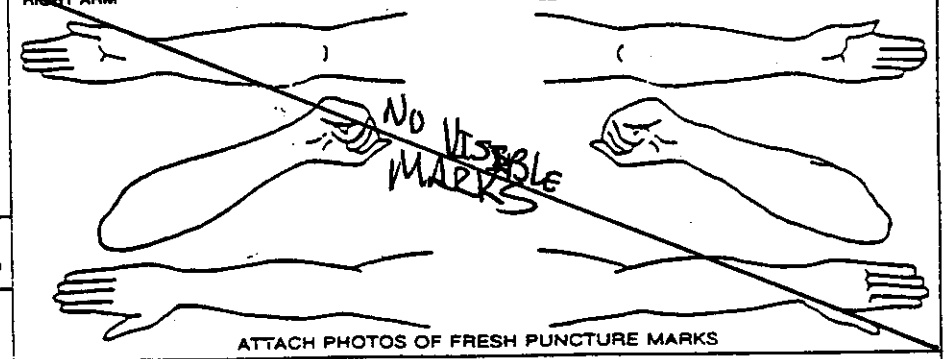
ORAL CAVITY: CLEAR

HIPPUS: ☐ Yes ☒ No

REBOUND DILATION: ☐ Yes ☒ No

Reaction to Light: SLOW

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 144 / 104 TEMP: 99.8 °

MUSCLE TONE: ☒ Near Normal ☐ Flaccid ☐ Rigid

Comments:

What medicine or drug have you been using? How much? I DON'T USE DRUGS ANYMORE

Time of use? REFUSED

Where were the drugs used? (Location) REFUSED

DATE/TIME OF ARREST: OCT 10, 1996 2240

TIME DRE NOTIFIED: 2305

EVAL START TIME: 2315

TIME COMPLETED: 2345

CONTROL #

EXAMINING OFFICER: Frank John

SERIAL NO: 7766

DIVISION: VIP

UNAVAILABLE DATES

REVIEWED BY: STUDARD R.

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Officer Clark John	ARRESTEE: Kim J. Kohlhepp (m)

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Kim J. Kohlhepp took place in the DRE Room, 3rd Precinct, Alburqueque PD

2. WITNESS: Arresting Officer - Officer R. Roberts, #8712 Alburqueque PD

3. BREATH TEST: Officer Roberts administered Intoxilyzer breath test to Kohlhepp, the result was 0.00%

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was notified by Officer Roberts immediately upon completion of the breath test. Officer Roberts stated subject had been apprehended for driving 65/30 zone, failure to stop for a traffic signal and driving without headlights.

5. INITIAL OBSERVATIONS: Writer observed subject in the DRE room standing next to Officer Roberts. When told to sit down, subject stood up again within several seconds and fidgeted from foot to foot.

6. MEDICAL PROBLEMS: None observed or stated.

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject swayed approximately 2" side to side and estimated 15 seconds as 30 seconds. Walk and Turn: Subject stepped off the line, raised his arms, and turned in an abrupt (about face) One Leg Stand: Subject swayed, raised his arms, hopped and put his foot down. Finger to Nose: Subject missed tip of his nose on each attempt.

8. CLINICAL INDICATORS: Subject's pulses, blood pressure and temperature were above the normal range. His pupils were dilated and reacted slowly to light.

9. SIGNS of INGESTION: Subjects nostrils were found to be red and ulcerated.

10. STATEMENTS: Subject denied ever using drugs. Subsequently stated "I don't use drugs anymore"

11. OPINION of EVALUATOR: In my opinion Kim Kohlhepp is under the influence of a CNS Stimulant and unable to operate a vehicle safely.

12. TOXICOLOGICAL SAMPLE: Subject agreed to provided a blood sample.

13. MISCELLANEOUS: There is an outstanding bench warrant on the subject Kim J. Kohlhepp, for failure to appear on a charge of possession of methamphetamine.

One Hour

SESSION XI

PRACTICE: EYE EXAMINATIONS

SESSION XI PRACTICE: EYE EXAMINATIONS

Upon successfully completing this session, the participant will be able to:

- Conduct examinations of pupil size and reaction to light, under both lighted room and darkened room conditions.
- Articulate the eye examination procedures.
- Document the results of the examinations of pupil size and reaction to light.

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

Aides	Lesson Plan	Instructor Notes
  **XI-0** (Session Objectives)  **10 Minutes**	PRACTICE: EYE EXAMINATIONS A. Procedures For This Session 1. Participants will work in three or four member teams. a. At any given time, one member of the team will be engaged in conducting and recording eye examinations of another member. b. The remaining member(s) will help coach and critique the student who is conducting the examinations. 2. Participants will take turns serving as test administrator, test subject and coach. 3. Teams initially will practice under lighted room conditions. a. Check pupil size under normal room light. b. Check reaction to light and pupil size using a pen light in a lighted room.	Total Lesson Time: Approximately 60 Minutes Point out "Practice Sessions" wall chart. Briefly review the objectives, content and activities of this session. Make team assignments. Emphasize that students can help each other learn by pointing out errors of omission or commission. Clarification: students will shine a pen light directly into the subject's eye. Demonstrate this, using a student subject.

Aides	Lesson Plan	Instructor Notes
	4. Teams subsequently will practice under darkened room conditions. a. Check pupil size in near total darkness. b. Check pupil size under indirect light. c. Check reaction to light and pupil size under direct pen light.	
	5. Students will record their estimations using Eye Examinations Data Sheet.	Point out the copies of the Eye Examination Data Sheet in the Student's Manual. Solicit students' questions concerning procedures for this practice session.
 **20 Minutes**	B. Room Light Examinations	
	1. Pupil size estimation, under room light. 2. Pupil reaction and size estimation, under direct pen light.	Monitor teams and coach students as necessary and appropriate. When the first student completes the two estimations, have the team members exchange roles. Continue this process. Sequence of roles should be as follows: 1. Test administrator 2. Test subject 3. Coach 4. Test administrator (continue cycle)

Aides	Lesson Plan	Instructor Notes
		Terminate this segment after 20 minutes, or after each student has twice served as a test administrator (whichever comes first).
 **25 Minutes**	C. Dark Room Examinations	Allow students approximately 90 seconds for their eyes to adapt to the darkened conditions.
	1. Pupil size estimation, under near total darkness.	Monitor teams and coach students as necessary and appropriate.
	2. Pupil size estimation, under indirect light. 3. Pupil reaction and size estimation, under direct pen light.	When the first student completes the three checks, have the team members exchange roles. Continue this process. Sequence of roles should be as follows: 1. Test administrator 2. Test subject 3. Coach 4. Test administrator (continue cycle)
		Terminate this segment after 25 minutes, or after each student has twice served as a test administrator (whichever comes first).
 **5 Minutes**	D. Session Wrap Up	Offer appropriate comments and observations about the students' performance. Solicit students' comments concerning the practice session.

Session XI

Practice: Eye Examinations

Practice: Eye Examinations

Upon successfully completing this session, the participant will be able to:

- Conduct examinations of pupil size and reaction to light, under both lighted room and darkened room conditions
- Articulate the eye examination procedures
- Document the results of the examinations of pupil size and reaction to light

One Hour and Forty-Five Minutes

SESSION XII

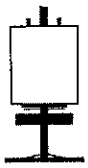
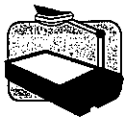
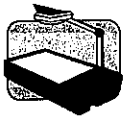
ALCOHOL WORKSHOP

SESSION XII ALCOHOL WORKSHOP

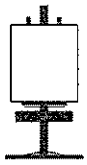
Upon successfully completing this session, the participant will be able to:

- Correctly administer the preliminary clinical examinations and psychophysical tests used in the drug evaluation procedure.
- Observe and record the suspect's performance on the preliminary clinical examinations and psychophysical tests.
- Determine the level of impairment based on the results of the suspect's preliminary clinical examinations and psychophysical tests.

Content Segments		Learning Activities	
A.	Procedures	o	Instructor Led Presentations
B.	Hands-On Practice	o	Student Led Practice
C.	Session Wrap Up	o	Instructor Led Discussion

Aides	Lesson Plan	Instructor Notes
  **XII-0** (Session Objectives)	ALCOHOL WORKSHOP	Total Lesson Time: Approximately 105 Minutes Session title on wall chart. Briefly review the objectives, content and activities of this session.
 **10 Minutes**	A. Procedures	
	1. Students will work in three or four member teams during this session.	Make team assignments.
	2. Each team will administer a battery of tests to each volunteer.	
 **XII-1** (Examinations and tests)	a. The preliminary clinical examinations and psycho-physical tests include: o Pupil Size (Room Light) o Horizontal Gaze Nystagmus o Vertical Nystagmus o Lack of Convergence o Romberg o Walk and Turn o One Leg Stand (both legs) o Finger to Nose o Pulse	Point out that for the Drug Evaluation and Classification Examination, it is helpful to estimate angle of onset for HGN, and to relate it to BAC.
	b. Results/observations of all tests will be recorded on the Standard Drug Evaluation Report Form.	Point out that copies of the report form are in the Student's Manual. Each team will need one report form for each volunteer.

Aides	Lesson Plan	Instructor Notes
	3. For each volunteer, team members should perform the following duties: a. One team member will administer the tests to the volunteer. b. One team member will record the results on the report form. c. The other team member(s) will assist the test administrator in observing the volunteer's performance on the tests.	<u>Emphasize</u> that team members will take turns performing the various duties, as they deal with the different volunteers.
	4. Some volunteers will have BACs above 0.10%, others will have lower BACs. 5. The following safety precautions will be strictly enforced: a. <u>No weapons will be present.</u> b. <u>Volunteers will not be left unattended at any time.</u>	Solicit students' questions concerning the procedures for the Alcohol Workshop.
 **75 Minutes**	B. Hands On Practice 1. Test administration	<u>Monitor</u> teams as they test the volunteers.
	2. Test recording	Make sure that each student takes at least one turn as a test administrator. Coach students, as necessary, to improve their performance as test administrators.

Aides	Lesson Plan	Instructor Notes
		Terminate the hands on practice after 75 minutes, or after each team has tested 5 volunteers (whichever occurs first).
 **20 Minutes**	C. Session Wrap Up	
	1. Feedback of teams' assessments	Record teams' assessments of each volunteer's probable BAC status on the chalkboard or flip chart (see next page for a sample chalkboard array). If a chalkboard or flipchart is not available, an overhead has been made. Ask each team briefly to describe the evidence that led the members to their conclusions about a particular volunteer's BAC.
	2. Feedback of volunteers' BACs.	Record each volunteer's actual BAC on the chalkboard array.
	3. Discussion	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. Solicit students' comments or questions concerning the alcohol workshop.

SAMPLE CHALKBOARD ARRAY FOR
RECORDING TEAMS' ASSESSMENTS.

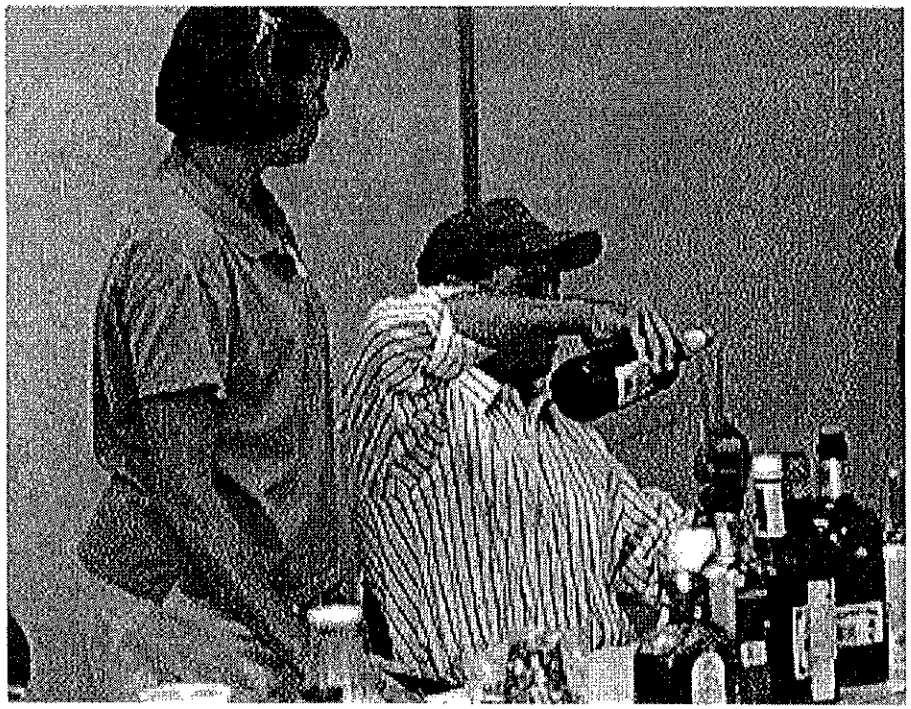
TEAMS' ESTIMATES OF BAC

Volunteer	0.05% 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



Alcohol Workshop

Upon successfully completing this session, the participant will be able to:

- Correctly administer the preliminary clinical examinations psychophysical tests used in the Drug Evaluation procedure
- Observe and record the suspect's performance on the preliminary clinical examinations and psychophysical tests
- Determine the level of impairment based on the results of the suspect's preliminary clinical examinations and psychophysical tests

Examinations And Tests

- Pupil Size (Room Light)
- Horizontal Gaze Nystagmus
- Vertical Nystagmus
- Lack of Convergence
- Romberg
- Walk and Turn
- One Leg Stand (Both Legs)
- Finger to Nose
- Pulse

Thirty Minutes

SESSION XIII

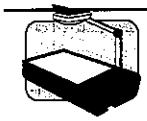
PHYSICIAN'S DESK REFERENCE (PDR) AND OTHER REFERENCE SOURCES

SESSION XIII PHYSICIAN'S DESK REFERENCE (PDR) AND OTHER REFERENCE SOURCES

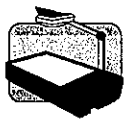
Upon successfully completing this session, the participant will be able to:

- 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; that is, 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 those drugs, and list the signs and symptoms that can be caused by them and observed and documented during a drug influence examination.

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	

Aides	Lesson Plan	Instructor Notes
 **XIII-0** (Session Objectives)	PHYSICIAN'S DESK REFERENCE (PDR)	Total Lesson Time: Approximately 30 Minutes Briefly review the content, objectives and activities of this session. Instructors Note: Due to the unique nature of this session, instructors teaching this session should strive to develop innovative and interactive creative learning activities.
 **10 Minutes**	A. Physician's Desk Reference as a Resource	
	1. PDR is published annually.	Point out that the PDR has been admitted as a "learned treatise" in previous court cases.
	a. Many versions are published: o PDR for prescription drugs o PDR for non-prescription drugs o PDR for ophthalmology	Point out that we will use the PDR for prescription drugs. There are other PDR publications in addition to these. Exhibit copy of a PDR.
	b. PDR supplements are published periodically as new products are introduced during the year.	
	c. Function of the publisher is compilation, organization and distribution of information.	
	d. Product descriptions are prepared by the manufacturer, and edited and approved by their respective medical directors.	

Aides	Lesson Plan	Instructor Notes
	e. Additional information on the various drugs can be obtained from the manufacturer.	
 XIII-1	2. Sections of a PDR.	Point out that the sections are color coded for easy use.
	a. Manufacturers Index (section 1)	List of manufacturers (with phone numbers) who have provided prescribing information.
	b. Product Name Index and Discontinued Products (section 2).	Alphabetical listing of products available and a listing of discontinued products. Note: New editions PDR 1996 will have a merging of Sections 2 and 4.
	c. Product Category Index (section 3).	Products listed according to appropriate category.
	d. Generic and Chemical Name Index (section 4).	Products listed under generic and chemical name headings according to the principal ingredient(s).
	e. Product Identification Section (section 5).	Point out that this section contains actual size, full color reproductions.
	f. Product Information Section (section 6).	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. Also includes common names, generic compositions or chemical names.
	g. Diagnostic Product Information (section 7)	Diagnostic product descriptions.

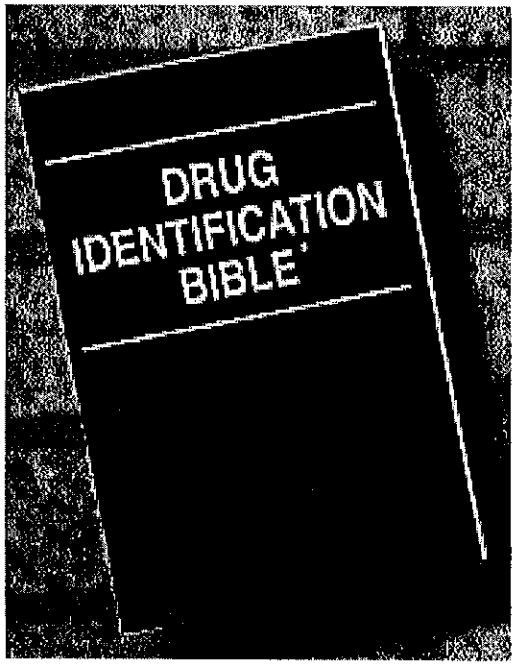
Aides	Lesson Plan	Instructor Notes
	h. Poison Control Centers	List of centers and emergency telephone numbers.
	i. Guide to Management of Drug Overdose.	Information concerning drug overdosage.
	3. Use of PDR in Drug Evaluation and Classification	This information is contained in the product identification section.
	a. To identify prescription drugs.	
	b. To identify the effects of prescription drugs for comparison with observed effects.	This information is contained in the product information section.
	4. How to use the PDR.	
	a. Identification of an unknown product.	Demonstrate how to identify a tablet, capsule, etc. using the product identification section.
 XIII-2	b. Identification of drug pharmacology.	Demonstrate how to use the product information section. Example: Nembutal sodium capsules (pentobarbital sodium capsules)
	5. Location and acquisition of agency's PDR(s).	Point out that PDRs can be obtained from physicians, hospitals, etc. It is not essential to have the current version for typical enforcement uses.
 15 Minutes	B. Practical Exercise 1. Small group exercise 2. Group reports	Assign students to small groups and provide color slides or photographs of typical prescription drugs encountered during enforcement contacts.

Aides	Lesson Plan	Instructor Notes
		Have the group identify the drugs and describe typical "actions" or symptoms that can be observed and documented during a Drug Evaluation. Each group must have a PDR.
5 Minutes **XIII-3A and 3B**	C. Other Resources	
	1. National Highway Traffic Safety Administration, Traffic Law Enforcement Division	
	2. State Drug Evaluation and Classification Program Coordinator.	Point out that names and addresses of the State DEC Coordinators are included in the Student's Manual.
	3. "The DRE" Newsletter	Published by the Prosecutor's Office, Phoenix, Arizona.
	4. Traffic Law Center	
	5. Local Poison Control Center	
	6. Medical Dictionaries	
	7. The Pill Book, The Drug Identification Bible, and other consumer's guides to drugs	
	8. Other texts	Instructor: Discuss some other useful texts known to you.
	9. Newspaper and magazine articles on drugs and drug impaired driving, including counter-culture magazines such as "High Times".	

Aides	Lesson Plan	Instructor Notes
	10. Software programs such as Pharmacists, Body Works, Mosbey's Medical Dictionary and other programs are available on disks and CDs. 11. Various resources are available through Online services and the Internet.	

Session XIII

Physician's Desk Reference (PDR) and Other Reference Sources



Physician's Desk Reference (PDR) and Other Reference Sources

Upon successfully completing this session, the participant 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. The student will correctly identify and classify those drugs and list the signs and symptoms that can be caused by them and observed and documented during a drug influence examination

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

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

Continuing Information Sources

- National Highway Traffic Safety Administration, Traffic Law Enforcement Division
- State DEC Program Coordinator
- "DRE" Newsletter

  Phoenix City
  Prosecutor's Office
  455 North 5th Street
  Suite 400
  Phoenix, AZ 85004

Continuing Information Sources (continued)

- Local poison control center
- Medical dictionary
- Pill Book
- Other text books (physiology, pharmacology, toxicology, etc.)
- Newspaper and magazine articles

DRUG EVALUATION AND CLASSIFICATION PROGRAM

GLOSSARY OF MEDICAL TERMS

*The Terms in this section are intended to help the DRE officer understand terms commonly used in medical literature

ARRHYTHMIA
An abnormal heart rhythm.

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

BRADYDNEA
Abnormally slow rate of breathing.

CONJUNCTIVITIS
An inflammation of the mucous membrane that lines the inner surface of the eyelids. Persons suffering from conjunctivitis may show symptoms in one eye only. This condition is commonly called "pink eye", a condition that could be mistaken for the bloodshot eyes produced by alcohol or Cannabis.

DIPLOPIA
Double Vision

DYSARTHIA
Slurred Speech. Difficult, poorly articulated speech

DYSMETRIA
A condition that affects a person from properly estimating distances.

DYSPHORIA
A disorder of mood, feelings of depression or anguish.

DYSPNEA ET AL
Shortness of breath.

GARRULITY
Rambling or pointless speech. Talkativeness.

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

HYPERPNEA
A deep, rapid or labored breathing.

HYPERPYREXIA
Extremely high body temperature

HYPERREFLEXIA
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.

MUSCULAR HYPERTONICITY
Rigid muscle tone.

MYDRIASIS
Abnormally dilated pupils.

PALLOR
An abnormal paleness or lack of color in the skin.

PARASYMPATHOMIMETIC DRUGS
Drugs that mimic neurotransmitters 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 technicians. The PDR provides detailed information on the physical appearance and psychoactive effects of all licitly-manufactured drugs.

PSYCHOTOGENETIC
Literally, "creating psychosis" or "giving birth to insanity". A drug is considered to be psychotogenetic 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.

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

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

TACHYPNEA
An abnormally rapid rate of breathing.

One Hour and Forty-Five Minutes

SESSION XIV

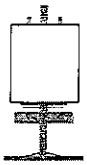
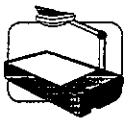
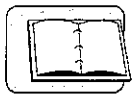
HALLUCINOGENS

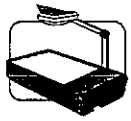
SESSION XIV HALLUCINOGENS

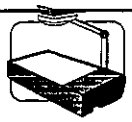
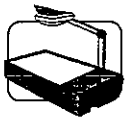
Upon successfully completing this session, the participant will be able to:

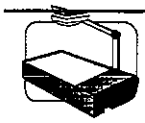
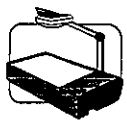
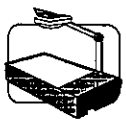
- Explain a brief history of the Hallucinogen category of drugs.
- Identify common drug names and terms associated with this category.
- Identify common methods of administration for this category.
- Explain the symptoms, observable signs and other effects associated with this category.
- Explain the typical time parameters, i.e., onset and duration of effects, associated with this category.
- State the clues that are likely to emerge when the Drug Evaluation and Classification Process 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 Section.

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

Aides	Lesson Plan	Instructor Notes
  **XIV-0A&B** (Session Objectives)  **20 Minutes** 	HALLUCINOGENS A. Overview of the Category 1. Hallucinogens are drugs that affect a person's perceptions, sensations, thinking, self awareness and emotions. a. The word "Hallucinogen" means <u>something that causes hallucinations</u>. b. An <u>hallucination</u> is a sensory experience of something that does not exist outside the mind. o Seeing, hearing, smelling, tasting or feeling something that isn't really there. o Having <u>distorted</u> sensory perceptions, so that things look, sound, smell, etc. <u>differently</u> from the way they really are.	Total Lesson Time: Approximately 105 Minutes Session title on wall chart. Briefly review the objectives, content and activities of this session. Definition from <u>The Random House College Dictionary</u> (Revised Edition, 1980).

Aides	Lesson Plan	Instructor Notes
	c. Hallucinogenic drugs usually produce what are called pseudo-hallucinations: 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.	But emphasize 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.
 XIV-1 (Synesthesia)	d. One common type of hallucination produced by these drugs is called Synesthesia, which means a transposing of sensory modes.	Note: Synesthesia may occur naturally in an insignificant percentage of the population.
	o Sounds for example, may be transposed into sights.	Examples: The user may "see" a flash of color, or some other sight, when the telephone rings.
	o Sights may be transposed into odors.	The user may "smell" a particular fragrance when he or she looks at something painted red.
	e. The illusions and distorted perceptions produced by hallucinogenic drugs may be very alarming, even terrifying.	
	o They may produce panic and uncontrolled excitement.	Point out that the expression "bad trip" refers principally to these panic filled reactions to Hallucinogens.
	o The user may be unable to cope with the terror, and may attempt to flee wildly.	
	o A user who is emotionally or mentally unstable may become psychotic in response to this frightening experience.	

Aides	Lesson Plan	Instructor Notes
 **XIV-2** ("Flashback")	f. A terrifying "bad trip" sometimes may be re-experienced as a <u>flashback</u>. o In simple terms, a flashback is a vivid recollection of a portion of an hallucinogenic experience. o A flashback does <u>not</u> occur because of a residual quantity of drug in the user's body. o Instead, a flashback essentially is a very intense daydream.	<u>But point out</u> that subsequent use of the drug may precipitate a flashback, by causing the user to reexperience the frightening illusions of the previous "bad trip".
 **XIV-2A** (Types of Flashback)	g. There are three types of flashback: o Emotional: Feelings of panic, fear, etc; the sensations of a "bad trip". o Somatic: Altered body sensations, tremors, weakness, dizziness, crawly, tingly feelings on the skin. o Perceptual: Distortions of vision, hearing, smell and/ or other senses. These distortions are "re-runs" of the original "trip".	

Aides	Lesson Plan	Instructor Notes
 **XIV-2B** (Illusions and Delusions)	h. Remember that hallucinogens produce <u>illusions</u>, <u>delusions</u> or both.	
	o An illusion is a false perception, i.e., a misrepresentation of what the senses are receiving.	Example of an illusion: "I see an Elephant".
	o A delusion is a false belief.	Example of a delusion: "I am an Elephant".
	i. Because they often make the user appear to be insane, Hallucinogens sometimes are called psychotomimetic drugs.	Print "PSYCHOTOMIMETIC" on the chalkboard or flip chart. "Psychotomimetic" means "something that mimics psychosis". A psychosis is a major mental disorder. It implies a loss of touch with reality.
 **XIV-3A** (Hallucinogens)	2. Some Hallucinogens come from natural sources, while others are synthetically manufactured.	
	a. Peyote and Psilocybin are examples of naturally occurring Hallucinogens.	<u>Instructor, for your information</u>: Other naturally occurring Hallucinogens include nutmeg; jimpson weed; morning glory seeds; and, bufotenine, a substance found in the glands of certain toads. Note: Some regional or local Hallucinogens may be discussed in more detail.
 **XIV-3B**	b. LSD, MDA, MDMA, DMT, STP and TMA are examples of synthetically manufactured Hallucinogens.	LSD: Lysergic Acid Diethylamide

Aides	Lesson Plan	Instructor Notes
		MDA: Methylene Dioxyamphetamine MDMA: Methylene DioxyMethamphetamine (also known as "Ecstasy"). STP: (also known as DOM) Dimethoxylamphetamine TMA: Trimethoxyamphetamine DMT: Dimethyltryptamine Instructor, for your information: Drugs such as MDA, MDMA, STP and TMA all contain amphetamine based compounds. The are for this reason sometimes called "psychedelic amphetamines". In essence, they are high powered stimulants that cause hallucinations.
	3. Peyote is a small, spineless cactus.	
	a. The active, hallucinogenic ingredient in peyote is mescaline.	If available, show 35mm slides of the peyote cactus and of dried "buttons" or crowns from the cactus.
	b. Peyote use by certain Indian tribes for religious rituals pre-dates Columbus' discovery of America by many centuries.	Mescaline is a chemical relative of adrenalin. Its effects on the body may be similar to those that would result from a massive rush of adrenalin.
	c. Peyote is used legally in religious ceremonies of the Native American Church.	Mescaline was first isolated from Peyote in 1856. It was named after the Mescalero Apaches.

Aides	Lesson Plan	Instructor Notes
		Persons who are not American Indians cannot be members of the Native American Church.
	4. Psilocybin is a drug found in a number of different species of mushrooms of the genus Psilocybe.	Eighty-one species of these mushrooms have been identified as hallucinogenic.
	a. These mushrooms also have been used in Indian religious ceremonies for thousands of years.	If available, show 35mm slides of Psilocybin Mushrooms.
	b. An unstable derivative of Psilocybin, called Psilocin, also is found in these mushrooms and also has hallucinogenic properties.	Psilocybin is chemically very similar to serotonin, a neurotransmitter that is found in the brain. The effects of Psilocybin may be similar to what would happen if the brain were suddenly flooded with Serotonin.
	5. LSD is perhaps the most famous of the synthetically manufactured Hallucinogens.	
	a. "LSD" is an abbreviation of Lysergic Acid Diethylamide.	
	b. It was first produced in 1938, although its hallucinogenic properties were not discovered until 1943.	
	c. LSD was used in psychotherapy during the 1940's and early '50's.	Example: It was occasionally used in the treatment of alcoholism. If available, show 35mm slides of various forms of LSD.

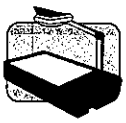
Aides	Lesson Plan	Instructor Notes
	d. Although LSD is a synthetic drug, it was first derived from Ergot, a fungus that grows on rye and other grains.	Write "LSD derived from Ergot, a fungus" on the chalkboard or flip chart.
	e. In the Middle Ages, when people accidentally ate this fungus, their resulting bizarre behavior was thought to stem from possession by the Devil.	
	f. The trials and subsequent burning of "witches" in Salem, Massachusetts in 1692 probably was due to accidental Ergot consumption by those women.	
	g. Ergot is still used medically to treat migraine headaches.	Sandoz Laboratories markets a combination of caffeine and Ergot called Cafergot.
	6. MDA, STP and TMA are synthetically manufactured Hallucinogens that sometimes are called "Psychedelic Amphetamines".	
	a. They are chemically related to Amphetamines and produce many effects similar to those of CNS Stimulants.	
	b. They are also chemically related to Mescaline.	
	c. MDA is an abbreviation for 3, 4-Methylenedioxy-amphetamine	
	d. Among users, MDA sometimes is referred to as the "Mellow Drug of America".	

Aides	Lesson Plan	Instructor Notes
	e. STP is also called DOM, an abbreviation of 2 Methyl-2,5 Dimethoxylamphetamine.	
	f. Users have popularized the abbreviation STP, representing "Serenity, Tranquility and Peace".	Point out the ironic fact that drugs popularly associated with soothing concepts like "mellowness and tranquility" actually often produce the extreme panic of a "bad trip".
	g. TMA is an abbreviation for 3,4,5-Trimethoxyamphetamine.	Point out that there are additional Hallucinogens beyond those listed on Visual XIV-3.
	7. An important fact about Hallucinogens is that they are not addictive, in the sense that cessation of use does not produce withdrawal signs or symptoms; however, regular users do develop tolerance to these drugs.	But point out that many people repeatedly abuse these non-addictive drugs because they enjoy the hallucinogenic effects they produce.
	8. Methods of ingestion of Hallucinogens.	
	a. The most common method of ingesting Hallucinogens is orally.	
	o LSD is placed on bits of paper, gelatin squares, or sugar cubes and eaten.	
	o The small "buttons" or crowns of the Peyote Cactus are dried and eaten, or may be brewed into a beverage for drinking.	

Aides	Lesson Plan	Instructor Notes
	o Similarly, the Psilocybin Mushrooms are dried and eaten, or may be brewed into a beverage for drinking.	
	b. Some Hallucinogens can also be <u>smoked</u> (example: LSD impregnated on Marijuana or tobacco cigarettes).	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.
	c. Some users <u>inject</u> LSD.	
	d. MDA can also be <u>insufflated</u>, or "snorted".	Solicit students' comments or questions on this overview of Hallucinogens.
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.	

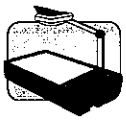
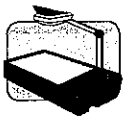
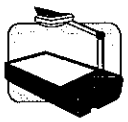
Aides	Lesson Plan	Instructor Notes
	b. If the user expects that the drug will help him or her achieve new insights or an expanded consciousness, the "trip" will seem to have that effect. 2. However, Hallucinogens also often uncover mental or emotional flaws that the user was unaware of possessing. 3. 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 reality, often with a mixing of senses that makes it virtually impossible for the drug influenced user to function in the real world.	Solicit students' comments or questions on this overview of Hallucinogens.
 **15 Minutes**  **XIV-4A** ("Time Factors of Peyote")	C. Onset and Duration of Effects 1. The time parameters associated with Hallucinogens vary from drug to drug. 2. The effects of Peyote (Mescaline) begin to be felt within approximately one-half hour after eating the cactus "buttons". a. <u>30 minutes</u>: nausea, possibly leading to vomiting; mild rise in blood pressure, pulse, temperature and heart rate; pupils dilate.	

Aides	Lesson Plan	Instructor Notes
	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". c. <u>3-4 hours</u>: sensory changes reach their peak; synesthesia (mixing of senses) commonly occurs. d. <u>10 hours</u>: gradual decline in effects. e. <u>12 hours</u>: nearly total recovery from effects. f. <u>24 hours</u>: approximately 87% of the Mescaline has been excreted from the body. 3. Psilocybin also begins to exert its effects within one-half hour. a. <u>1-30 minutes</u>: dizziness, light headed feeling, giddiness; the extremities (hands, feet, etc.) may feel very light <u>or</u> very heavy. b. <u>30-60 minutes</u>: vision blurs; colors become brighter, leave longer lasting after images; objects take on sharp visual definition; hearing becomes more acute.	
 **XIV-4B** ("Time Factors of Psilocybin")		

Aides	Lesson Plan	Instructor Notes
 **XIV-4C** ("Time Factors of LSD")	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. 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. Onset and duration of effects of other Hallucinogens vary widely from about 2 hours to about 24 hours.	

Aides	Lesson Plan	Instructor Notes
 **5 Minutes**	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. 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.	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. Solicit students' comments and questions concerning time factors.

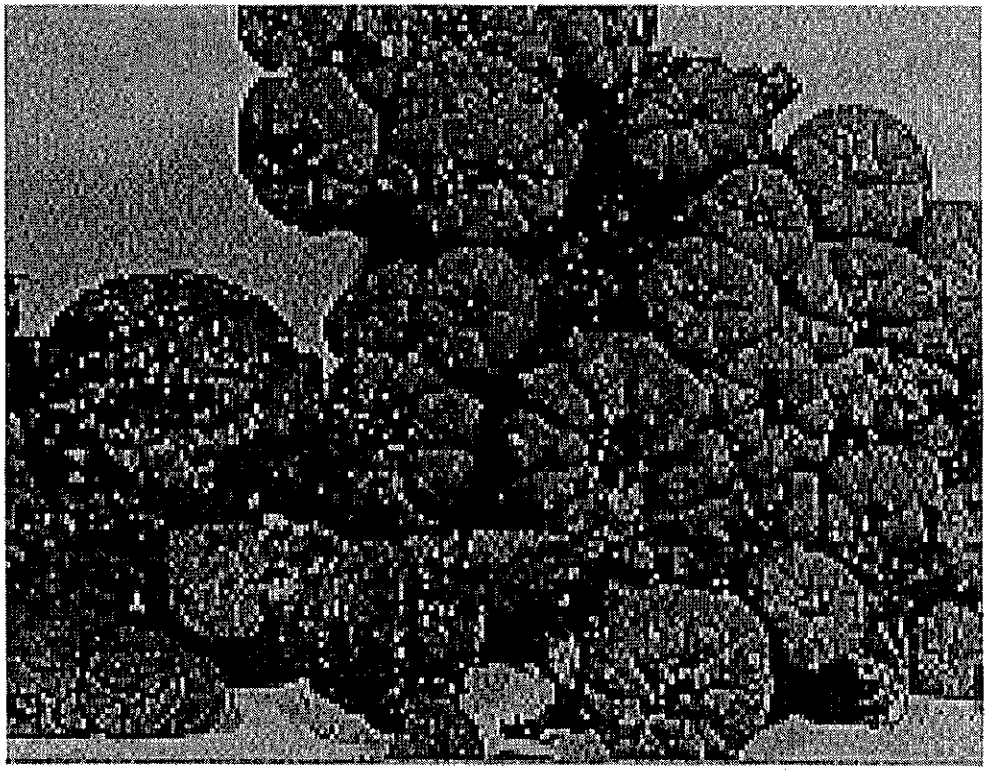
Aides	Lesson Plan	Instructor Notes
60 Minutes  **XIV-5A** ("SFST Evidence")	E. Expected Results of the Evaluation 1. Observable evidence of impairment. a. Standardized Field Sobriety Tests. o Neither Horizontal nor Vertical Nystagmus will be present. o Performance on the Romberg balance test will be impaired, particularly in the subject's estimation of the passage of 30 seconds. 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.	<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. 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.
 **XIV-5B** ("General Indicators")	b. General indicators o dazed appearance o body tremors o perspiring o uncoordinated movements o muscle tone normal/rigid	

Aides	Lesson Plan	Instructor Notes
	o difficulty with speech o statements/utterances suggesting hallucinations or distorted sensory perceptions 2. Evidence associated with the physiologic examinations. a. Eye examinations o Lack of Convergence will not be evident. o pupils generally will be dilated. o Reaction to light will usually be normal. Certain Psychedelic Amphetamines usually will slow the pupils' reaction to light b. Vital signs examinations o blood pressure generally will be elevated. o pulse generally will be up. o body temperature generally will be up. 3. Summary 4. Demonstrations	
 **XIV-5C** ("Eye Examinations")		
 **XIV-5D** ("Vital Signs Examinations")		
 **XIV-6** ("Hallucinogens Symptomatology Chart")		

Aides	Lesson Plan	Instructor Notes
	a. Video tape demonstrations (if available)	Show video tape of subject(s) under the influence of Hallucinogens. Relate behavior and observations to the symptomology chart.
	b. Drug Evaluations and Classification exemplar demonstrations	Refer students to the exemplars found at the end of Section XIV of their student manuals. Relate the items noted on the exemplars to the symptomatology chart. Solicit students' questions or comments concerning expected results of the evaluation of subjects under the influence of Hallucinogens.

Session XIV

Hallucinogens



Hallucinogens

Upon successfully completing this session, the participant 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
- Explain the symptoms, observable signs and other effects associated with this category

Hallucinogens (continued)

- Explain the typical time parameters, i.e., onset and duration of effects, associated with this category
- State the clues that are likely to emerge when the drug evaluation and classification process 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 section

Synesthesia:

A transposition of senses

- "Seeing sounds"
- "Hearing colors"

Flashback:

A vivid recollection of a hallucinogenic experience

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)

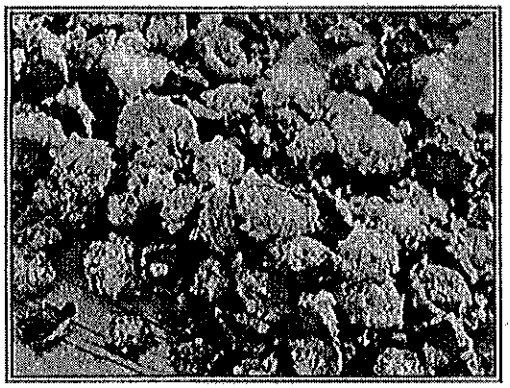
Illusion:

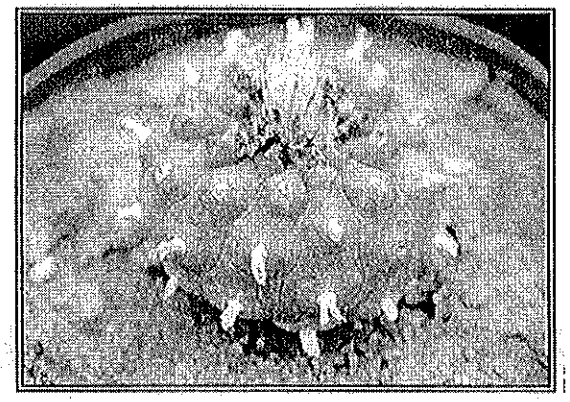
A false perception

Delusion:

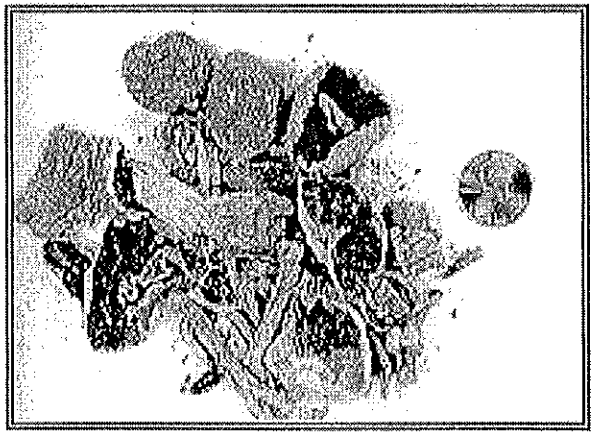
A false belief

Common Hallucinogens





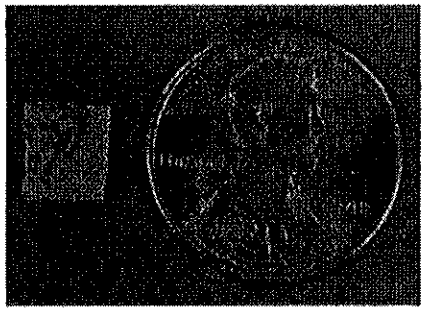
Peyote (Mescaline)



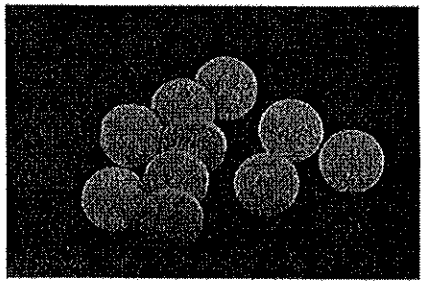
Psilocybin

- Both occur naturally

Common Hallucinogens (continued)



- Synthetically manufactured
  - LSD (Lysergic Acid Diethylamide)
  - MDA (3,4-Methylenedioxyamphetamine)
  - STP (or DOM) (2 Methyl-2,5 Dimethoxylamphetamine)
  - TMA (3,4,5-Trimethoxyamphetamine)



Time Factors of Peyote

- 30 minutes: Onset

  Nausea; elevated blood pressure, pulse and temperature; dilated pupils

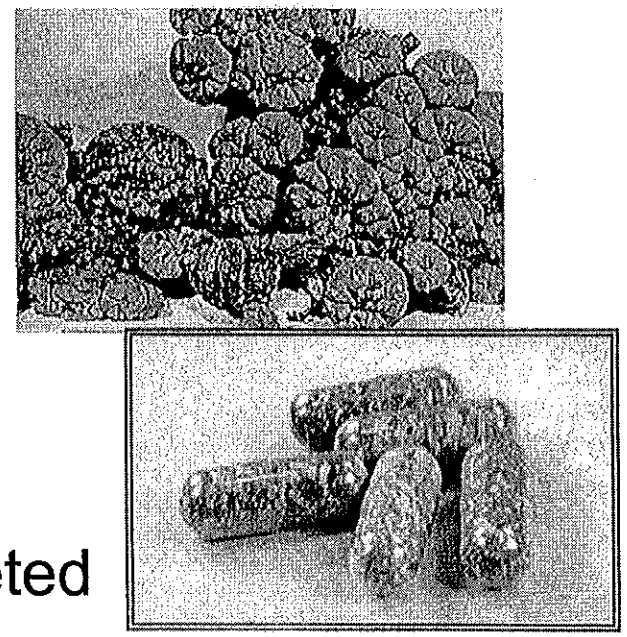
- 60 minutes: Development of hallucinogenic effects

  Visual distortions, rich colors, changing forms and moving shapes

- 3-4 hours: Peak effects

  Synesthesia

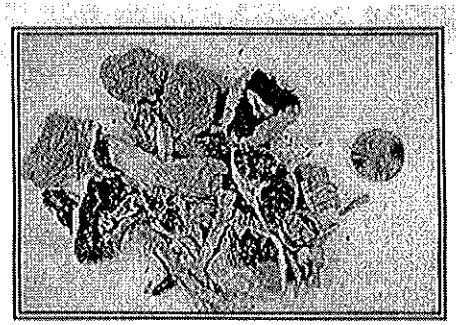
- 10 hours: Gradual decline of effects
- 12 hours: Nearly total recovery
- 24 hours: Elimination nearly completed



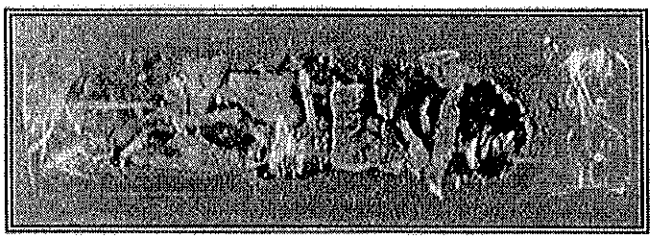
Time Factors of Psilocybin

- 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

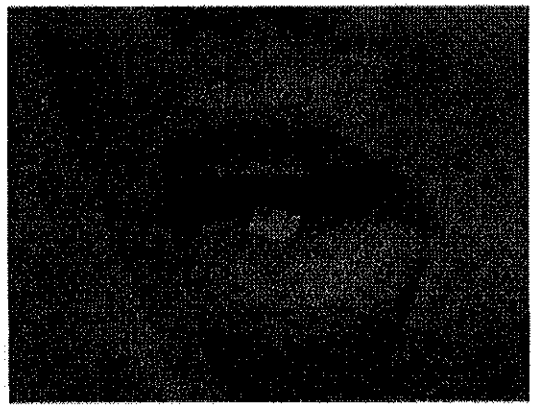


- 60-90 minutes: Sensory effects intensify
  Patterns and shapes develop and move; distance perception is impaired; euphoria develops

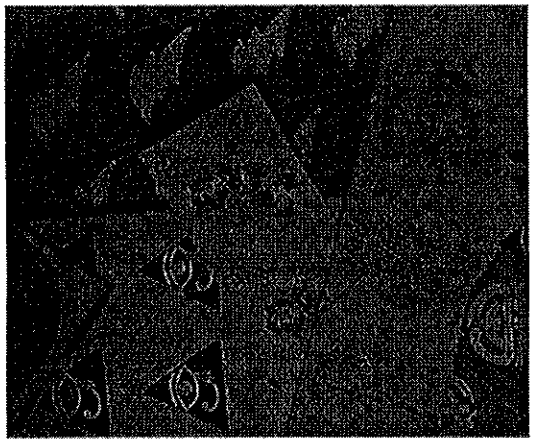


- 90-100 minutes: Peak effects
  Subject becomes introspective
- 120-180 minutes: Effects begin to diminish

Time Factors of LSD



- 30-45 minutes: Onset
- 4-6 hours: Peak effects
- 7-9 hours: Effects diminish
- 10-12 hours: Subject feels normal



Evaluation of Suspects Under the Influence of Hallucinogens

SFST Evidence:

- HGN - None
- Impaired performance will be evident on Walk and Turn and One Leg Stand
- Impaired performance will be evident on Romberg and Finger To Nose

Evaluation of Suspects Under the Influence of Hallucinogens

General Indicators:

- Dazed appearance
- Body tremors
- Perspiring
- Uncoordinated movements
- Muscle tone - normal/rigid
- Difficulty with speech
- Statements suggesting hallucinations

Evaluation of Suspects Under the Influence of Hallucinogens

Eye Examinations:

- Lack of convergence - none
- Pupils will be dilated (Mydriasis)
- Reaction to light will be normal*

*Certain psychedelic amphetamines cause slowing

Evaluation of Suspects Under the Influence of Hallucinogens

Vital Signs:

- Blood pressure will be up
- Pulse will be up
- Body temperature will be up

Hallucinogen Symptomatology Chart

HGN	None
Vertical Nystagmus	None
Lack of Convergence	None
Pupil Size	Dilated (mydriasis)
Reaction to Light	Normal*
Pulse Rate	Up
Blood Pressure	Up
Temperature	Up
Muscle Tone	Possibly rigid

* Certain psychedelic amphetamines cause slowing

000507

Page 1 of 2

DRUG INFLUENCE EVALUATION

EVALUATOR: PAGE, T
BOOKING NO.: 005
DR: XIV — 1

ARRESTEE'S NAME (LAST, FIRST, MI): HOECKLE, REBECCA S | AGE: 40 | SEX: F | RACE: B
ARRESTING OFFICER (NAME, SERIAL #, DIV.): BUONETO, R. #5430 HCPD

DATE EXAMINED/TIME/LOCATION: SEPT 23, 1996 / 2030 / CENTRAL TESTING
BREATH RESULTS: ☐ Refused — Results: 0.00 — Instrument #: 1234
CHEMICAL TEST: ☐ Urine ■ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ■ Yes ☐ No — Given by: BUONETO, R.
What have you eaten today? When? NOTHING I'M FASTING BECAUSE OF MY RELIGIOUS DUTIES
What have you been drinking? How much? MY RELIGION DOESN'T PERMIT ALCOHOL
Time of last drink? N/A

Time now? 7PM | When did you last sleep? How long? LAST NIGHT 7HRS
Are you sick or injured? ■ Yes ☐ No — MY STOMACH IS UPSET
Are you diabetic or epileptic? ☐ Yes ■ No
Do you take insulin? ☐ Yes ■ No
Do you have any physical defects? ☐ Yes ■ No
Are you under the care of a doctor/dentist? ☐ Yes ■ No
Are you taking any medication or drugs? ☐ Yes ■ No

ATTITUDE: GENERALLY COOPERATIVE BUT WITHDRAWN & DISTRACTED
COORDINATION: VERY POOR CAN BARELY STAND
SPEECH: RAPID STUTTERING
BREATH: SOUR RANCID ODOR
FACE: FLUSHED

CORRECTIVE LENS: ■ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ■ Normal ☐ Bloodshot ☐ Watery
Blindness: ■ None ☐ L. Eye ☐ R. Eye
Tracking: ■ Equal ☐ Unequal
PUPIL SIZE: ■ Equal ☐ Unequal (explain)
HGN Present: ☐ Yes ■ No
Able to follow stimulus: ■ Yes ☐ No
Eyelids: ■ Normal ☐ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 104, 2040	Lack of Smooth Pursuit	NO	NO
2. 112, 2057	Max. Deviation	NO	NO
3. 104, 2112	Angle of Onset	NONE	NONE

Vertical Nystagmus? ☐ Yes ■ No
Convergence: Right Eye → Left Eye ←

BALANCE EYES CLOSED: TEST STOPPED SUBJECT UNABLE TO STAND

WALK AND TURN TEST: TEST STOPPED SUBJECT UNABLE TO MAINTAIN HEEL-TOE POSITION

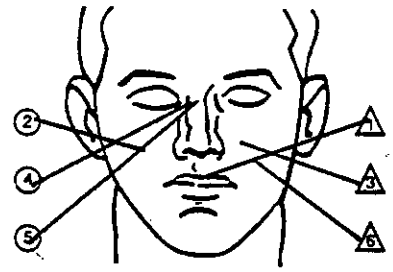
	1st Nine	2nd Nine
Cannot keep balance	VVV	
Starts too soon		
Stops Walking		
Misses Heel-Toe		
Steps off Line		
Raises Arms		
Actual Steps Taken		

ONE LEG STAND: TEST STOPPED SUBJECT UNABLE TO STAND ON ONE FOOT

L R ☐ ☐ Sways while balancing.
☐ ☐ Uses arms to balance.
☐ ☐ Hopping.
☐ ☐ Puts foot down.

INTERNAL CLOCK: N/A Estimated as 30 sec.
Describe Turn: N/A
Cannot do Test (explain): N/A
Type of Footwear: MOCCASINS

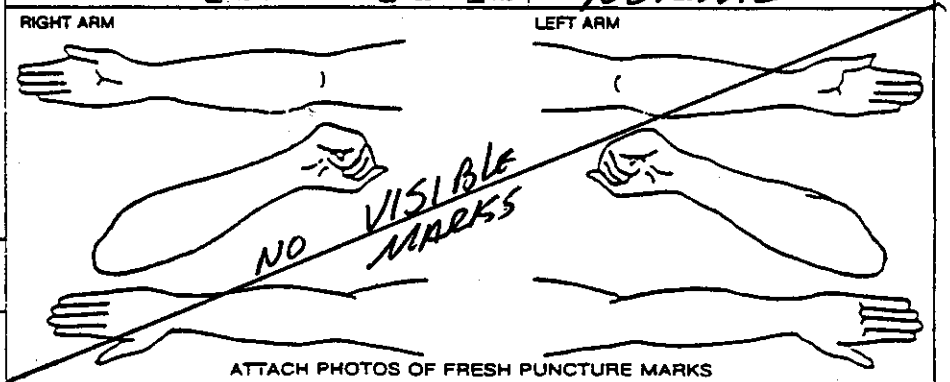
○ Right △ Left — Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	6.0	8.0	7.0	5.5
Right Eye	6.0	8.0	7.0	5.5

NASAL AREA: CLEAR
ORAL CAVITY: CLEAR
HIPPUS: ☐ Yes ■ No
REBOUND DILATION: ☐ Yes ■ No
Reaction to Light: NORMAL

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 148, 104 TEMP: 100.0°
MUSCLE TONE: ☐ Near Normal ☐ Flaccid ■ Rigid
Comments: RIGIDITY IN ARMS

What medicine or drug have you been using? How much? MY MEDIUM DOESN'T PERMIT DRUGS
Time of use? N/A
Where were the drugs used? (Location) N/A

DATE/TIME OF ARREST: SEP 23, 1996 1930
TIME DRE NOTIFIED: 2010
EVAL START TIME: 2030
TIME COMPLETED: 2115

CONTROL #:
EXAMINING OFFICER: T. Page
SERIAL NO: 3744
DIVISION:
UNAVAILABLE DATES:
REVIEWED BY: Conner, M.

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Sgt. Tom Page	ARRESTEE: Rebecca S. Hoeckle

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Rebecca S. Hoeckle took place in the Central Testing Unit, Nassau County PD

2. WITNESS: Arresting Officer - Officer R. Buoneto, Nassau County PD and ADA Edward Bracken, Suffolk County

3. BREATH TEST: Officer Buoneto administered an Intoxilyzer breath test to Hoeckle, the result was 0.00%

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was notified by Officer Buoneto and requested to conduct a DRE evaluation. Officer Buoneto stated the subject had been operating her 1994 Chevrolet (NY127 NCQ) and was stopped in the S/B traffic lane of Island Drive, at the intersection with Hauppage Drive for a green light. Upon approaching the vehicle, subject turned to him, pointed to the traffic light and said "God is light and the light is of God"

5. INITIAL OBSERVATIONS: Subject was seated next to the Intoxilyzer table and staring fixedly ahead. She slowely turned towards me and asked "are you of God?" I replied that my name was Tom, and that I would like to examine her. She nodded and said," God sent you therefore you must be good." Her speech was rapid and she stuttered slightly.

6. MEDICAL PROBLEMS: Subject indicated she was experiencing a mildly upset stomach. At the end of the DRE examination, Dr. J. P. Mooney was summoned to examine her.

7. PSYCHOPHYSICAL TESTS: Subject was unable to stand without assistance, and it was necessary to terminate the Romberg Balance, Walk and Turn, and the One Leg Stand Tests virtually immediately for the subjects own safety. Finger to Nose was conducted while the subject was in the seated position she missed tip of her nose on each attempt.

8. CLINICAL INDICATORS: Subject's pulse, blood pressure and temperature were above the normal range, and her pupils were dilated.

9. SIGNS of INGESTION: Subjects breath had a sour and rancid odor.

10. STATEMENTS: Subject stated that she was fasting for religious reasons, and that her religion forbids the ingestion of alcoholic beverages. She also stated that her medium doesn't allow her to use drugs. She further indicated that her medium is her religious leader a man "whose body is of fire and air, and whose spirit is of light, which is of God" She indicated she had just attended a service conducted by the medium.

11. OPINION of EVALUATOR: In my opinion Rebecca S. Hoeckle is under the influence of a Hallucinogen and unable to operate a vehicle safely.

12. TOXICOLOGICAL SAMPLE: Subject agreed to provided a blood sample.

13. MISCELLANEOUS:

000509

Page 1 of 2

DRUG INFLUENCE EVALUATION

EVALUATOR: HAVERSAT, A.
BOOKING NO.: 006
DR.: XIV-2

ARRESTEE'S NAME (LAST, FIRST, MI): WARBURTON, CINDY T.
AGE: 32 | SEX: F | RACE: W
ARRESTING OFFICER (NAME, SERIAL #, DIV.): JACKSON, F. #6310 CPD

DATE EXAMINED/TIME/LOCATION: APRIL 25, 1996 2300 2ND DIST
BREATH RESULTS: Results 0.00 ☐ Refused Instrument # 1234
CHEMICAL TEST: ☐ Urine ● Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ● Yes ☐ No
Given by: JACKSON, F.
What have you eaten today? When? SPAGHETTI LUNCH
What have you been drinking? How much? NOTHING
Time of last drink? N/A
Time now? 7PM
When did you last sleep? How long? YESTERDAY 6HRS
Are you sick or injured? I DON'T THINK SO BUT I FEEL HOT ☐ Yes ● No
Are you diabetic or epileptic? ☐ Yes ● No
Do you take insulin? ☐ Yes ● No
Do you have any physical defects? ☐ Yes ● No
Are you under the care of a doctor/dentist? ☐ Yes ● No
Are you taking any medication or drugs? ☐ Yes ● No

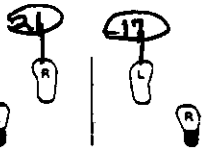
ATTITUDE: COOPERATIVE BUT FEARFUL + DISTRACTED
COORDINATION: POOR STAGGERING
SPEECH: RAMBLING OFTEN INCOHERENT
BREATH: NORMAL
FACE: PERSPIRING

CORRECTIVE LENS: ● None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ● Normal ☐ Bloodshot ☐ Watery
Blindness: ● None ☐ L Eye ☐ R Eye
Tracking: ● Equal ☐ Unequal
PUPIL SIZE: ● Equal ☐ Unequal (explain)
HGN Present: ☐ Yes ● No
Able to follow stimulus: ● Yes ☐ No
Eyelids: ● Normal ☐ Droopy

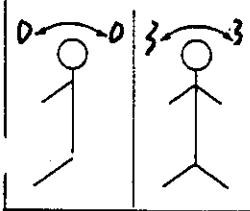
PULSE & TIME	HGN	Left Eye	Right Eye
1. 112 / 2310	Lack of Smooth Pursuit	NO	NO
2. 116 / 2325	Max. Deviation	NO	NO
3. 116 / 2340	Angle of Onset	NONE	NONE

Vertical Nystagmus? ☐ Yes ● No
Convergence: Right Eye / Left Eye

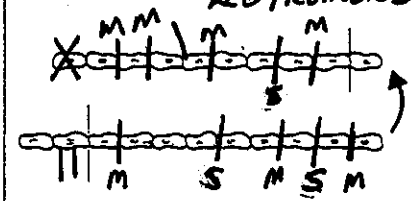
ONE LEG STAND: LEG SHAKING SEVERELY



BALANCE EYES CLOSED



WALK AND TURN TEST: LEG TREMORS

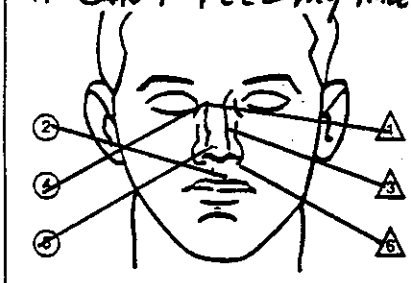


	1st Nine	2nd Nine
Cannot keep balance	VV	
Starts too soon		
Stops Walking	VV	V
Misses Heal-Toe	VVV	VVVV
Steps off Line		V
Raises Arms	CONSTANT	CONSTANT
Actual Steps Taken	9	8

L R
☐ ☐ Sways while balancing.
☐ ☐ Uses arms to balance.
☐ ☐ Hopping.
☐ ☐ Puts foot down.

INTERNAL CLOCK: 10 Estimated as 30 sec.
Describe Turn: LOST BALANCE STUMBLED NEARLY FELL
Cannot do Test (explain): N/A
Type of Footwear: LOAFERS

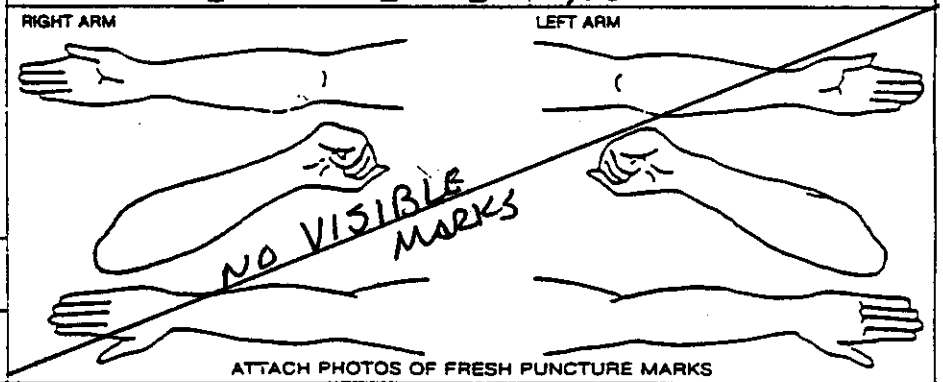
○ Right △ Left
Draw lines to spots touched
"I CAN'T FEEL my FACE"



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	6.0	7.5	7.0	5.5
Right Eye	6.0	7.5	7.0	5.5

NASAL AREA: CLEAR
ORAL CAVITY: CLEAR
HIPPUS: ☐ Yes ● No
REBOUND DILATION: ☐ Yes ● No
Reaction to Light: NORMAL

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 150 / 102
TEMP: 99.8 °
MUSCLE TONE: ☐ Near Normal ☐ Flaccid ● Rigid
Comments: ARM + LEGS RIGID

What medicine or drug have you been using? How much? NOTHING
Time of use? NO ANSWER
Where were the drugs used? (Location) NO ANSWER

DATE/TIME OF ARREST: APR 25, 1996 2230
TIME DRE NOTIFIED: 2240
EVAL START TIME: 2300
TIME COMPLETED: 2345

CONTROL #:
EXAMINING OFFICER: Asst Haversat
SERIAL NO: 6632
DIVISION: HTD
UNAVAILABLE DATES:
REVIEWED BY: Richardson, S.

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Sgt. Art Haversat	ARRESTEE: Cindy T. Warburton

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Cindy T. Warburton, took place in the DRE room, 2nd District Hdqtrs. Capitol PD

2. WITNESS: Arresting Officer - F. Jackson # 6310 Capitol PD and R.C. Studdard, IACP/TAP Representative

3. BREATH TEST: Writer observed Officer Jackson administer GCI breath test to Warburton, the result was 0.00%

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was serving as on-duty DRE for 2nd District when informed by dispatch that Officer Jackson was enroute with a subject and was requesting a drug evaluation. Upon arrival Officer Jackson stated the subject had been arrested driving N/B along the gravel shoulder of the S/B lane Higgenbotham Ave. Jackson further stated the subject pointed to the police baton and shouted "My God there's a terrible big snake hanging from your belt. Subsequently, she shouted that the blue and red emergency lights on his of cruiser were bleeding into her eyes and skin.

5. INITIAL OBSERVATIONS: Writer observed subject seated next to the GCI. Subject was very frightened and disoriented. She pointed to the clock on the wall and shouted "Keep that off me, keep it away!" At the time the clock indicated 2245 hours. Minutes later in response to my question "What time is it now?" Subject stated it was "7 o'clock"

6. MEDICAL PROBLEMS: None observed or stated.

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject swayed approximately 3" side to side and estimated 10 seconds as 30 seconds. Walk and Turn: Subject started walking to 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 (8) steps on the way back. One Leg Stand: Subject swayed, raised arms, hopped, and put her foot down. Finger to Nose: Subject missed tip of her nose on each attempt. She opened her eyes and shouted "I can't feel my face! My face is missing!"

8. CLINICAL INDICATORS: Subject had dilated pupils. Blood pressure, pulse, and temperature were above the normal range.

9. SIGNS of INGESTION: None were evident

10. STATEMENTS: Subject stated that she felt hot, and denied any drug use.

11. OPINION of EVALUATOR: In my opinion Cindy T. Warburton is under the influence of a Hallucinogen, and unable to operate a vehicle safely

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a blood sample.

13. MISCELLANEOUS: At the time of the evaluation, subject was wearing a T-shirt bearing the words "Legalize Acid"

000511

Page 1 of 2

DRUG INFLUENCE EVALUATION

EVALUATOR: HOHN, R.
BOOKING NO.: 007
DR#: XIV-3

ARRESTEE'S NAME (LAST, FIRST, MI): BUCHANAN, LEW B.
AGE: 35 | SEX: M | RACE: B
ARRESTING OFFICER (NAME, SERIAL #, DIV.): GREGORY, D. #3210 NCPD

DATE EXAMINED/TIME/LOCATION: JAN 25, 1996 0115 CENTRAL TESTING
BREATH RESULTS: ☐ Refused Results 0.05 Instrument # 1234
CHEMICAL TEST: ☐ Urine ☒ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ☒ Yes ☐ No
Given by: GREGORY D.
What have you eaten today? When? PIZZA ABOUT 6 PM
What have you been drinking? How much? Couple of BEERS
Time of last drink? 8 PM
Time now? 10 PM
When did you last sleep? How long? LAST NIGHT 3 HRS
Are you sick or injured? I THINK I MIGHT THROW UP ☒ Yes ☐ No
Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No
Do you have any physical defects? ☐ Yes ☒ No
Are you under the care of a doctor/dentist? ☐ Yes ☒ No
Are you taking any medication or drugs? ☐ Yes ☒ No
ATTITUDE: WITHDRAWN / COOPERATIVE
COORDINATION: VERY POOR - STAGGERING
SPEECH: DIFFICULTY IN SPEAKING RAMBLING
BREATH: NORMAL
FACE: DAZED PERSPIRING HEAVILY
CORRECTIVE LENS: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ☐ Normal ☐ Bloodshot ☒ Watery
Blindness: ☒ None ☐ L. Eye ☐ R. Eye
Tracking: ☒ Equal ☐ Unequal
PUPIL SIZE: ☒ Equal ☐ Unequal (explain)
HGN Present: LACK of SMOOTH PURSUIT ☒ Yes ☐ No
Able to follow stimulus: ☒ Yes ☐ No
Eyelids: ☒ Normal ☐ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 116 / 0130	Lack of Smooth Pursuit	YES	YES
2. 112 / 0147	Max. Deviation	NO	NO
3. 104 / 0200	Angle of Onset	NONE	NONE

Vertical Nystagmus? ☐ Yes ☒ No
Convergence: Right Eye ☒ Left Eye ☐

ONE LEG STAND: TEST STOPPED

BALANCE EYES CLOSED: CIRCULAR SWAY

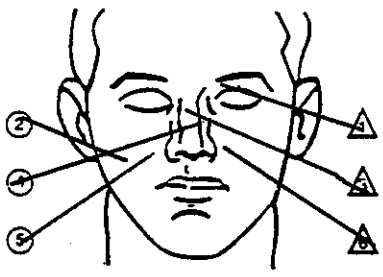
WALK AND TURN TEST: TEST STOPPED COULD NOT MAINTAIN STANCE
STATED THAT THE WHITE LINE RESEMBLED A LAZY SNAKE
Cannot keep balance ☑
Starts too soon ☐

	1st Nine	2nd Nine
Stops Walking		
Misses Heel-Toe		
Steps off Line		
Raises Arms		
Actual Steps Taken		

L R
☑ ☐ Sways while balancing.
☐ ☐ Uses arms to balance.
☐ ☐ Hopping.
☑ ☐ Puts foot down.

INTERNAL CLOCK: 35 Estimated as 30 sec.
Describe Turn: N/A.
Cannot do Test (explain): STEPPED OFF LINE 3 TIMES DURING INSTRUCTIONS
Type of Footwear: RUNNING SHOES

○ Right △ Left
Draw lines to spots touched

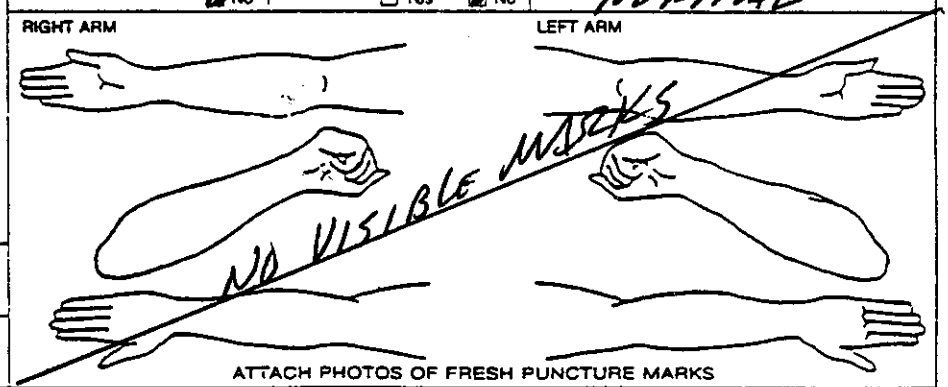


PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	5.5	8.5	7.5	5.0
Right Eye	5.5	8.5	7.5	5.0

NASAL AREA: CLEAR
ORAL CAVITY: CLEAR

HIPPUS: ☐ Yes ☒ No
REBOUND DILATION: ☐ Yes ☒ No
Reaction to Light: NORMAL

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 146 / 102
TEMP: 100.5 °

MUSCLE TONE: ☐ Near Normal ☐ Flaccid ☒ Rigid
Comments: ARMS, NECK, FACE RIGID

What medicine or drug have you been using? NOTHING
How much? NO ANSWER
Time of use? NO ANSWER
Where were the drugs used? (Location) NO ANSWER

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED
JAN 25, 1996 0040	0100	0115	0205

CONTROL #	EXAMINING OFFICER	SERIAL NO.	DIVISION	UNAVAILABLE DATES	REVIEWED BY
	Bob Hohn	2225	AHP		ZARAGA J.

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Sgt. Bob Hohn	ARRESTEE: Lew B. Buchanan

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Lew B. Buchanan, took place in the DRE room, Central Testing Unit Nassau County

2. WITNESS: Arresting Officer - D. Gregory , Nassau County PD

3. BREATH TEST: Writer observed Officer Gregory administer GCI breath test to Buchanan, the result was 0.05%. Subject later admitted to consuming "a couple of beers"

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was summoned to Central Testing to conduct a DRE evaluation. Officer Gregory stated he had observed subject driving at 10/55 zone on the Cross Island Parkway, drifting from lane to lane. Subject performed poorly on the SFSTs.

5. INITIAL OBSERVATIONS: Writer observed subject 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 questions. In response to my question "What time is it now?" Subject stated it was "about 10 o'clock"

6. MEDICAL PROBLEMS: Subject indicated some nausea

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject swayed approximately 3" in a circular motion and estimated 35 seconds as 30 seconds. Walk and Turn and One Leg Stand: Subject was unable to perform tests. Tests were terminated for subject's safety. Finger to Nose: Subject missed tip of his nose on each attempt.

8. CLINICAL INDICATORS: Subject exhibited lack of smooth pursuit and dilated pupils. Blood pressure, pulse, and temperature were above the normal range.

9. SIGNS of INGESTION: None were evident

10. STATEMENTS: Subject stated that he did not used any drugs.

11. OPINION of EVALUATOR: In my opinion Lew B. Buchanan is under the influence of Alcohol and a Hallucinogen, and unable to operate a vehicle safely

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a blood sample.

13. MISCELLANEOUS:

Forty-Five Minutes

SESSION XV

PRACTICE: TEST INTERPRETATION

SESSION XV PRACTICE: TEST INTERPRETATION

Upon successfully completing this session, the participant will be able to:

- Analyze the results of a complete Drug Evaluation and Classification Examination and identify the category or categories of drugs affecting the individual examined.
- Articulate the basis for the drug category identification.

Content Segments

A. Interpretation Demonstrations

B. Interpretation Practice

Learning Activities

- Instructor Led Demonstrations
- Small Group Practice
- Participant Led Presentations

Aides	Lesson Plan	Instructor Notes
  **XV-0** (Session Objectives)  **20 Minutes**	PRACTICE: TEST INTERPRETATION A. Interpretation Demonstrations 1. Case #1: "Subject Adams" a. Preliminary examination. b. Eye examinations. c. Psychophysical tests.	Total Lesson Time: Approximately 45 Minutes Point out the "Test Interpretation" wall chart. Briefly review the objectives, content and activities of this session. Direct students to review to the "Subject Adams" exemplar in Section XV of their manuals. Review the results of the Preliminary Examination of Subject Adams. Ask 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. Review the results of the Eye Examinations of Subject Adams. Ask students to discuss the category or categories of drugs that would produce these eye examination results. Review the results of the Psychophysical Tests of Subject Adams.

Aides	Lesson Plan	Instructor Notes
		Ask students to discuss the category or categories of drugs that would produce these psychophysical test results.
	d. Vital Signs examinations.	Review the results of the Vital Signs Examinations of Subject Adams. Ask students to discuss the category or categories of drugs that would produce these results.
	e. Dark room examinations.	Review the results of the Dark Room Examinations of Subject Adams. Ask students to discuss the category or categories of drugs that would produce these results.
	f. Other evidence and additional observations.	Review the results of the examinations for injection sites and muscle rigidity, and of the final interview of Subject Adams.
	g. Narrative report.	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. Ask students to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.
	h. Opinions of evaluator.	Point out that the evidence indicates that Subject Adams is under the influence of CNS Depressants.

Aides	Lesson Plan	Instructor Notes
		Solicit students' questions concerning this demonstration.
	2. Case #2: "Subject Baker".	Direct students to review to the "Subject Baker" exemplar.
	a. Preliminary examination.	Review the results of the Preliminary Examination of Subject Baker. Ask 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.
	b. Eye examinations.	Review the results of the Eye Examinations of Subject Baker. Ask students to discuss the category or categories of drugs that would produce these eye examination results.
	c. Psychophysical tests.	Review the results of the Psychophysical Tests of Subject Baker. Ask students to discuss the category or categories of drugs that would produce these psychophysical test results.
	d. Vital signs examinations.	Review the results of the Vital Signs Examinations of Subject Baker. Ask students to discuss the category or categories of drugs that would produce these results.

Aides	Lesson Plan	Instructor Notes
	e. Dark room examinations.	Review the results of the Dark Room Examinations of Subject Baker. Ask students to discuss the category or categories of drugs that would produce these results.
	f. Other evidence and additional observations	Review the results of the examinations for injection sites and muscle rigidity, and of the final interview of Subject Baker.
	g. Narrative report.	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. Ask students to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.
	h. Opinions of evaluator.	Point out that the evidence indicates that Subject Baker is under the influence of CNS Stimulants. Solicit students' questions concerning this demonstration.
25 Minutes	B. Interpretation Practice	
	1. Team practice.	Assign students to work in teams of three or four members.

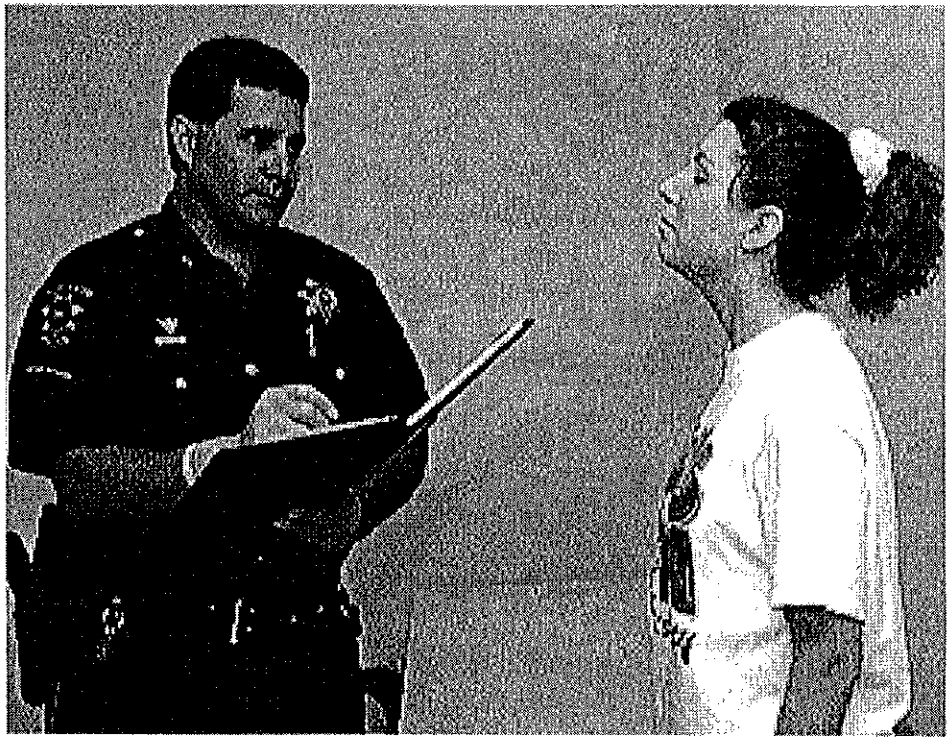
Aides	Lesson Plan	Instructor Notes
		Tell teams that they are to review three exemplars (Subjects Charles, Dodge and Edwards). Team members are to discuss the evidence among themselves and reach a conclusion concerning the category or categories of drugs, if any. Teams will present their conclusions to the entire class.
	a. Review and discussion of exemplars by teams.	Allow teams approximately 15 minutes to review the three exemplars and reach their conclusions.
	b. Feedback of results. o Subject Charles o Subject Dodge o Subject Edwards	Poll the teams to determine their conclusions concerning the category or categories of drugs present in each subject. Offer appropriate comments concerning the teams performance.
	2. Session wrap-up.	Solicit students' comments and questions concerning this practice session.

DRUG CATEGORIES FOR INTERPRETATION PRACTICE

SUBJECT	CATEGORY(IES)
Adams	CNS Depressant
Baker	CNS Stimulant
Charles	Alcohol only (CNS Depressant)
Dodge	CNS Stimulant
Edwards	Hallucinogen

Session XV

Practice: Test Interpretation



Practice: Test Interpretation

Upon successfully completing this session, the participant will be able to:

- Analyze the results of a complete drug evaluation and classification examination and identify the category or categories of drugs affecting the individual examined
- Articulate the basis for the drug category identification

000523

Page 1 of 2

DRUG INFLUENCE EVALUATION

EVALUATOR: BROWN, J
BOOKING NO. 008 OR XV-1

ARRESTEE'S NAME (LAST, FIRST, MI): ADAMS, FRANCES A. | AGE: 37 | SEX: F | RACE: W.
ARRESTING OFFICER (NAME, SERIAL #, DIV.): HOHN, R. #2345 VTD

DATE EXAMINED/TIME/LOCATION: AUG 6 1996 2230 4TH DIST
BREATH RESULTS: ☐ Refused Results 0.00 Instrument # 1234
CHEMICAL TEST: ☐ Urine ☒ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ☒ Yes ☐ No — Given by: R. HOHN
What have you eaten today? When? HAMBURGER NOON
What have you been drinking? How much? WATER
Time of last drink? N/A

Time now? 930PM
When did you last sleep? How long? LAST NIGHT 5HRS
Are you sick or injured? ☐ Yes ☒ No
Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No
Do you have any physical defects? ☐ Yes ☒ No
Are you under the care of a doctor/dentist? ☐ Yes ☒ No
Are you taking any medication or drugs? ☐ Yes ☒ No

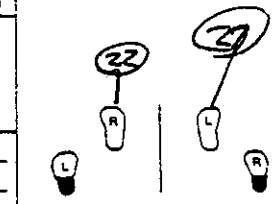
ATTITUDE: COOPERATIVE
COORDINATION: POOR STUMBLES STAGGERS
SPEECH: SLOW, SLURRED, THICK TONGUED
BREATH: NORMAL
FACE: NORMAL

CORRECTIVE LENS: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ☒ Normal ☐ Bloodshot ☐ Watery
Blindness: ☒ None ☐ L. Eye ☐ R. Eye
Tracking: ☒ Equal ☐ Unequal
PUPIL SIZE: ☒ Equal ☐ Unequal (explain)
HGN Present: ☒ Yes ☐ No
Able to follow stimulus: ☒ Yes ☐ No
Eyelids: ☐ Normal ☒ Droopy

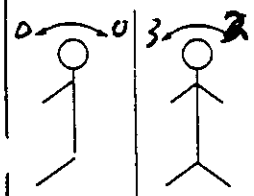
PULSE & TIME	HGN	Left Eye	Right Eye
1. 60 , 2235	Lack of Smooth Pursuit	YES	YES
2. 56 , 2252	Max. Deviation	YES	YES
3. 60 , 2301	Angle of Onset	35°	35°

Vertical Nystagmus? ☐ Yes ☒ No
Convergence: Right Eye ☒ Left Eye ☒

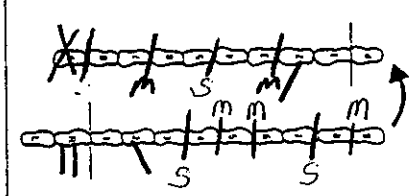
ONE LEG STAND



BALANCE EYES CLOSED



WALK AND TURN TEST



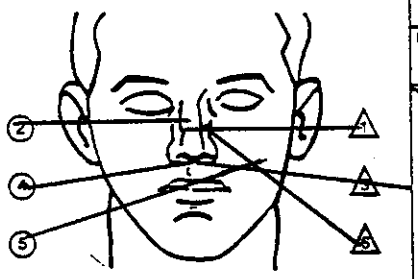
Cannot keep balance: VV
Starts too soon:

	1st Nine	2nd Nine
Stops Walking	VV	V
Misses Heel-Toe	VVV	VV
Steps off Line	V	V
Raises Arms	VVV	VV
Actual Steps Taken	9	8

L R
☒ ☒ Sways while balancing.
☒ ☒ Uses arms to balance.
☐ ☐ Hopping.
☒ ☒ Puts foot down.

INTERNAL CLOCK: 55 Estimated as 30 sec.
Describe Turn: TURNED BACKWARDS
Cannot do Test (explain): N/A
Type of Footwear: HIGH HEELS (BROKEN)

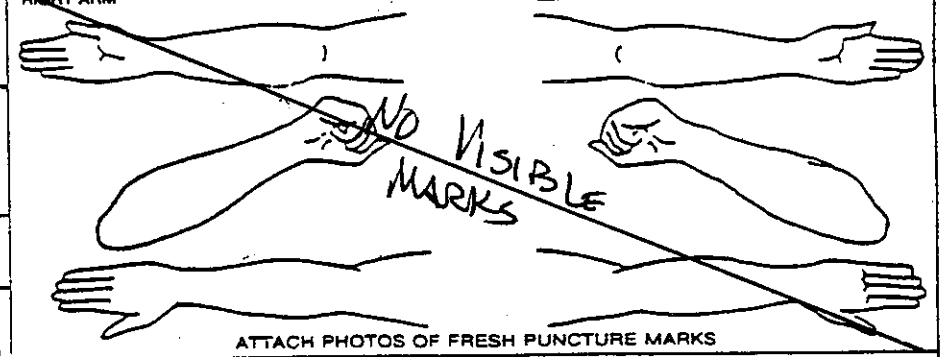
○ Right △ Left
Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	4.0	6.0	5.0	3.0
Right Eye	4.0	6.0	5.0	3.0

NASAL AREA: CLEAR
ORAL CAVITY: CLEAR
HIPPUS: ☐ Yes ☒ No
REBOUND DILATION: ☐ Yes ☒ No
Reaction to Light: SLOW

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 104 , 64
TEMP: 97.6°
MUSCLE TONE: ☐ Near Normal ☒ Flaccid ☐ Rigid
Comments: VERY LOOSE RELAXED

What medicine or drug have you been using? NONE
How much? REFUSED
Time of use? REFUSED
Where were the drugs used? (Location) REFUSED

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED
AUG 6, 1996 2150	2200	2230	2310

CONTROL #	EXAMINING OFFICER	SERIAL NO	DIVISION	UNAVAILABLE DATES	REVIEWED BY
	J. BROWN	9999	VTD		FELTON, C

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Officer Jim Brown	ARRESTEE: Frances A. Adams (f)

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: DRE examination room 4th District, Arizona Department Public Safety

2. WITNESS: Arresting Officer - Sgt. R. Hohn # 2345 Arizona Department of Public Safety

3. BREATH TEST: Writer administered GCI breath test to Adams, the result was 0.00%

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER:

5. INITIAL OBSERVATIONS: Writer observed subject seated next to the breath test instrument, her head was tilted forward, her eyes were closed, her breathing was deep but slow. She responded slowly to my questions and her speech was slow and slurred.

6. MEDICAL PROBLEMS: None noted or stated

7. PSYCHOPHYSICAL TESTS:

8. CLINICAL INDICATORS:

9. SIGNS of INGESTION: None were evident

10. STATEMENTS: Subject stated that she was very sleepy, and denied taking any medicine or drugs.

11. OPINION of EVALUATOR: In my opinion Frances A. Adams is under the influence of and unable to operate a vehicle safely

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a blood sample.

13. MISCELLANEOUS:

000525

DRUG INFLUENCE EVALUATION

Page 1 of 2

EVALUATOR: JOHN, C
BOOKING NO. 009
DR. XV-2

ARRESTEE'S NAME (LAST, FIRST, MI): BAKER, SAM B.
AGE: 28 | SEX: M | RACE: B
ARRESTING OFFICER (NAME, SERIAL #, DIV.): TOWER, T.W. #210 CTD

DATE EXAMINED/TIME/LOCATION: July 19, 1996 2230 3RD DIST
BREATH RESULTS: ☐ Refused Results 0100 Instrument # 1234
CHEMICAL TEST: ☐ Urine ☒ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ☒ Yes ☐ No
Given by: TOWER, T.W.
What have you eaten today? When? MILKSHAKE 3 HRS AGO
What have you been drinking? How much? NOTHING
Time of last drink? N/A

Time now? ABOUT 0830
When did you last sleep? How long? THIS MORNING 2 HRS
Are you sick or injured? ☐ Yes ☒ No
Are you diabetic or epileptic? ☐ Yes ☒ No

Do you take insulin? ☐ Yes ☒ No
Do you have any physical defects? ☐ Yes ☒ No
Are you under the care of a doctor/dentist? ☐ Yes ☒ No

Are you taking any medication or drugs? ☐ Yes ☒ No
ATTITUDE: COOPERATIVE
COORDINATION: POOR STUMBLING
SPEECH: RAPID
BREATH: RANCID
FACE: NORMAL / SWEATY

CORRECTIVE LENS: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ☒ Normal ☐ Bloodshot ☐ Watery
Blindness: ☒ None ☐ L. Eye ☐ R. Eye
Tracking: ☒ Equal ☐ Unequal

PUPIL SIZE: ☒ Equal ☐ Unequal (explain)
HGN Present: ☐ Yes ☒ No
Able to follow stimulus: ☒ Yes ☐ No
Eyelids: ☒ Normal ☐ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 108 / 2235	Lack of Smooth Pursuit	NO	NO
2. 112 / 2246	Max. Deviation	NO	NO
3. 100 / 2253	Angle of Onset	NONE	NONE

Vertical Nystagmus? ☐ Yes ☒ No
Convergence: Right Eye ☒ Left Eye ☒

ONE LEG STAND: COUNTED TO 1040 IN 30 SECONDS

BALANCE EYES CLOSED: 3 / 0

WALK AND TURN TEST: WALKED RAPIDLY

Cannot keep balance
Starts too soon

	1st Nine	2nd Nine
Stops Walking	✓	
Misses Heal-Toe		
Steps off Line		
Raises Arms	VVV	VVV
Actual Steps Taken	9	9

L R
☒ ☒ Sways while balancing.
☒ ☒ Uses arms to balance.
☐ ☐ Hopping.
☐ ☒ Puts foot down.

INTERNAL CLOCK: 15 Estimated as 30 sec.
Describe Turn: AS INSTRUCTED
Cannot do Test (explain): N/A
Type of Footwear: LOAFERS

○ Right △ Left
Draw lines to spots touched

PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	6.5	8.0	7.5	6.0
Right Eye	6.5	8.0	7.5	6.0

NASAL AREA: REDNESS RUNNY NOSE
ORAL CAVITY: CLEAR

HIPPUS: ☐ Yes ☒ No
REBOUND DILATION: ☐ Yes ☒ No
Reaction to Light: SLOW

RIGHT ARM / LEFT ARM
NO VISIBLE MARKS
ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 142 / 102
TEMP: 99.7°

MUSCLE TONE: ☒ Near Normal ☐ Flaccid ☐ Rigid
Comments:

What medicine or drug have you been using? How much? NO ANSWER
Time of use? NO ANSWER
Where were the drugs used? (Location) NO ANSWER

DATE/TIME OF ARREST: July 19, 1996 2150
TIME DRE NOTIFIED: 2200
EVAL START TIME: 2230
TIME COMPLETED: 2310

CONTROL
EXAMINING OFFICER: Clark/John
SERIAL NO: 8888
DIVISION: CTD
UNAVAILABLE DATES
REVIEWED BY: HANCOCK, A.

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Sgt. Clark John	ARRESTEE: Sam B. Baker

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: DRE Examination room 3rd District Capitol PD

2. WITNESS: Arresting Officer - Sgt. T. W. Tower # 3210 Capitol PD and Sgt. Toby Dyas, Tempe Police Department

3. BREATH TEST: Writer observed Sgt. T. W. Tower administer a breath test to Baker, the result was 0.00%

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER:

5. INITIAL OBSERVATIONS: Writer observed subject standing next to the breath test instrument . He repeatedly shifted his weight from foot to foot, and scratched his face and head. He was perspiring heavily, and appeared nervous, anxious and jittery

6. MEDICAL PROBLEMS: None noted or stated

7. PSYCHOPHYSICAL TESTS:

8. CLINICAL INDICATORS:

9. SIGNS of INGESTION: Reddened nasal area.

10. STATEMENTS: Subject denied taking any medicine or drugs.

11. OPINION of EVALUATOR: In my opinion Sam B. Baker is under the influence of and unable to operate a vehicle safely

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a blood sample.

13. MISCELLANEOUS:

000527

DRUG INFLUENCE EVALUATION

Page 1 of 2

EVALUATOR: HAYES, M.
BOOKING NO.: 010
DR.: XV-3

ARRESTEE'S NAME (LAST, FIRST, MI): CHARLES, MARY C
AGE: 17 | SEX: F | RACE: W
ARRESTING OFFICER (NAME, SERIAL #, DIV.): SHERMAN, S. #5083 WPD

DATE EXAMINED/TIME/LOCATION: MAR 17, 1996 0045 CENTRAL TESTING
BREATH RESULTS: Results 0.09 ☐ Refused Instrument # 1234
CHEMICAL TEST: ☐ Urine ■ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ■ Yes ☐ No — Given by: SHERMAN, S.
What have you eaten today? When? PIZZA LAST NIGHT
What have you been drinking? How much? JUST A COUPLE BEERS
Time of last drink? 9PM

Time now? 11:30PM
When did you last sleep? How long? LAST NIGHT 7HRS
Are you sick or injured? ☐ Yes ■ No
Are you diabetic or epileptic? ☐ Yes ■ No

Do you take insulin? ☐ Yes ■ No
Do you have any physical defects? ☐ Yes ■ No
Are you under the care of a doctor/dentist? ☐ Yes ■ No

Are you taking any medication or drugs? ■ Yes ☐ No — BIRTH CONTROL PILLS
ATTITUDE: COOPERATIVE
COORDINATION: POOR STAGGERING

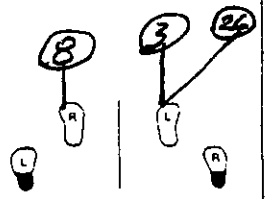
SPEECH: SLURRED
BREATH: MODERATE ODOR OF ALCOHOLIC BEVERAGE
FACE: FLUSHED

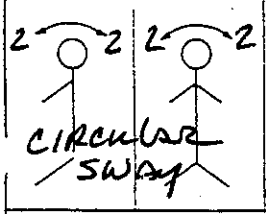
CORRECTIVE LENS: ■ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ☐ Normal ■ Bloodshot ■ Watery
Blindness: ■ None ☐ L. Eye ☐ R. Eye
Tracking: ■ Equal ☐ Unequal

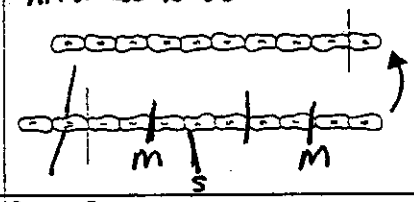
PUPIL SIZE: ■ Equal ☐ Unequal (explain)
HGN Present: ■ Yes ☐ No
Able to follow stimulus: ■ Yes ☐ No
Eyelids: ☐ Normal ■ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 68 / 0050	Lack of Smooth Pursuit	YES	YES
2. 64 / 0105	Max. Deviation	YES	YES
3. 72 / 0117	Angle of Onset	40°	40°

Vertical Nystagmus? ☐ Yes ■ No
Convergence: Right Eye → Left Eye G

ONE LEG STAND


BALANCE EYES CLOSED


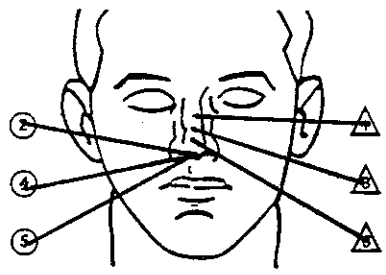
WALK AND TURN TEST — APPEARED "RUBBER LEGGED"


Cannot keep balance: VV
Starts too soon:

	1st Nine	2nd Nine
Stops Walking	✓	
Misses Heal-Toe	VV	
Steps off Line	✓	
Raises Arms	CONSTANT	CONSTANT
Actual Steps Taken	9	9

L R
☐ ☐ Sways while balancing.
☐ ☐ Uses arms to balance.
☐ ☐ Hopping.
☐ ☐ Puts foot down.

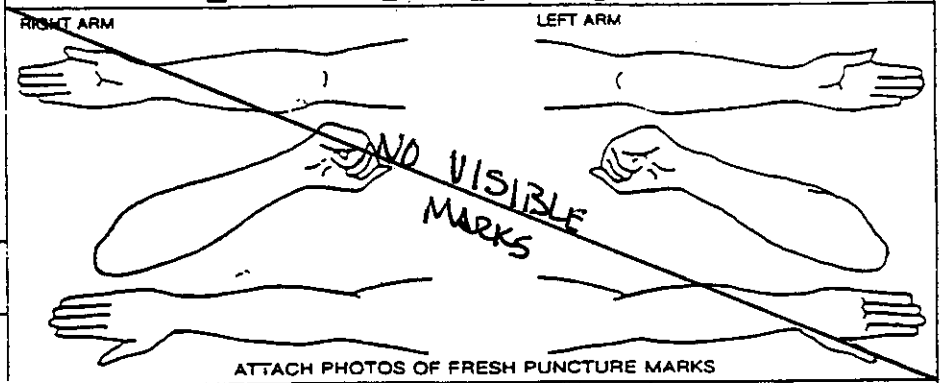
INTERNAL CLOCK: 40 Estimated as 30 sec.
Describe Turn: LOST BALANCE + STAGGERED
Cannot do Test (explain): N/A
Type of Footwear: TENNIS SHOES

○ Right △ Left
Draw lines to spots touched


PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	4.5	6.5	5.5	3.5
Right Eye	4.5	6.5	5.5	3.5

NASAL AREA: CLEAR
ORAL CAVITY: CLEAR

HIPPUS: ☐ Yes ■ No
REBOUND DILATION: ☐ Yes ■ No
Reaction to Light: SLOW

RIGHT ARM / LEFT ARM


ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 110 / 76
TEMP: 98.0°

MUSCLE TONE: ☐ Near Normal ■ Flaccid ☐ Rigid
Comments:

What medicine or drug have you been using? NONE JUST MY PILL
How much? NO ANSWER
Time of use? NO ANSWER
Where were the drugs used? (Location) NO ANSWER

DATE/TIME OF ARREST: MAR 17, 1996 0010
TIME ORE NOTIFIED: 0025
EVAL START TIME: 0045
TIME COMPLETED: 0125

CONTROL #:
EXAMINING OFFICER: Michael Hayes
SERIAL NO: 7700
DIVISION: TCS
UNAVAILABLE DATES:
REVIEWED BY: LAQUETTE, D.

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Sgt. Michael Hayes	ARRESTEE: Mary C. Charles

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: DRE Examination room 4 th District Washington State Patrol

2. WITNESS: Arresting Officer - S. Shermann # 5083 Washington State Patrol and Sandy Richardson, NHTSA

3. BREATH TEST: Writer observed Officer Shermann administer a breath test to Charles, the result was 0.09%

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER:

5. INITIAL OBSERVATIONS: Writer observed subject in the holding area of central booking, she was staggering and stumbling, she swayed and repeatedly blinked her eyes and her speech was very slurred

6. MEDICAL PROBLEMS: None noted or stated

7. PSYCHOPHYSICAL TESTS:

8. CLINICAL INDICATORS:

9. SIGNS of INGESTION: Subject had an odor of alcoholic beverage on her breath.

10. STATEMENTS: Subject admitted she had been drinking. However, she denied taking any medicine or using any drugs other than birth control pills.

11. OPINION of EVALUATOR: In my opinion Mary C. Charles is under the influence of and unable to operate a vehicle safely

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a blood sample.

13. MISCELLANEOUS:

000529

Page 1 of 2

DRUG INFLUENCE EVALUATION

EVALUATOR: TIDWELL, JERRY
BOOKING NO.: 011
DR.: XV-4

ARRESTEE'S NAME (LAST, FIRST, MI): DODGE, FRED D.
AGE: 26 | SEX: M | RACE: W
ARRESTING OFFICER (NAME, SERIAL #, DIV.): LAIRD, C.D. #7654 HTD

DATE EXAMINED/TIME/LOCATION: FEB 22, 1997 2300 STOCKTON PD
BREATH RESULTS: ☐ Refused Results 0.00 Instrument # 1234
CHEMICAL TEST: ☐ Urine ☑ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ☑ Yes ☐ No
Given by: LAIRD, C.D.
What have you eaten today? When? 2 TACOS 2-3 HRS AGO
What have you been drinking? How much? NOTHING
Time of last drink? N/A

Time now? 11 o'clock
When did you last sleep? How long? YESTERDAY or Day BEFORE 5HRS
Are you sick or injured? ☐ Yes ☑ No
Are you diabetic or epileptic? ☐ Yes ☑ No
Do you take insulin? ☐ Yes ☑ No
Do you have any physical defects? ☐ Yes ☑ No
Are you under the care of a doctor/dentist? ☐ Yes ☑ No
Are you taking any medication or drugs? ☐ Yes ☑ No

ATTITUDE: CAREFREE, COOPERATIVE
COORDINATION: POOR JITTERY STUMBLING
SPEECH: RAPID
BREATH: NORMAL
FACE: NORMAL

CORRECTIVE LENS: ☑ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ☑ Normal ☐ Bloodshot ☐ Watery
Blindness: ☑ None ☐ L. Eye ☐ R. Eye
Tracking: ☑ Equal ☐ Unequal
PUPIL SIZE: ☑ Equal ☐ Unequal (explain)
HGN Present: ☐ Yes ☑ No
Able to follow stimulus: ☑ Yes ☐ No
Eyelids: ☑ Normal ☐ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 100 / 2305	Lack of Smooth Pursuit	NO	NO
2. 104 / 2316	Max. Deviation	NO	NO
3. 100 / 2326	Angle of Onset	NONE	NONE

Vertical Nystagmus? ☐ Yes ☑ No
Convergence: Right Eye → Left Eye ←

ONE LEG STAND: (5)

BALANCE EYES CLOSED: 0 0 2 2

WALK AND TURN TEST: WALKED VERY RAPIDLY

	1st Nine	2nd Nine
Cannot keep balance	✓	
Starts too soon	✓	
Stops Walking	✓	
Misses Heel-Toe		
Steps off Line		
Raises Arms	VV	VV
Actual Steps Taken		

L R
☑ ☑ Sways while balancing.
☐ ☐ Uses arms to balance.
☐ ☐ Hopping.
☐ ☑ Puts foot down.

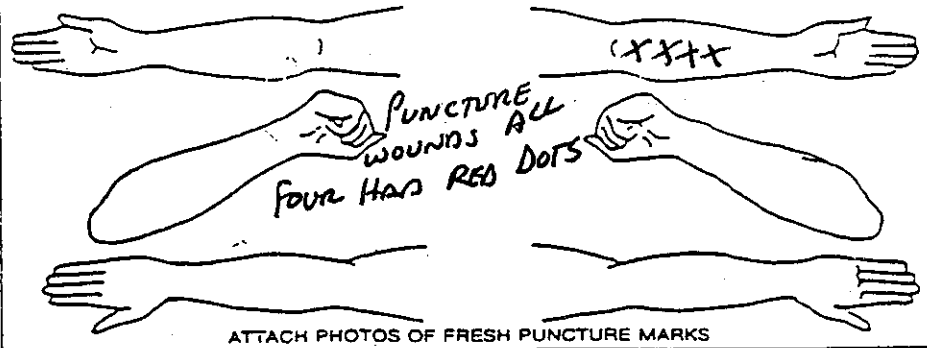
INTERNAL CLOCK: 15 Estimated as 30 sec.
Describe Turn: AS INSTRUCTED
Cannot do Test (explain): N/A
Type of Footwear: STREET SHOES

○ Right △ Left
Draw lines to spots touched

PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	5.5	8.5	7.5	5.5
Right Eye	5.5	8.5	7.5	5.5

NASAL AREA: REDNESS
ORAL CAVITY: CLEAR
HIPPUS: ☐ Yes ☑ No
REBOUND DILATION: ☐ Yes ☑ No
Reaction to Light: SLOW

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 140 / 96
TEMP: 99.5 °
MUSCLE TONE: ☑ Near Normal ☐ Flaccid ☐ Rigid
Comments:

What medicine or drug have you been using? How much? Time of use? Where were the drugs used? (Location)
NONE | NO ANSWER | NO ANSWER | NO ANSWER

DATE/TIME OF ARREST: FEB 22, 1997 2215
TIME DRE NOTIFIED: 2245
EVAL START TIME: 2300
TIME COMPLETED: 2330

CONTROL #:
EXAMINING OFFICER: Jerry Tidwell
SERIAL NO: 1177
DIVISION: HTD
UNAVAILABLE DATES:
REVIEWED BY: CONRAD, M.

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Lt. Jerry Tidwell	ARRESTEE: Fred D. Dodge

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: DRE Examination room 5th District HTD

2. WITNESS: Arresting Officer - C. D. Laird # 7654 HTD

3. BREATH TEST: Officer Laird administer a breath test to Fred Dodge, the result was 0.00%

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER:

5. INITIAL OBSERVATIONS: Writer observed subject at 2255 hrs. In the breathalyzer room. He was smiling and joking with officer Laird. Dodge's speech was rapid and loud. He seemed boisterous and unconcerned about being under arrest.

6. MEDICAL PROBLEMS: None noted or stated

7. PSYCHOPHYSICAL TESTS:

8. CLINICAL INDICATORS:

9. SIGNS of INGESTION: Subject had four (4) fresh puncture wounds on the underside of his left forearm.

10. STATEMENTS: Subject denied taking any medicine or using any drugs. When questioned about the punsture marks he grinned and stated "Gee, I guess those must be mosquito bites", then laughed.

11. OPINION of EVALUATOR: In my opinion Fred D. Dodge is under the influence of and unable to operate a vehicle safely

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a blood sample.

13. MISCELLANEOUS:

000531

DRUG INFLUENCE EVALUATION

Page 1 of 2

EVALUATOR: UNSWORTH, J.

BOOKING NO.: 012 | DR.: XV-5

ARRESTEE'S NAME (LAST, FIRST, MI): EDWARDS, JOAN E | AGE: 33 | SEX: F | RACE: W

ARRESTING OFFICER (NAME, SERIAL #, DIV.): HALL, I #2456 CRD

DATE EXAMINED/TIME/LOCATION: APRIL 1, 1996 2300 CPD

BREATH RESULTS: ☐ Refused Results 0.00 Instrument # 1234

CHEMICAL TEST: ☐ Urine ■ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ■ Yes ☐ No Given by: HALL, I

What have you eaten today? When? NOTHING N/A

What have you been drinking? How much? NOTHING

Time of last drink? N/A

Time now? I DON'T KNOW

When did you last sleep? How long? I DON'T REMEMBER

Are you sick or injured? ■ Yes ☐ No I FEEL SICK TO MY STOMACH

Are you diabetic or epileptic? ☐ Yes ■ No

Do you take insulin? ☐ Yes ■ No

Do you have any physical defects? ☐ Yes ■ No I DON'T THINK SO

Are you under the care of a doctor/dentist? ☐ Yes ■ No

Are you taking any medication or drugs? ☐ Yes ■ No

ATTITUDE: DAZED BUT COOPERATIVE

COORDINATION: POOR DISORIENTED STAGGERING

SPEECH: DIFFICULTY IN SPEAKING AT TIMES

BREATH: NORMAL

FACE: SWEATY, DAZED APPEARANCE

CORRECTIVE LENS: ■ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft

Eyes: ■ Normal ☐ Bloodshot ☐ Watery

Blindness: ■ None ☐ L. Eye ☐ R. Eye

Tracking: ■ Equal ☐ Unequal

PUPIL SIZE: ■ Equal ☐ Unequal (explain)

HGN Present: ☐ Yes ■ No

Able to follow stimulus: ■ Yes ☐ No

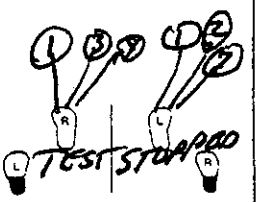
Eyelids: ■ Normal ☐ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 100 / 2310	Lack of Smooth Pursuit	NO	NO
2. 108 / 2325	Max. Deviation	NO	NO
3. 104 / 2337	Angle of Onset	NONE	NONE

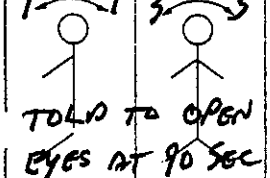
Vertical Nystagmus? ☐ Yes ■ No

Convergence: Right Eye → Left Eye ←

ONE LEG STAND

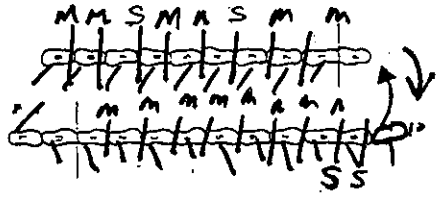


BALANCE EYES CLOSED



TOLD TO OPEN EYES AT 90 SEC

WALK AND TURN TEST



Cannot keep balance: VV

Starts too soon:

	1st Nine	2nd Nine
Stops Walking	VV	VV
Misses Heal-Toe	VVVVV	VVVV
Steps off Line	ALL STEPS	
Raises Arms	V	V
Actual Steps Taken	10	9

L R
☐ ☐ Sways while balancing.
☐ ☐ Uses arms to balance.
☐ ☐ Hopping.
☐ ☐ Puts foot down.

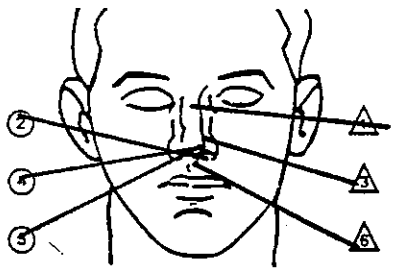
INTERNAL CLOCK: 90 Estimated as 30 sec.

Describe Turn: TURNED BACKWARDS

Cannot do Test (explain): KEPT STOPPING TO ASK WHAT TO DO NEXT

Type of Footwear: SANDALS

○ Right △ Left
Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	6.0	8.5	8.0	6.0
Right Eye	6.0	8.5	8.0	6.0

NASAL AREA: CLEAR

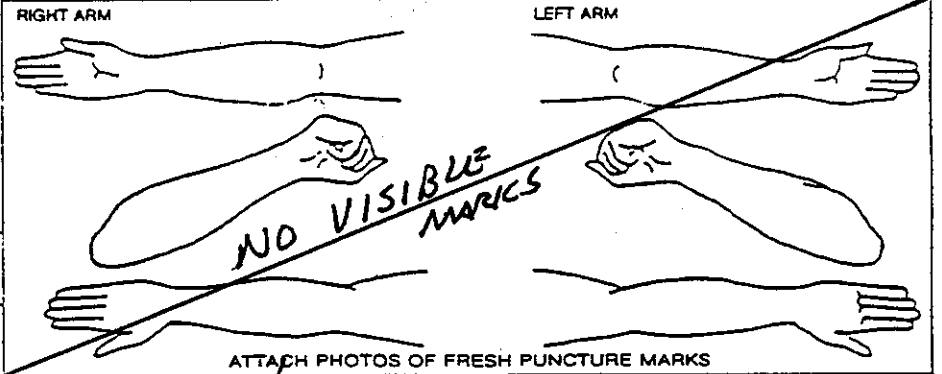
ORAL CAVITY: CLEAR

HIPPUS: ☐ Yes ■ No

REBOUND DILATION: ☐ Yes ■ No

Reaction to Light: NORMAL

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 150 / 110 TEMP: 100.0 °

MUSCLE TONE: ☐ Near Normal ☐ Flaccid ■ Rigid

Comments: ARMS VERY RIGID

What medicine or drug have you been using? NOTHING

How much? NO ANSWER

Time of use? NO ANSWER

Where were the drugs used? (Location) NO ANSWER

DATE/TIME OF ARREST: APR 1, 1996 2235

TIME DRE NOTIFIED: 2245

EVAL START TIME: 2300

TIME COMPLETED: 2345

CONTROL #:

EXAMINING OFFICER: J. Unsworth

SERIAL NO: 5406

DIVISION: CRD

UNAVAILABLE DATES:

REVIEWED BY: Klima I.

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Officer J. Unsworth	ARRESTEE: Joan E. Edwards

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: DRE Examination room 5th District CTD

2. WITNESS: Arresting Officer - Ian Hall # 3456 CTD

3. BREATH TEST: Officer Hall administer a breath test to Joan E. Edwards, the result was 0.00%

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was contacted by Officer Hall at 2255 hrs. Officer Hall stated he had just arrested a "very weird" woman. He further stated "she's either on drugs or crazy." Her vehicle was stopped in the intersection of Studdard Ave. and Haversat Dr., she was standing on the hood of her car waving her arms and screaming incoherently at passing traffic.

5. INITIAL OBSERVATIONS:

6. MEDICAL PROBLEMS: Subject stated indicated some nausea.

7. PSYCHOPHYSICAL TESTS:

8. CLINICAL INDICATORS:

9. SIGNS of INGESTION: None were evident.

10. STATEMENTS: Subject denied taking any medicine or using any drugs.

11. OPINION of EVALUATOR: In my opinion Joan E. Edwards is under the influence of and unable to operate a vehicle safely

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a blood sample.

13. MISCELLANEOUS: Subject was transported to the psychiatric ward, at the county jail, for continued monitoring.

One Hour and Forty Minutes

SESSION XVI

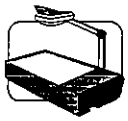
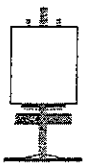
PHENCYCLIDINE (PCP)

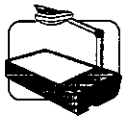
SESSION XVI PHENCYCLIDINE (PCP)

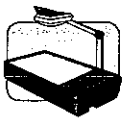
Upon successfully completing this session, the participant will be able to:

- Explain a brief history of PCP.
- Identify common drug names and terms associated with PCP.
- Identify common methods of administration for PCP.
- Explain the symptoms, observable signs and other effects associated with PCP.
- Explain the typical time parameters, i.e., onset and duration of effects, associated with PCP.
- State the clues that are likely to emerge when the drug evaluation and classification process is conducted for a person under the influence of PCP.
- Correctly answer the "topics for study" questions at the end of this Section.

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

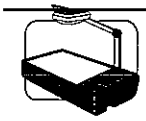
Aides	Lesson Plan	Instructor Notes
  **XVI-0A&B** (Session Objectives)	PHENCYCLIDINE (PCP)	Total Lesson Time: Approximately 100 Minutes Session title on wall chart. Briefly review the objectives, content and activities of this session.
 **25 Minutes**	A. Overview of the Category	The chemical name for PCP is PhenylCyclohexyl Piperidine. Write the chemical name on the chalkboard or flip chart, underlining the first "P", the first "C" and the last "P".
	1. Phencyclidine or PCP, is a drug that, along with its analogs, forms a distinct category.	Point out that an "analog" is a chemical that is very similar to the drug in terms of molecular structure or in psychoactive effects.
	2. PCP shares some characteristics with each of the three categories of drugs previously covered in this training.	
	a. It produces some effects that are similar to the effects of CNS Depressants.	Examples of effects PCP shares with Depressants: Nystagmus, slurred speech, slowed responses.
	b. It produces some effects that are similar to those of CNS Stimulants.	Examples of effects PCP shares with Stimulants: elevated vital signs, frenzied behavior.

Aides	Lesson Plan	Instructor Notes
	c. In some respects it acts like an Hallucinogen.	Point out that in many medical texts and other reference documents, PCP may be classified as an Hallucinogen. However, for purposes of the Drug Evaluation and Classification procedure, it is treated as a separate category.
	3. Phencyclidine was first developed in the late 1950s.	Developed by Parke-Davis and Company, a leading pharmaceutical firm.
 XVI-1 ("PCP History")	a. The developers were searching for a drug that would serve as an efficient intravenous anesthetic.	
	b. PCP proved to be a very effective anesthetic.	An anesthetic is an agent that reduces or abolishes sensation.
	c. It was patented and marketed in 1963 under the trade name Sernyl.	Sernyl derives from the word serene, the apparent mood induced by PCP. In fact, however, the PCP user often is very far from "serene".
	d. It was used in the treatment of mental and psychological disorders, including schizophrenia and alcoholism.	
	e. Many adverse side effects were experienced by persons who had been treated with PCP.	Point out that some of these side effects will be discussed later.
	f. In 1967, use of Phencyclidine as an anesthetic for humans was discontinued.	

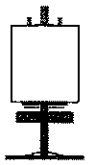
Aides	Lesson Plan	Instructor Notes
	g. In 1968, Parke-Davis re-patented PCP under the trade name Sernylan, which was restricted to use as a veterinary anesthetic.	Sernyl for animals = Sernylan. Point out that this is why PCP sometimes goes by the "street" names "Monkey Dust"; "Elephant Tranquilizer"; "Horse Tranquilizer"; etc.
	h. However, Sernylan was often illicitly diverted to "street" use, so most legitimate manufacturing of PCP was stopped in 1978.	
	i. Another drug in this category is called **Ketamine.** It continues to be manufactured and sold legitimately.	Print **Ketamine** on the chalkboard or flip chart.
	j. Ketamine is used as a surgical anesthetic, both for animals and humans, especially children.	Some brand names of Ketamine: Ketalar, Ketaject and Vetalar.
	k. Ketamine is also used for burn victims.	
 **XVI-2** ("Adverse Side Effects")	4. Continuing research demonstrated that PCP consistently produced adverse side effects.	
	a. delirium	Delirium: confusion, disordered speech, frenzied excitement, hallucinations.
	b. visual disturbances, hallucinations	
	c. agitation, anxiety	
	d. rigid muscle tone	

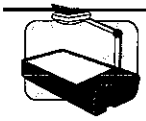
Aides	Lesson Plan	Instructor Notes
	e. elevated blood pressure	
	f. convulsions	Convulsion: involuntary contortion of the muscles, producing contortion of the body and limbs.
	g. difficulty in speech	
	h. violent reactions	
	5. Some lingering and long term effects were also noted.	
	a. Some patients complained of dizziness for several hours after their attention and consciousness appeared to be cleared of PCP's effects.	
	b. Some patients reported memory disorders and other psychological disorders resembling schizophrenia for several months and even years afterwards.	PCP has sometimes been called a psychotomimetic 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 psychotogenic, i.e., it didn't simply mimic craziness, it caused craziness.
	6. Cases of terribly bizarre, self destructive behavior have been reported with persons under the influence of PCP.	
	a. One young man methodically pulled his own teeth out, using a pair of pliers.	Point out 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.

Aides	Lesson Plan	Instructor Notes
	b. Another individual suffered hallucinations of unbelievably grotesque monsters, and gouged out his own eyes to avoid seeing the monsters. c. Another young man drank rat poison, attempting to kill rats that he imagined were inhabiting his body. 7. PCP is relatively easy to manufacture. a. The chemicals required to produce it are readily available commercially. b. The formula for producing PCP has been widely publicized. c. The hardware needed to combine the chemicals is very basic.	NOTE: Instructors should feel free to replace or supplement these examples with others known personally to them. Emphasize, however, that there is some danger present in the manufacturing process. Illicit PCP laboratories frequently explode and burn. Note 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. Emphasize that officers should exercise great caution when they discover an illicit PCP lab. Review the policy and procedures of the students' department for dealing with PCP labs and materials.

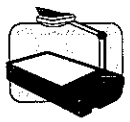
Aides	Lesson Plan	Instructor Notes
 **XVI-3A, B**  **XVI-4** ("Methods of Ingestion")	8. Numerous "street names" are used to designate PCP.	Briefly review the more common street names in vogue in the students' communities.
	9. Methods of ingestion of PCP.	
	a. Many users ingest PCP by smoking.	If available, display 35mm slides of the various PCP ingestion paraphernalia.
	b. 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.	NOTE: Liquid PCP is especially dangerous because it can be absorbed through the skin. Hence, it could be used as a weapon.
	c. Popular substances include mint leaves, parsley, oregano, tobacco or Marijuana.	Point out that PCP smoke is very hot and can irritate the mouth and tongue. Mint leaves and similar material help to cool the smoke.
	d. Commercially prepared cigarettes can also be dipped in liquid PCP, allowed to dry and then smoked.	NOTE: PCP adulterated cigarettes usually will be wrapped in metal foil to be preserved.
	e. Some users prefer to dip a string in liquid PCP, and then insert the string into a tobacco cigarette.	Point out that "Kool" and "Sherman" brand cigarettes are popular for this, because they are mentholated. PCP-adulterated cigarettes are sometimes called "Super Kools" or "Sherms".
	f. PCP can also be insufflated or "snorted".	NOTE: White cigarette paper will be stained brown if adulterated with PCP. Brown cigarette paper will show white crystals, when adulterated.
	g. It can also be taken orally, in capsule or tablet form.	

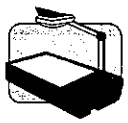
Aides	Lesson Plan	Instructor Notes
	h. Some users <u>inject</u> liquid PCP, either directly into a vein or under the skin or into a muscle.	
	i. Some users have administered PCP to themselves by dropping liquid PCP onto their eyes, using an eyedropper.	
	j. Transdermal absorption of PCP has also been reported (i.e., when applied to the skin, especially as a liquid, PCP can penetrate directly into the body and bloodstream).	Reemphasize the danger to officers handling suspected drugs without proper protective gloves.
		Solicit students' questions and comments about the overview of PCP.
 **5 Minutes**  **XVI-5**	B. Possible Effects	
	1. PCP produces impairments and other observable effects on the human mind and body that are a combination of some of the effects associated with Depressants, Stimulants and Hallucinogens.	<u>Point out</u> that these effects will not necessarily appear in a predictable sequence as dose increases.
	a. Slow, slurred speech.	
	b. Disorientation.	
	c. Loss of memory.	
	d. Agitation, excitement.	
	e. Blank stare.	

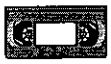
Aides	Lesson Plan	Instructor Notes
	f. Passivity, but may abruptly turn violent if confronted with a situation perceived to be threatening.	Studies show that between 3-30% of PCP subjects will exhibit violence.
	g. Muscle tone rigid.	
	h. Noncommunicative.	
	i. Depersonalization, loss of the sense of personal identity.	Clarification: "Depersonalization" is a syndrome characterized by a feeling of unreality and of estrangement from one's self, body or surroundings.
	j. Sensory distortions, hallucinations.	Note: Especially auditory hallucinations.
	k. Perspiring.	
	i. Increased pain threshold	
	2. Regular users of PCP develop a tolerance that may mask many of these observable effects.	Solicit students' questions and comments concerning possible effects of PCP.
	3. PCP has been called a Dissociative Anesthetic, i.e., it cuts off the brain's perceptions of the senses.	Write "Dissociative Anesthetic" on the chalkboard or flip chart.
	a. PCP users often feel that their heads are physically separated from their bodies.	
	b. They sometimes report feeling they are dead, and that their heads are floating away.	
 **5 Minutes**	C. On-set and Duration of Effects	

Aides	Lesson Plan	Instructor Notes
 XVI-6	1. The onset of PCP's effects varies somewhat with the method of ingestion. 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. 2. The effects reach their peak in about 15-30 minutes, assuming the PCP was smoked, injected or snorted. 3. The effects generally last 4-6 hours, but they can go somewhat longer. 4. The user usually, but not always returns to normal within 24-48 hours.	Solicit students' questions and comments concerning onset and duration factors.
 5 Minutes	D. Overdose Signs and Symptoms 1. In addition to the bizarre, violent and self destructive behavior discussed previously, persons severely intoxicated by PCP may exhibit definite and extreme symptoms signifying a medically dangerous condition. a. A deep coma, lasting for up to 12 hours. b. Seizures and convulsions. c. Eyes generally open and staring blankly.	

Aides	Lesson Plan	Instructor Notes
	2. A danger associated with severe PCP intoxication is that the person may die due to respiratory depression.	A good practice (followed by LAPD) is to take all PCP suspects to medical treatment.
	3. There is also some evidence that PCP may trigger a heart attack, if the user had some preexisting condition disposing him or her to possible cardiac problems.	
	4. There is also some evidence that prolonged use of PCP can lead to psychosis, which can be permanent.	Solicit students questions and comments concerning signs and symptoms of PCP overdose.
60 Minutes	E. Expected Results of the Evaluation	
	1. Observable evidence of impairment.	
 **XVI-7A** ("SFST evidence")	a. Standardized Field Sobriety Tests.	
	o Horizontal Gaze Nystagmus generally will be present with a very early angle of onset.	NOTE: So-called "Resting Nystagmus" may be evident, especially with high doses. That is a distinct jerking of the eyeballs even as the suspect stares straight ahead.
	o Vertical Nystagmus usually will be present.	
 **XVI-7B** (SFST, continued)	o performance on Romberg and Finger to Nose will be impaired: muscle tone will usually be rigid. Internal clock may be slowed.	

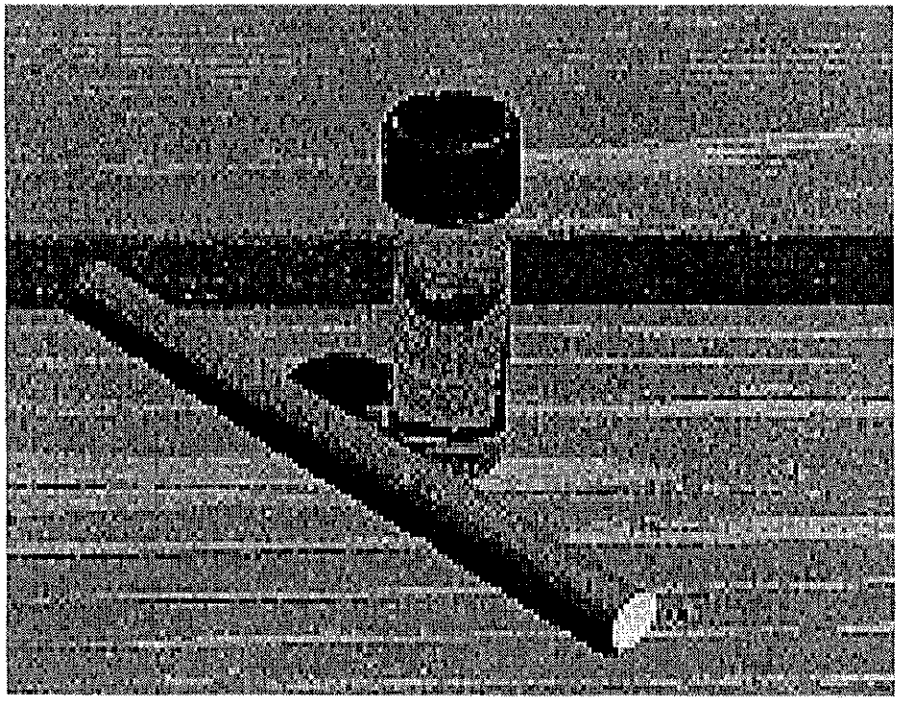
Aides	Lesson Plan	Instructor Notes
	o performance on Walk and Turn and One Leg Stand will be impaired: muscle tone will be rigid.	Suspect may exhibit a "high gait ataxia" or "moon walking", i.e., taking abnormally high and slow steps, as though he or she were trying to step over obstacles in his or her path.
	o suspect may neglect to estimate the passage of 30 seconds when performing the Romberg test.	
 **XVI-7C** ("General Indicators")	b. General indicators	
	o blank stare	
	o warm to the touch	
	o perspiring	
	o muscle tone rigid	
	o speech slurred and slow repetitive speech	
	o non-responsive, slow responses	
	o confused	
	o agitated	
	o may become suddenly violent	
	o chemical odor (of Ether, used in preparation of PCP)	
	o self-reported hallucinations	

Aides	Lesson Plan	Instructor Notes
	o cyclic behavior	NOTE: "Cyclic behaviors" mean that the signs and symptoms tend to increase and decrease cyclically.
 **XVI-7D** ("Eye Examinations")	2. Evidence associated with the physiologic examinations. a. Eye examinations o Lack of Convergence generally will be present. o pupil size generally will be normal o reaction to light generally will be normal	
 **XVI-7E** ("Vital Signs Examinations")	b. Vital signs examinations o blood pressure will be up o pulse will be up o body temperature will be up	Point out that people under the influence of PCP often feel so hot that they remove all of their clothing.
 **XVI-8** ("PCP Symptomatology Chart")	3. Summary	
	4. Demonstrations	Point out that tolerance may reduce some PCP symptoms.

Aides	Lesson Plan	Instructor Notes
	a. Video tape demonstrations	Show video tape of suspect(s) under the influence of PCP. Relate behavior and observations to the PCP symptomatology chart.
	b. Drug Evaluation and Classification exemplars demonstrations.	Refer students to the exemplars found at the end of Section XVI of their student manuals. Relate the items noted on the exemplars to the PCP Symptomatology Chart. Solicit students' questions or comments concerning Expected Results of the Evaluation of PCP suspects.

Session XVI

PCP and Its Analogs



Phencyclidine (PCP)

Upon successfully completing this session, the participant will be able to:

- Explain a brief history of PCP
- Identify common drug names and terms associated with PCP
- Identify common methods of administration for PCP
- Explain the symptoms, observable signs and other effects associated with PCP

Phencyclidine (PCP)
(continued)

- Explain the typical time parameters, i.e., on-set and duration of effects, associated with PCP
- State the clues that are likely to emerge when the drug evaluation and classification process is conducted for a person under the influence of PCP
- Correctly answer the "topics for study" questions at the end of this section

Brief History of PCP

- Developed in the late 1950's
- An effective intravenous anesthetic
- Patented in 1963: trade name "Sernyl"
- Used in treating mental and psychological disorders
- Very undesirable side effects were noted
- Use as an anesthetic for humans
- Was discontinued in 1967
- Re-patented in 1968 as an animal tranquilizer: trade name "Sernylan"

Some Adverse Side Effects of PCP

- Delirium
- Hallucinations
- Agitation, anxiety
- Muscle tone -- rigid
- Blood pressure -- up
- Convulsions
- Difficulty in speech
- Violent reactions

Some "Street Names" for PCP

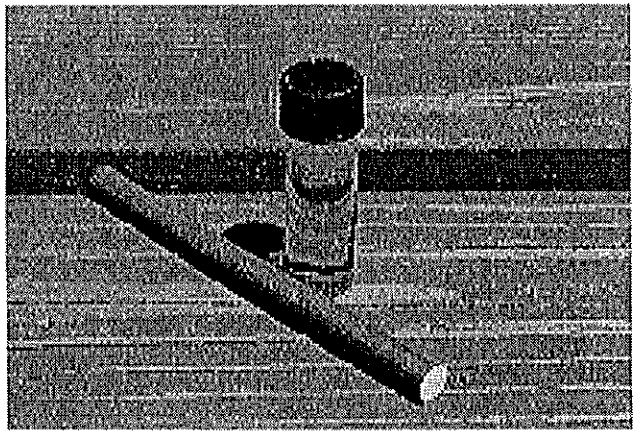
- Ace
- Amoeba
- Trank
- Jet Fuel
- Juice
- Dust
- Magic Dust
- Monkey Dust
- Crystal Joints
- Crystal
- Krystal
- KJ (Or CJ)
- Devil Dust
- KJ Krystal
- Angel Dust
- Krystal Joints
- Embalming Fluid
- Monkey Tranquilizer
- Lovely

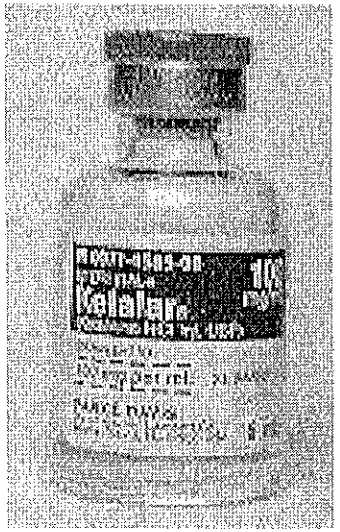
More "Street Names" for PCP

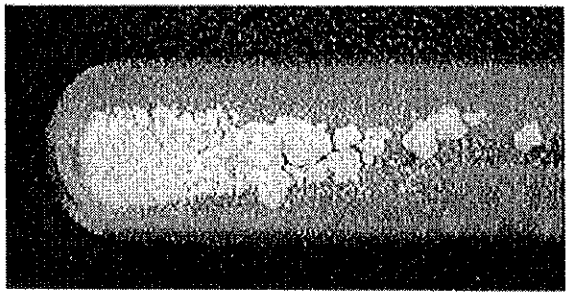
- Peace
- Peace Pill
- Paz
- Green
- Elephant Tranquilizer
- Horse Tranquilizer
- Animal Tranquilizer
- Green Leaves
- Tic Tac
- Kools
- Super Kools
- Super Grass
- Super Weed
- Zombie Weed
- Peace Weed
- Mint Weed
- Killer Weed
- Sherms

Methods of Ingesting PCP

- Smoking
- Orally
- Injection
- Eyedropper
- Insufflation (inhaling, “snorting”)







Possible Effects of PCP

- Slow, slurred speech
- Disorientation
- Loss of memory
- Agitation, excitement
- Blank stare
- Passivity…but possibly abruptly turning violent
- Muscle tone - rigid
- Noncommunicative
- Depersonalization
- Sensory distortion, hallucinations
- Excessive perspiration
- Increased pain threshold

On-set and Duration of PCP's 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

Evaluation of Suspects Under the Influence of PCP

SFST Evidence:

- Horizontal gaze nystagmus will be present with a very early angle of onset (maybe "immediate" or even "resting" nystagmus)
- Vertical nystagmus will be present
- Impaired performance will be evident on Walk and Turn and One Leg Stand Tests

Evaluation of Suspects Under the Influence of PCP

SFST Evidence (continued):

- Impaired performance will be evident on Romberg and Finger To Nose
- Muscle tone will be rigid

Evaluation of Suspects Under the Influence of PCP

General Indicators:

- Blank stare
- Warm to the touch
- Perspiring
- Muscle tone rigid
- Speech slurred and repetitive
- Non-responsive, slow responses
- Confused
- Agitated
- May become suddenly violent
- Chemical odor
- Self-reported hallucinations
- Cyclic behavior

Evaluation of Suspects Under the Influence of PCP

Eye Examinations:

- Lack of convergence - present
- Pupil size will be normal
- Pupillary reaction to light will be normal

Evaluation of Suspects Under the Influence of PCP

Vital Signs Examination:

- Blood pressure will be up
- Pulse will be up
- Body temperature will be up

PCP Symptomatology Chart

HGN	Present
Vertical Nystagmus	Present
Lack of Convergence	Present
Pupil Size	Normal
Reaction to Light	Normal
Pulse Rate	Up
Blood Pressure	Up
Temperature	Up
Muscle Tone	Rigid

000564

EVALUATOR: GEORGE, MARK

Page 1 of 2

DRUG INFLUENCE EVALUATION

BOOKING NO: 013 | DR#: XVI-1

ARRESTEE'S NAME (LAST, FIRST, MI): ROSS, ROBERT H | AGE: 22 | SEX: M | RACE: H

ARRESTING OFFICER (NAME, SERIAL #, DIV.): BROWN, B. #1832 NYSP

DATE EXAMINED/TIME/LOCATION: DEC 8, 1996 2145 4TH DIST

BREATH RESULTS: ☐ Refused Results 0.00 Instrument # 1234

CHEMICAL TEST: ☐ Urine ☒ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ☒ Yes ☐ No Given by: BROWN A

What have you eaten today? When? FRIED CHICKEN 6AM

What have you been drinking? How much? NOTHING

Time of last drink? N/A

Time now? 8 o'clock

When did you last sleep? How long? YESTERDAY 6HRS

Are you sick or injured? ☐ Yes ☒ No

Are you diabetic or epileptic? ☐ Yes ☒ No

Do you take insulin? ☐ Yes ☒ No

Do you have any physical defects? ☐ Yes ☒ No

Are you under the care of a doctor/dentist? ☐ Yes ☒ No

Are you taking any medication or drugs? ☐ Yes ☒ No

ATTITUDE: PASSIVE BUT COOPERATIVE

COORDINATION: POOR STAGGERING

SPEECH: SLURRED, SLOW + LOW

BREATH: CHEMICAL ODOR

FACE: FLUSHED + SWEATY

CORRECTIVE LENS: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft

Eyes: ☒ Normal ☐ Bloodshot ☐ Watery

Blindness: ☒ None ☐ L. Eye ☐ R. Eye

Tracking: ☒ Equal ☐ Unequal

PUPIL SIZE: ☒ Equal ☐ Unequal (explain)

HGN Present: ☒ Yes ☐ No

Able to follow stimulus: ☒ Yes ☐ No

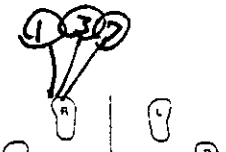
Eyelids: ☒ Normal ☐ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 100 / 2150	Lack of Smooth Pursuit	YES	YES
2. 108 / 2204	Max. Deviation	YES	YES
3. 100 / 2217	Angle of Onset	IMMEDIATE IMMEDIATE	

Vertical Nystagmus? ☒ Yes ☐ No

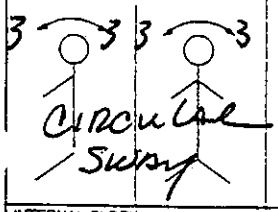
Convergence: Right Eye → Left Eye G

ONE LEG STAND

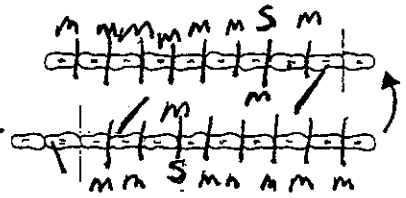


TEST STOPPED — TEST STOPPED — FOOT DOWN 3 TIMES

BALANCE EYES CLOSED



WALK AND TURN TEST



Cannot keep balance ✓

Starts too soon ✓

	1st Nine	2nd Nine
Stops Walking	✓	✓
Misses Heel-Toe	ALL STOPS	ALL STOPS
Steps off Line	✓	✓
Raises Arms	✓✓✓	✓✓
Actual Steps Taken		

L R
☒ ☒ Sways while balancing.
☒ ☒ Uses arms to balance.
☐ ☐ Hopping.
☒ ☒ Puts foot down.

INTERNAL CLOCK: 45 Estimated as 30 sec.

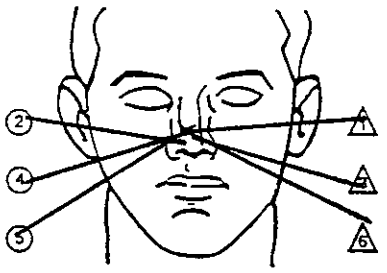
Describe Turn: SWIVELED IN ONE ABRUPT MOTION LOST BALANCE

Cannot do Test (explain): N/A

Type of Footwear: TENNIS SHOES

○ Right △ Left

Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	4.0	6.0	5.5	3.5
Right Eye	4.0	6.0	5.5	3.5

NASAL AREA: CLEAR

ORAL CAVITY: CHEMICAL ODOR ON BREATH

HIPPUS: ☐ Yes ☒ No

REBOUND DILATION: ☐ Yes ☒ No

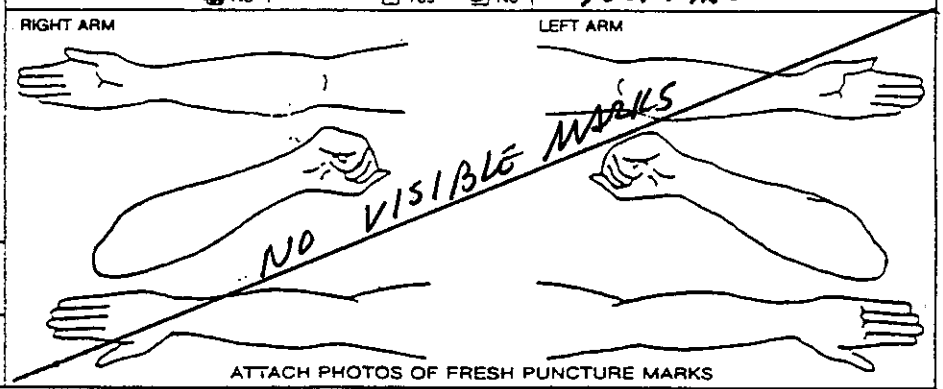
Reaction to Light: NORMAL

BLOOD PRESSURE: 146 / 100 TEMP: 99.8 °

MUSCLE TONE: ☐ Near Normal ☐ Flaccid ☒ Rigid

Comments: ARMS VERY RIGID

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

What medicine or drug have you been using? NOTHING

How much? NO ANSWER

Time of use? NO ANSWER

Where were the drugs used? (Location) NO ANSWER

DATE/TIME OF ARREST: DEC 8, 1996 2100

TIME DRE NOTIFIED: 2120

EVAL START TIME: 2145

TIME COMPLETED: 2220

CONTROL #

EXAMINING OFFICER: Mark George

SERIAL NO: 7654

DIVISION: GRD

UNAVAILABLE DATES:

REVIEWED BY: Hoff, M

DRUG INFLUENCE EVALUATION Page 2 of 2

LOG NO.	DRE: Sgt. Mark George	ARRESTEE: Robert H. Ross

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Robert H. Ross, took place in the DRE room, NYSP Tarrytown

2. WITNESS: Arresting Officer - Trooper Alan D. Brown

3. BREATH TEST: Troper Brown administer a breath test to Ross at 2135 hours, the result was 0.00%

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was contacted by radio at 2120 hrs. and advised to return to the station to conduct a DRE evaluation. Tpr. Brown informed me that he had observed Ross driving S/B in the median of the NYS Thruway, at approximately 10 mph. Brown stated that the subject appeared dazed and could not state where he was or where he had come from.

5. INITIAL OBSERVATIONS: Writer observed subject at 2140 hrs. He appeared dazed and disoriented, he had a fixed stare and responded very slowly (approx. 5 - 10 seconds delay) to all my questions and instructions.

6. MEDICAL PROBLEMS: None noted or stated

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject swayed approximately 3" in a circular motioin and estimated 45 seconds as 30 seconds. Walk and Turn: Subject started walking immediately, lost balance during the instructions, stepped off the line, stopped walking, repeatedly used his arms for balance, and missed heel to toe One Leg Stand: Subject unable to complete the test using either foot. Finger to Nose: Subject missed tip of his nose on each attempt and his arm movements were very rigid.

8. CLINICAL INDICATORS: Subject exhibited immediate onset of HGN, vertical nystagmus, and lack of convergence. Blood pressure, pulse and body temperature were above the normal range

9. SIGNS of INGESTION: There was a strong chemical odor on the subject's breath.

10. STATEMENTS: Subject stated that he did not use any drugs.

11. OPINION of EVALUATOR: In my opinion Robert H. Ross is under the influence of Phencyclidine, or an analog, and unable to operate a vehicle safely

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a blood sample.

13. MISCELLANEOUS: Three (3) discolored filtered cigarettes in a "Kool" box were found in the subject's right shirt pocket, and were sent to the laboratory for analysis.

000566

DRUG INFLUENCE EVALUATION

Page 1 of 2

EVALUATOR: BLEA, JOHN
BOOKING NO.: 014
DR.: XVI-2

ARRESTEE'S NAME (LAST, FIRST, MI): MAYER, ROBIN C
AGE: 22 | SEX: F | RACE: W
ARRESTING OFFICER (NAME, SERIAL #, DIV.): JOHNSON, C #9541 DPD

DATE EXAMINED/TIME/LOCATION: MAY 2, 1996 2300 CENTRAL TESTING
BREATH RESULTS: ☐ Refused Results 0.04 Instrument # 1234
CHEMICAL TEST: ☐ Urine ☑ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ☑ Yes ☐ No
Given by: JOHNSON C
What have you eaten today? PIZZA When? 5PM
What have you been drinking? How much? 1 BEER
Time of last drink? 5PM

Time now? 8PM
When did you last sleep? How long? LAST NIGHT 6HRS
Are you sick or injured? ☐ Yes ☑ No
Are you diabetic or epileptic? ☐ Yes ☑ No

Do you take insulin? ☐ Yes ☑ No
Do you have any physical defects? ☐ Yes ☐ No NO RESPONSE
Are you under the care of a doctor/dentist? NO RESPONSE ☐ Yes ☐ No

Are you taking any medication or drugs? ☐ Yes ☑ No
ATTITUDE: WITHDRAWN NONE RESPONSIVE PASSIVE
COORDINATION: POOR STUMBLING STAGGERING

SPEECH: SLOW, SLURRED, AT TIMES DID NOT RESPOND
BREATH: CHEMICAL ODOR
FACE: SWEATY & FLUSHED

CORRECTIVE LENS: ☑ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ☑ Normal ☐ Bloodshot ☐ Watery
Blindness: ☑ None ☐ L. Eye ☐ R. Eye
Tracking: ☑ Equal ☐ Unequal

PUPIL SIZE: ☑ Equal ☐ Unequal (explain)
HGN Present: ☑ Yes ☐ No
Able to follow stimulus: ☑ Yes ☐ No
Eyelids: ☑ Normal ☐ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 120 / 2310	Lack of Smooth Pursuit	YES	YES
2. 116 / 2326	Max. Deviation	YES	YES
3. 104 / 2338	Angle of Onset	IMMEDIATE	IMMEDIATE

Vertical Nystagmus? VERY DISTINCT ☑ Yes ☐ No
Convergence: Right Eye Left Eye

ONE LEG STAND: NOT GIVEN
SUBJECT FELL TEST STOPPED

BALANCE EYES CLOSED: CIRCULAR SWAY

WALK AND TURN TEST: WALKING STIFF LEGGED ARMS LOCKED

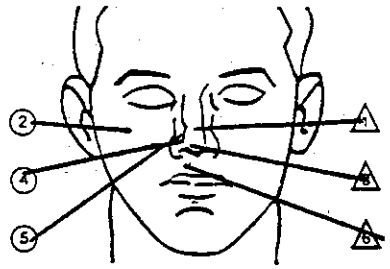
Cannot keep balance: VV
Starts too soon:

	1st Nine	2nd Nine
Stops Walking		
Misses Heal-Toe		ALL STOP
Steps off Line		
Raises Arms	CONSTANT	VV
Actual Steps Taken	10	12

L R
☐ ☐ Sways while balancing.
☐ ☐ Uses arms to balance.
☐ ☐ Hopping.
☐ ☐ Puts foot down.

INTERNAL CLOCK: 40 Estimated as 30 sec.
Describe Turn: SWIVELED ABRUPTLY STAGGERED TO THE LEFT
Cannot do Test (explain): N/A
Type of Footwear: LOAFERS

○ Right △ Left
Draw lines to spots touched

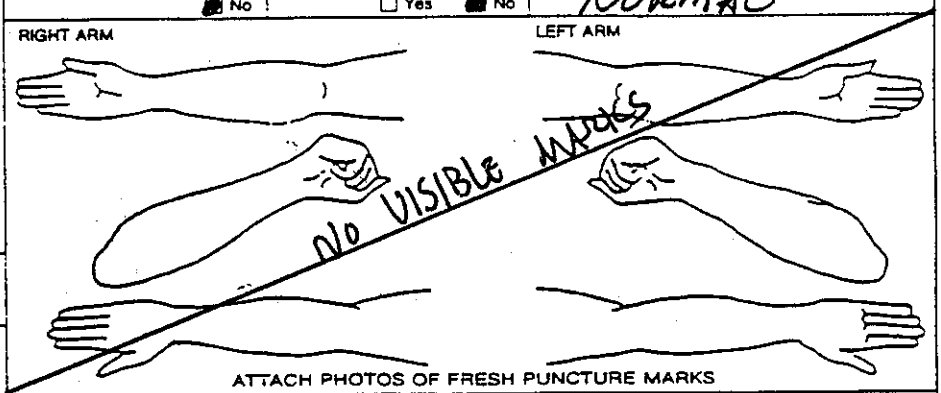


PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	4.0	6.5	6.0	3.5
Right Eye	4.0	6.5	6.0	3.5

NASAL AREA: CLEAR
ORAL CAVITY: CLEAR

HIPPUS: ☐ Yes ☑ No
REBOUND DILATION: ☐ Yes ☑ No
Reaction to Light: NORMAL

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 150 / 104
TEMP: 100.5 °

MUSCLE TONE: ☐ Near Normal ☐ Flaccid ☑ Rigid
Comments: ARMS & NECK VERY RIGID

What medicine or drug have you been using? How much? NO RESPONSE
Time of use? NO RESPONSE
Where were the drugs used? (Location) NO RESPONSE

DATE/TIME OF ARREST: MAY 2, 1996 2240
TIME DRE NOTIFIED: 2245
EVAL START TIME: 2300
TIME COMPLETED: 2345

CONTROL #:
EXAMINING OFFICER: John Blea
SERIAL NO: 7672
DIVISION: DPD
UNAVAILABLE DATES:
REVIEWED BY: GEORGE, M.

DRUG INFLUENCE EVALUATION Page 2 of 2

LOG NO.	DRE: Officer John Blea	ARRESTEE: Robin C. Mayer

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Robin C. Mayer, took place in the DRE room, Denver PD Headquarters

2. WITNESS: Arresting Officer - Officer Cliff Johnson

3. BREATH TEST: Officer Johnson administered a breath test to Mayer at 2300 hours, the result was 0.04%. At this time subject admitted she had consumed some beer.

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was contacted by radio at 2245 hrs. and advised to return to Headquarters to conduct a DRE evaluation. Officer Johnson informed me that he had observed the subject fail to obey a stop sign. At the time of the stop Mayer was smoking a cigarette which gave off a strong chemical odor. Additional examination of the cigarette indicated the possibility of some form of string in the middle.

5. INITIAL OBSERVATIONS: Writer observed subject sitting quietly in the DRE room, staring at the floor, and taking no notice of the activity around her. It was necessary to instruct the subject twice to raise her head before she complied.

6. MEDICAL PROBLEMS: None noted or stated

7. PSYCHOPHYSICAL TESTS: Ms. Mayer was very slow in responding to all instructions during this portion of the examination. Romberg Balance: Subject swayed approximately 3" in a circular motioin and estimated 40 seconds as 30 seconds. Walk and Turn: Subject lost balance during the instructions, took the wrong number of steps, turned abruptly, stepped off the line, and repeatedly used her arms for balance. On the return she never touched heel to toe and simply took 12 "normal" steps. Her legs seemed very stiff and rigid. One Leg Stand: Subject fell after only three (3) seconds. Finger to Nose: Subject missed tip of her nose on each attempt and on one attempt missed her nose entirely.

8. CLINICAL INDICATORS: Subject exhibited immediate onset of HGN, vertical nystagmus, and lack of convergence. Blood pressure, pulse and body temperature were above the normal range.

9. SIGNS of INGESTION: There was a strong chemical odor on the subject's breath.

10. STATEMENTS: Subject stated that she had drank "one (1) beer" She did not respond to the questions regarding drug use or questions concerning the cigarette.

11. OPINION of EVALUATOR: In my opinion Robin C. Mayer is under the influence of Phencyclidine, or an analog, and unable to operate a vehicle safely.

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a blood sample.

13. MISCELLANEOUS: The confiscated cigarette was sent to the laboratory for analysis.

convergence

Three Hours

SESSION XVII

NARCOTIC ANALGESICS

SESSION XVII NARCOTIC ANALGESICS

Upon successfully completing this session, the participant 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.
- Explain the symptoms, observable signs and other effects associated with this category.
- Explain the typical time parameters, i.e., onset and duration of effects, associated with this category.
- State the clues that are likely to emerge when the DRE Evaluation is conducted.
- Explain the procedures for examining and determining the ages of injection sites.
- Correctly answer the "topics for study" questions at the end of this section.

Content Segments

A. Overview of the Category

B. Possible Effects

C. On-Set and Duration of Effects

D. Overdose Signs and Symptoms

E. Expected Results of the Evaluation

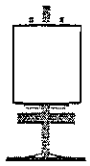
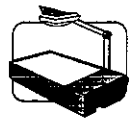
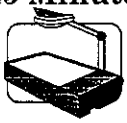
F. Injection Site Examination

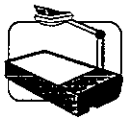
G. Expected Location of Injection Marks

H. Conclusion

Learning Activities

- Instructor Led Presentations
- Review of Drug Evaluation and Classification Exemplars
- Reading Assignments
- Video Presentations
- Slide Presentations

Aides	Lesson Plan	Instructor Notes
  **XVII-0A&B** (Narcotic Analgesics)	NARCOTIC ANALGESICS	Total Lesson Time: Approximately 180 Minutes Session title on wallchart. Briefly review the objectives, content and activities of this session. 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. The term "Opioid," however, most correctly refers to the synthetic subcategory of Narcotic Analgesics.
 **25 Minutes**  **XVII-1** ("Narcotic Analgesics Defined")	A. Overview of the Category 1. Narcotic Analgesic defined a. A medical term, not a legal or police term. 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. c. Non-Narcotic Analgesics, such as Aspirin, Tylenol, and Motrin, relieve pain, but do NOT produce narcosis, which means numbness or sedation.	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.

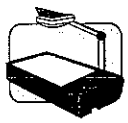
Aides	Lesson Plan	Instructor Notes
 **XVII-2** ("Types of Narcotic Analgesics")	d. A Narcotic is a drug derived from Opium, or produced synthetically that relieves pain, but also induces euphoria, alters mood, and produces sedation. 2. There are two subcategories of Narcotic Analgesics. a. The Opiates: drugs that either contain or are derived from Opium. (1) the natural alkaloids of Opium	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. The term "main ingredient" can be used as a synonym for "alkaloid."
	(2) Opium derivatives.	Opium derivatives are obtained by chemically treating the Opium alkaloid. Opium Derivatives are therefore derived from Opium. 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 (wheat flour which has been chemically treated)

Aides	Lesson Plan	Instructor Notes
	b. The synthetics, which do not derive from Opium at all, but have similar or identical effects as Opium alkaloids and derivatives.	Point out that the synthetic Narcotic Analgesics are produced from a variety of non-opiate substances. Again, these are sometimes called "Opioids".
	3. The natural alkaloids and the Opium Derivatives all come from Opium, which is sap from the seed pods of a particular type of poppy.	NOTE: The Opium poppy, or papaver somniferum (somniferum, Latin for the "carrier of sleep").
 **XVII-3** (Characteristics common to all Narcotic Analgesics)	4. Narcotic Analgesics all share three characteristics. a. They will relieve pain.	Clarification: They produce analgesia.
	b. They will produce withdrawal signs and symptoms when the user is physically dependent, and drug use is stopped.	Clarification: Physical dependence results from "chronic administration." This means that the drug has been taken at fairly regular intervals for a period of time.
	c. They will suppress the withdrawal signs and symptoms of chronic morphine administration.	Morphine is typically used as the standard for comparison with other Narcotic Analgesics. Clarification: This means that the various Narcotic Analgesics can be substituted for each other to relieve withdrawal symptoms.
 **XVII-4** ("Commonly Abused Opiates")	5. Some commonly abused Opiates. a. Powdered Opium (also known as smoking Opium)	

Aides	Lesson Plan	Instructor Notes
	o a simple refinement of raw Opium.	
	o used medically to treat diarrhea (administered orally)	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.
	o remains popular as a drug of abuse (smoked) among some Asian-American communities.	
	b. Morphine, the principal natural alkaloid of Opium.	Instructor, FYI: Named after Morpheus, the Greek God of dreams.
	o Morphine was first isolated from Opium in 1805.	
	o used medically to suppress severe pain (e.g., with terminal cancer patients).	
	o highly addictive	Morphine was widely used during the Civil War. Morphine addiction was termed "Soldier's disease."
	o at one time, Morphine was the most commonly abused Narcotic Analgesic.	
	c. Codeine is another natural alkaloid of Opium.	Its technical name is Methylmorphine.
	o first isolated in 1832.	
	o Codeine's pain killing ability is much weaker than Morphine's.	

Aides	Lesson Plan	Instructor Notes
	o used medically to suppress coughing or minor pain.	
	o Codeine is definitely an addictive drug.	Clarification: Narcotic Analgesic addicts often turn to Codeine when they cannot get more popular drugs.
	d. Heroin is the most commonly abused illicit Narcotic Analgesic.	Point out that the generic, or technical name for heroin is "Diacetyl Morphine".
	o derived from Morphine in 1874.	
	o Heroin was first thought to be a non-addictive substitute for Morphine.	Write "Diacetyl Morphine" on the chalkboard or flipchart.
	o it was approved for general use by the American Medical Association in 1906.	
	o by the 1920's it was evident that Heroin was much more addictive than Morphine.	
	o importation and manufacture of Heroin have been illegal in this country since 1925.	Heroin is a Schedule I drug, which means it has no legitimate medical uses in the United States.
	e. Dilaudid is another derivative of Morphine	Technical Name: Hydromorphone Hydrochloride.
	o first produced in 1923.	
	o sometimes called "drug store Heroin", since it is commercially available from medical and pharmaceutical sources.	

Aides	Lesson Plan	Instructor Notes
	o Dilaudid has the same addictive liabilities as does Heroin or Morphine.	
	o used medically for short term relief of moderate to severe pain, and to suppress severe, persistent coughs.	
	o can be ingested via injection, orally or in suppositories.	
	f. Hycodan is a derivative of Codeine.	Technical Name: Hydrocodone.
	o used medically to treat coughs.	Note: Vicodin is a commonly prescribed pain reliever containing Hydrocodone and Acetaminophen.
	o sometimes abused by addicts who are unable to obtain Morphine or Heroin.	
	g. Percodan is another derivative of Codeine.	Technical Name: Oxycodone.
	o Percodan is one of the most commonly prescribed Narcotic Analgesics.	It is also produced the under the brand name of "Percocet which is Percodan combined with Acetaminophen, such as Tylenol.
	o it is somewhat less addictive than Morphine, but more than Codeine.	
	o another medicine, Percobarb, is a combination of Percodan and Barbiturate.	i.e., Percobarb combines a CNS Depressant with a Narcotic Analgesic.

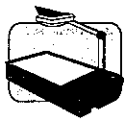
Aides	Lesson Plan	Instructor Notes
	h. Metopon derives from Thebaine, another alkaloid of Opium. o Metopon is chemically similar to Morphine. o used to relieve chronic pain such as terminal cancer.	
 **XVII-5** ("Common Synthetic Opiates")	7. Some common Synthetic Opiates. a. Demerol was first produced in 1939. o Demerol is one of the most widely used Synthetic Opiates for relief of pain and for sedation. o it is also the Narcotic Analgesic that is most frequently abused by medical personnel who become addicts. o Demerol is widely used as an analgesic in childbirth. 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.	Technical Name: Meperidine.

Aides	Lesson Plan	Instructor Notes
	o Medical literature sometimes indicates that Demerol does not cause pupillary constriction. Enforcement experience indicates to the contrary.	Point out that pupillary constriction ordinarily is one of the most reliable indicators of a Narcotic Analgesic.
	b. Methadone was developed in Germany during World War II and first marketed in America in 1947.	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.
	o Methadone's effects are similar to Morphine's, although they develop more slowly and last longer than do Morphine's effects.	
	o Methadone's withdrawal symptoms are slower and milder than are Morphine's.	Ask students: "What is one of the most common medical uses of Methadone in this country?"
	o used extensively in "maintenance programs" as a substitute for Heroin for addicts undergoing therapy and treatment.	Remind students that one characteristic shared by all Narcotic Analgesics is that they suppress withdrawal symptoms of chronic Morphine administration.
	o In theory, the daily dose of Methadone given to an Heroin addict allows the addict to function normally with no physical need for up to 24 hours.	Methadone's primary advantages are: it cannot be injected, and it has a much longer duration of effects than Heroin.
	o Methadone is also used medically to relieve moderate to severe pain, and to suppress coughing.	

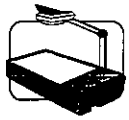
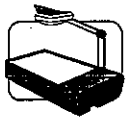
Aides	Lesson Plan	Instructor Notes
	c. Numorphan is a powerful analgesic with the same addictive properties as Morphine. o used medically for the relief of chronic pain. o sold in ampules (injection) and in suppositories. o previously (pre-1972) it was sold in tablets, and was a favorite substitute for Heroin among addicts; addicts now generally prefer Dilaudid as an Heroin substitute.	
	d. The Fentanyls include several hundred "designer drug" analogs of Morphine. o first developed in 1965 as an intravenous anesthetic. o legally produced as a pain killer. o principal abused analog is "Three-Methyl Fentanyl".	"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.
	e. Three-Methyl Fentanyl is very powerful: about 100 times as powerful as Morphine. o can be fatal in very small amounts.	

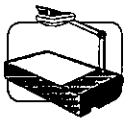
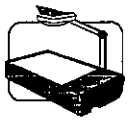
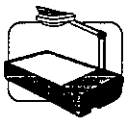
Aides	Lesson Plan	Instructor Notes
	o can be absorbed through the skin: very dangerous to handle.	Remind about officer safety when handling any containers found on the suspect.
	f. MPPP is an illegally manufactured analog of Demerol.	
	o MPPP is a powerfully addictive synthetic Narcotic Analgesic.	
	o in the course of producing MPPP, it often becomes contaminated with MPTP, a chemical producing paralysis similar to Parkinson's Disease.	Instructor, FYI: Parkinson's disease is a progressive neurological disorder characterized by resting tremors, shuffling gait, and muscle weakness.
	g. Darvon is a synthetic Narcotic of relatively low analgesic potency and relatively low addiction liability.	Technical name: Propoxyphene.
	7. Methods of administration of Narcotic Analgesics vary from one drug to another.	
	a. Some are commonly taken orally.	
	b. Some are often administered in suppositories.	
	c. Some are smoked.	Users have stated that the fear of contracting diseases, such as AIDS, from shared needles, has prompted them to either snort or smoke Heroin.
	d. Some are snorted. (taken intranasally)	If available, show 35mm slides of Heroin injection paraphernalia.

Aides	Lesson Plan	Instructor Notes
	e. Heroin, and some others, usually are taken by injection.	
	f. Medically, some Narcotic Analgesics may be administered transdermally or through the skin.	Solicit students' comments and questions concerning this overview of Narcotic Analgesics.
 **5 Minutes**	B. Possible Effects	
 **XVII-6** ("Concept of Tolerance")	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.	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)
	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.	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.

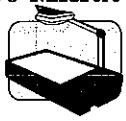
Aides	Lesson Plan	Instructor Notes
	d. Impairment is more evident with new users, and with tolerant users who exceed their "normal" doses.	
	2. Observable effects of Heroin and other Narcotic Analgesics.	
 XVII-7 ("On the Nod")	a. Sedation - "On the Nod"	
	o the condition known as "on the nod" is an apparently semiconscious state, resembling sleep.	Point out that "on the nod" occurs most often with new users or with users exceeding normal doses.
	o the user's eyelids become very droopy.	Remind students that the technical term for "droopy eyelids" is Ptosis.
	o their head will slump forward until the chin rests on the chest.	
	o in this condition, the user usually can be aroused easily and will be sufficiently alert to respond to questions.	
	b. Other effects.	NOTE: These effects may be dose-related, and most often occur with non-tolerant users.
	o slowed reflexes	
	o slow and raspy speech	
	o slow, deliberate movements	
	o inability to concentrate	
	o slowed breathing	Instructor, FYI: Technical terms are Hypopnea or Bradypnea.

Aides	Lesson Plan	Instructor Notes
	o skin cool to the touch o possible vomiting o itching of the face, arms or body	Solicit students' comments and questions concerning possible effects of Narcotic Analgesics.
20 Minutes	C. Onset and Duration of Effects	
XVII-8A ("On-set and Duration of Effects of Heroin")	1. The psychological effects of Heroin begin virtually immediately after the addict has injected.	
	a. A feeling of pleasure or euphoria. b. Relief from the symptoms of withdrawal. c. Relief from pain.	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.
XVII-8B	2. The observable signs will usually become evident within 15-30 minutes after the user has injected. a. "On the nod" b. Poor motor coordination c. Depressed reflexes d. Slowed breathing	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.
XVII-8C	3. The effects will usually be observable for up to 3-6 hours.	

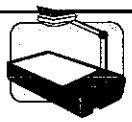
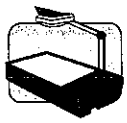
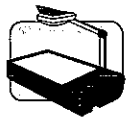
Aides	Lesson Plan	Instructor Notes
	4. As the drug wears off, withdrawal signs and symptoms start to develop until the user injects again.	Point out that the development of withdrawal symptoms implies that the Heroin has worn off, so that the addict is no longer under the influence. As with nearly all drugs, the withdrawal signs and symptoms are essentially the opposite of the "high" or intoxicated state.
 **XVII-9A** (Withdrawal)	a. Withdrawal <u>symptoms</u> usually begin to be felt by the addict within 4-6 hours following injection.	
	o chills o aches of the muscles & joints o nausea o insomnia	The early stages of withdrawal constitute the "downside effects of Narcotic Analgesics. DRE's should never state that an individual is "under the influence of the downside" of a drug.
 **XVII-9B**	b. Withdrawal <u>signs</u> start to become observable 8-12 hours following injection.	
	o sweating	Point out that "sweating" usually is the first withdrawal sign to appear.
	o goose bumps (Pilo-erection) on the skin	"Piloerection" means "hair standing up".
	o yawning o tearing o runny nose o vomiting	<u>Point out</u> that yawning, tearing, runny nose and vomiting usually appear only after marked withdrawal of many hours.

Aides	Lesson Plan	Instructor Notes
	5. Withdrawal signs and symptoms closely resemble those of Influenza or the common cold.	Point out that "withdrawal" signs of Narcotic Analgesics are essentially the opposite of their "under the influence" signs.
 XVII-9C	a. These symptoms begin to intensify from 14-24 hours after injection, and may be accompanied by gooseflesh, slight tremors, loss of appetite and dilation of the pupils.	
 XVII-9D	b. Approximately 24-36 hours after injection, the addict experiences insomnia, vomiting, diarrhea, weakness, depression and hot and cold flashes.	
 XVII-9E	c. Withdrawal symptoms and signs generally reach their peak 2-3 days after injection: o muscular and abdominal cramps o severe tremors and twitching o elevated temperature	Point out that the involuntary tremors and twitching of the legs give rise to the expression "kicking the habit".
	d. The user at this point is nauseated, gags, vomits and may lose 10-15 pounds within 24 hours.	
	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.	

Aides	Lesson Plan	Instructor Notes
	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.	Solicit students' comments and questions concerning onset and duration of the effects of Narcotic Analgesics.
 **5 Minutes**	D. Overdose Signs and Symptoms	
	1. Narcotic Analgesics depress respiration.	Point out that this is an effect that Narcotic Analgesics have in common with CNS Depressants.
	a. In overdoses, the user's breathing will become slow and shallow.	
	b. Death can occur from severe respiratory depression.	
	c. The danger of death is heightened by the fact that the addict may not know the strength of the drug he or she is taking.	Clarification: the percentage of pure Heroin in the sample the addict uses may be much higher than what the addict expects and is used to.
	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.	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. Point out that a person suffering from Narcotic Analgesic overdose may appear to be in shock.

Aides	Lesson Plan	Instructor Notes
	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.	Solicit students' comments and questions concerning signs and symptoms of an overdose of Narcotic Analgesics.
60 Minutes	E. Expected Results of the Evaluation	
 **XVII-10A** ("SFST evidence")	1. Observable evidence of impairment. a. Standardized Field Sobriety Tests. o Neither Horizontal nor Vertical Nystagmus will be present.	But remind students that Nystagmus could be present if the user has taken Heroin and PCP, or alcohol or some other CNS Depressant, or an Inhalant. Point out that, if the user has injected enough Narcotic Analgesic to exceed his or her level of tolerance, his or her performance of the field sobriety tests will be uncoordinated and "rubber-legged", similar to that caused by CNS Depressants.

Aides	Lesson Plan	Instructor Notes
	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. o Performance on Romberg and Finger to Nose will also be impaired. Generally, the user will appear drowsy, possibly "on the nod," and exhibit slow and deliberate movements.	
 **XVII-10B** ("General Indicators")	b. General indicators o "Track marks" o "On the nod" o Droopy eyelids o Slowed reflexes o Slow, low, raspy speech o Facial itching o Dry mouth o Euphoria o Nausea o Pupils visibly and obviously constricted	<u>If available</u>, show 35mm slides of typical addicts' "track" marks. Caused by the release of Histamines.
	2. Evidence associated with the physiologic examinations.	

Aides	Lesson Plan	Instructor Notes
 **XVII-10C** (Eye Examinations)	a. Eye examinations	
	o Eyes will <u>not</u> exhibit a lack of convergence.	
	o Pupil size generally will be severely constricted (below 3.0 mm in diameter)	<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."
	o Pupils reaction to light will be little or none visible.	
	o If the effects of the Narcotic Analgesic are wearing off, <u>hippus</u> may be evident.	<u>NOTE</u>: "Hippus" means pulsating pupils, i.e., alternately expanding and contracting in diameter.
 **XVII-10D** ("Vital Signs Examinations")	b. Vital signs examinations	
	o Blood pressure will be down.	
	o Pulse will be down.	<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.
	o Body temperature will be down.	
	o Muscle tone will normal or flaccid.	
 **XVII-11** ("Narcotic Analgesics Symptomatology Chart")	3. Summary	

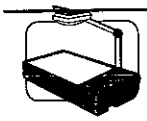
Aides	Lesson Plan	Instructor Notes
	4. Demonstrations	
	a. Video tape demonstrations.	Show video tape of suspect(s) under the influence of Narcotic Analgesics. Relate behavior/ observations to the symptomatology chart.
	b. Drug Evaluation and Classification exemplars demonstrations.	Refer students to the exemplars found at the end of Section XVII of their student manuals. Solicit students' comments or questions concerning Expected Results of the Evaluation.
 **30 Minutes**	F. Injection Site Examination	
	1. Examination of suspect's injection sites can give many clues to their drug habits.	The slang term for an injection site is a "mark".
	a. Many drugs can be injected.	The presence of injection sites doesn't ensure the suspect is under the influence of drugs.
	b. Injection sites are a sign of drug use which may or may not be recent.	Examination of ingestion sites is just one of the twelve steps in the evaluation.
	c. May be evidence of habitual use.	
	2. The trauma to the skin, muscles and the blood is the basic concept of injection sites.	
	3. Drugs and medication are injected into the body in three ways.	
	a. Legal injections are usually Intramuscular.	Abbreviated as I/M.

Aides	Lesson Plan	Instructor Notes
		Medicine or medical procedures, such as tuberculin skin test, injection of insulin is injected Intramuscular.
	b. Subcutaneous, means just under the skin.	Commonly referred to as "skin popping".
	c. For medically drawing of blood or emergency medical procedures, the injection is made into a blood vessel. Veins are usually used. Arteries are deep, thus not lending themselves to injection.	Insulin is never injected into a blood vessel, because the person would go into a comma. Abbreviated as I/V.
	4. The primary instrument for injection is the hypodermic syringe.	
	a. It consists of a hollow needle, a tube and a plunger.	
	b. Needles vary in size, with the primary variance being the inside diameter of the needle or the gauge.	IMPORTANT RULE: the larger the gauge, the smaller the inside diameter of the needle.
	c. Most medical procedures utilize a small gauge needle, which means a large needle inner diameter. (usually 16 - 22 gauge).	A 26 gauge needle is used by a diabetic. The hypodermic marks are smaller and are therefore, less noticeable making it more difficult for the DRE to see them.
	d. Illegal injections are usually made with a large gauge needle, which is a small inner diameter. (usually about 26 gauge).	

Aides	Lesson Plan	Instructor Notes
	5. The user's equipment is commonly referred to as a "hype kit" or "works".	
	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.	
	b. A handle to hold the "cooker" over the flame.	
	c. Matches, lighters (primarily disposable, adjustable flame types) used to heat the substance in the "cooker".	
	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.	
	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.	The cottons are saved for later use since they contain some of the drug.
	6. As an expert, you may be asked in court to describe the difference between a legal and an illegal injection site.	There may be multiple injections, if the technician is unable to find a vein during the first try.
	a. The legal mark is usually intramuscular. Some exceptions would be in an emergency, blood donation or lab tests.	

Aides	Lesson Plan	Instructor Notes
	b. Usually there will be only one mark and it will be larger than the typical illegal injection.	
	c. Legal injections are made with new, sterile needles.	
	d. The illegal mark is usually over a vein.	Abbreviated as O/V.
	e. There will usually be multiple marks in various stages of healing. It takes approximately two weeks for a "mark" to totally heal.	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.
	f. Users frequently use the same needle over and over again. Thus making it become dull or barbed.	Frequently the needles are carried in pockets or socks and the rubbing against clothing causes them to be dull or barbed.
	g. Since the used needles make it more difficult to pierce the skin and vein, the injections sites may be jagged.	A barbed needle may tear the skin on the way in and on the way out.
	h. Use of old, dirty and shared needles cause the spread of infections and diseases such as AIDS.	ALWAYS WEAR RUBBER GLOVES PRIOR TO CONDUCTING THE EXAMINATION
	7. Users may frequently use the same spot to inject, as an attempt to reduce their likelihood of detection.	
	a. The veins may become hard and thick from continuous injections and makes them difficult to find.	The technical term is "Thrombosed". Write Thrombosed on the chalk board or flip chart.

Aides	Lesson Plan	Instructor Notes
	b. 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.	This is referred to as "tunnel" or "corn". Write tunnel and corn on a flip chart. The healing is greatly retarded.
	8. Basic principles of puncture healing.	
	a. 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.	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).
	b. These dried remains fill the gap caused by the puncture of the skin. As the fluids dry, they harden (clot and gel).	
	c. There are no exact timetables for wounds to heal, but there are some general guidelines.	Chronic disease, poor nutrition and etc. retard the puncture healing process.
	d. Scabs develop within about 18 - 24 hours after a puncture.	A general rule: when the scab first forms, it is bright red. With age, the color gets darker and darker.
	e. After about 14 days a scab usually starts to peel or flake and then falls off. The skin under the scab is shrivelled and is lighter in color than the surrounding tissue.	Users sometimes inject under a scab to hide multiple puncture wounds. This is referred to as "trap dooring".

Aides	Lesson Plan	Instructor Notes
 **XVII-12** (Puncture Wounds)	9. There is no exact science to classifying the age of puncture wound. Some <u>general guidelines</u> are: 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. b. <u>Early</u> puncture wound is 12 - 96 hours after injection. It will have a light scab, light bruise, reddened border and a crater appearance. c. <u>Late</u> puncture wound is 5 - 14 days and will have a dark scab, dark bruise and the crater will flatten. d. <u>Healing</u> puncture wound is over 14 days. The scab will be flaking and falling off with shriveled light colored skin underneath. 10. Other indicators of injection sites: a. In an attempt to hide puncture wounds, users may inject into tattoos. 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.	Tattoos that are designed to hide puncture wounds are frequently colored and found on the inner arms.

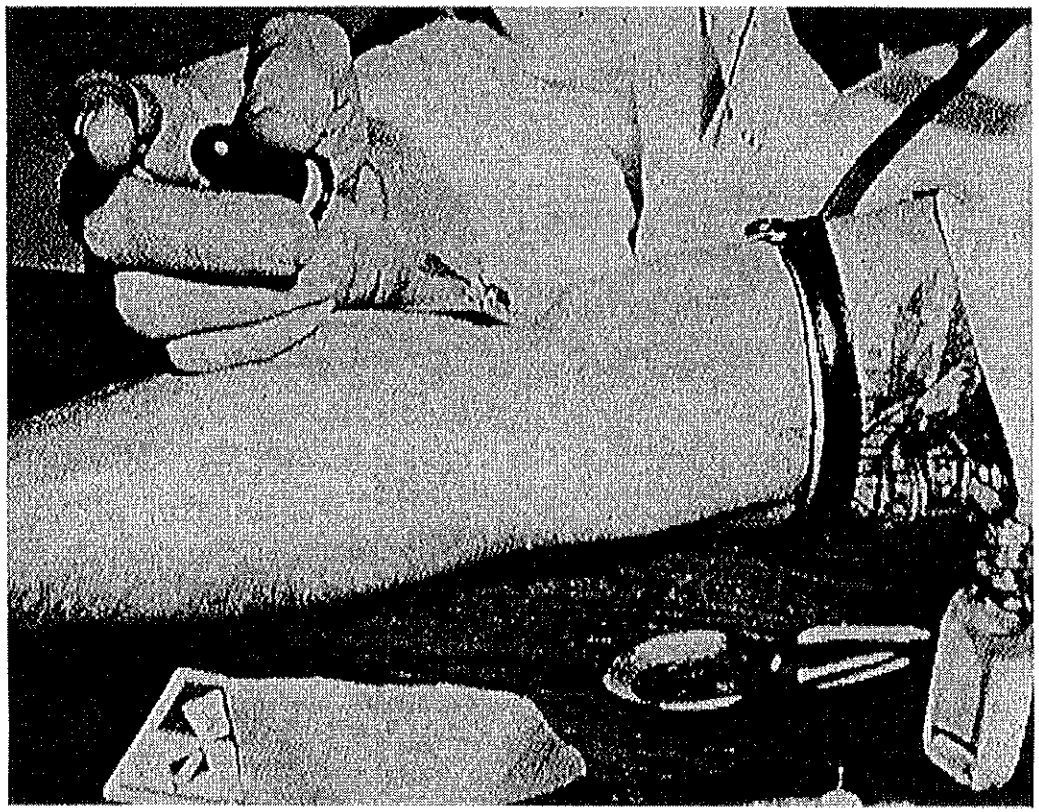
Aides	Lesson Plan	Instructor Notes
	c. A "track" is a hardened part of a vein where numerous injections have been administered. The entire vein becomes scarred and hardened and with time may no longer be able to inject into. The area becomes silvery-blue in color and raised. This is referred to as "silver streaks".	AS A GENERAL RULE: one inch of tracks indicates that approximately 50 - 100 separate injections have been administered in this area.
 **20 Minutes**	G. Expected Location of Injection Marks 1. Prior to conducting the injection site examination, always remember to wear gloves. 2. Injection sites may be located <u>anywhere</u> on the suspects' body. a. The arms are most frequently used because the veins here are large and easily accessible. b. The ankles are frequently used because the marks can be easily covered with socks. c. The user may even use their neck because the marks can be hidden by hair or makeup. d. They will basically use any part of their body where there is a vein. 3. Conduct a thorough, slow, methodical examination of the suspect's arms beginning with the left.	

Aides	Lesson Plan	Instructor Notes
	a. Using a magnifying light, examine the inner arm as it is extended with the palm facing you.	An ideal light is a 10 power light.
	b. Beginning at the bicep slowly examine the arm. Document the findings of your examine.	
	c. Ask the suspect to contract the arm, so that he or she grasps their shoulder. Beginning at the wrist, slowly examine the arm to the elbow and document the results.	This forces the individual's veins to protrude.
	d. Next examine the outer arm as it is extended palm facing downward. Start the examination at the shoulder moving to the wrist.	
	e. Subject should extend and spread their fingers as the examination is conducted on the hands. Examine both sides of the hands, with particular attention to the areas between the fingers, under watch bands and rings.	
	4. Conduct the entire procedure for the right side.	
	5. Ankles are the next most common injection area.	Suspects sometimes hide hypodermic needles in their socks, shoes and the heel compartments of their shoes.
	a. Subject should be instructed to remove their shoes and socks to allow the DRE to examine them for puncture wounds.	

Aides	Lesson Plan	Instructor Notes
	b. The most common area is on the back of the foot. 6. On a case by case basis, the DRE may need to examine other parts of the body for marks. a. ALWAYS follow your Agencies rules, policies and procedures and laws regarding invasive type searches.	
 **15 Minutes**	H. Conclusion 1. The injection site examination may reveal evidence of recent use. 2. The presence of marks however, doesn't mean drug influence or impairment at the time of the evaluation. 3. A slow methodical examination, using a magnifying light, is required to obtain evidence. 4. Conducting an injection mark examination is a skill. As with all skills, such as taking blood pressure, competency improves with practice.	Solicit students' comments and questions concerning the injection site examination.

Session XVII

Narcotic Analgesics



Narcotic Analgesics

Upon successfully completing this session, the participant 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
- Explain the symptoms, observable signs and other effects associated with this category

Narcotic Analgesics
(continued)

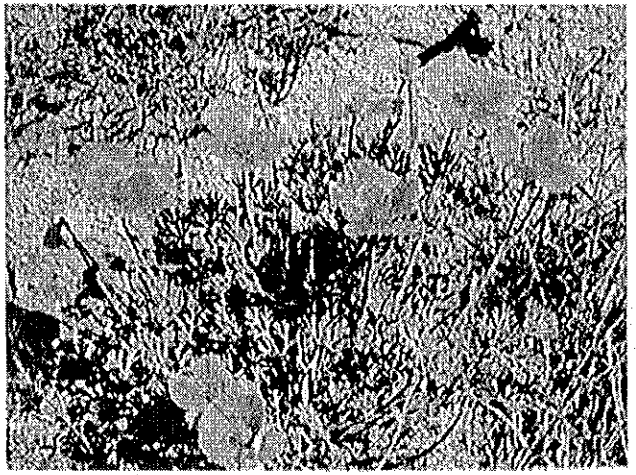
- Explain the typical time parameters, i.e., on-set and duration of effects, associated with this category
- State the clues that are likely to emerge when the drug evaluation and classification process is conducted for a person under the influence of this category of drugs
- Explain the procedures to examine for injection sites
- Correctly answer the "topics for study" questions at the end of this section

Narcotic Analgesic:

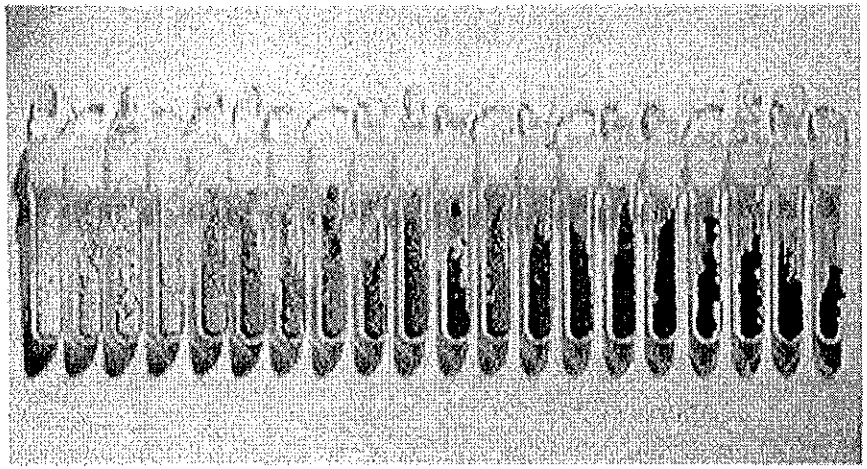
An "Analgesic" is a drug that relieves pain

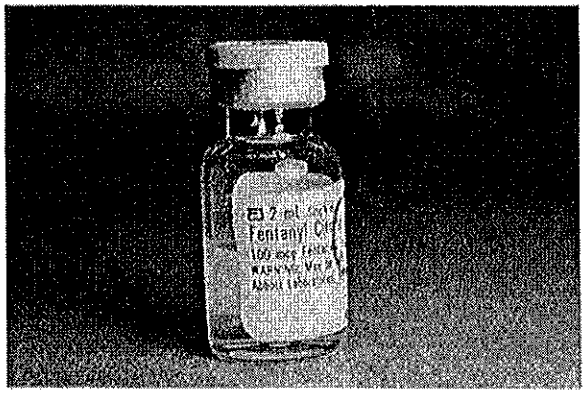
Types of Narcotic Analgesics

- The opiates
  - Natural alkaloids
  - Opium derivatives



- The synthetics

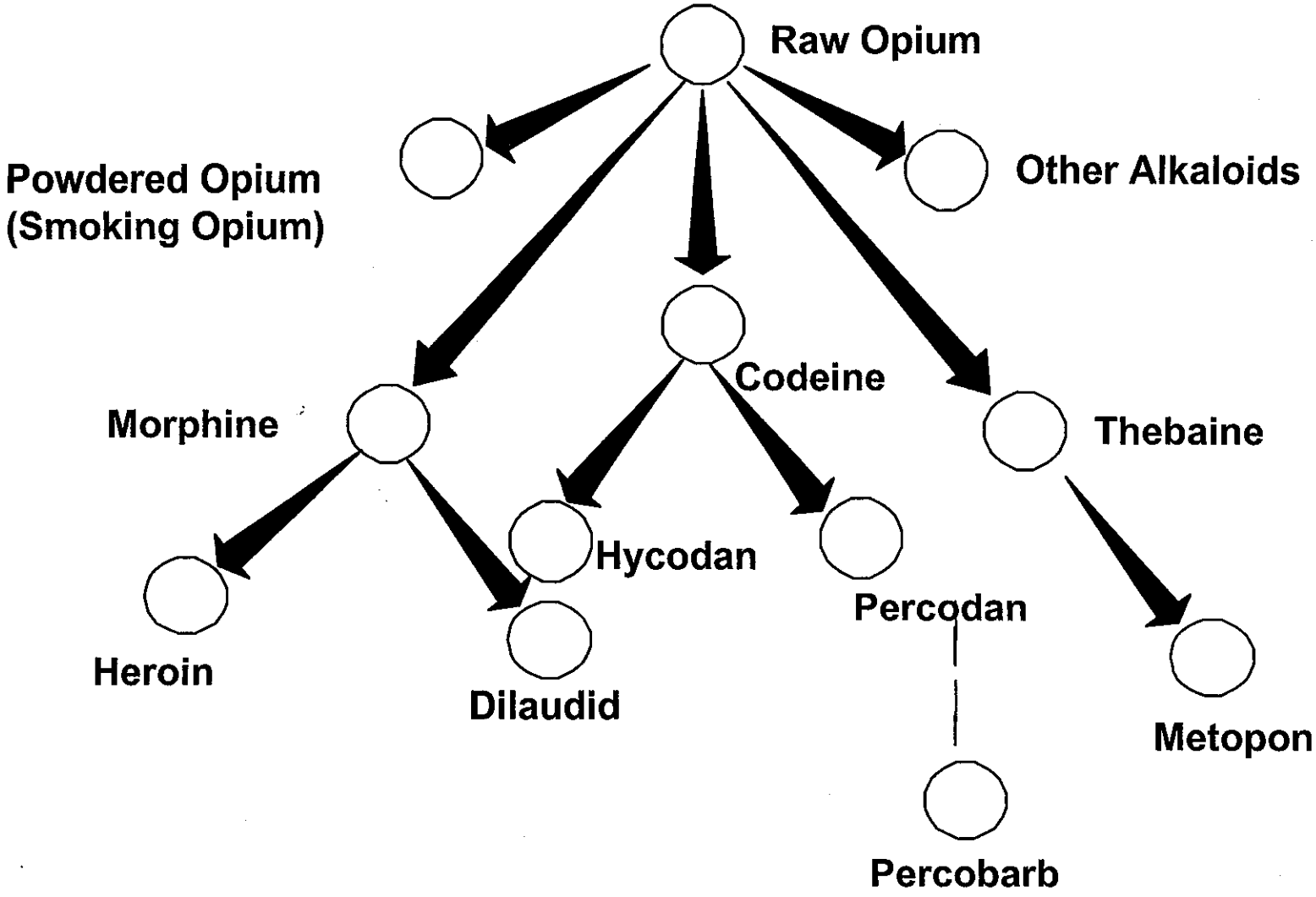




Three Characteristics Common to All Narcotic Analgesics

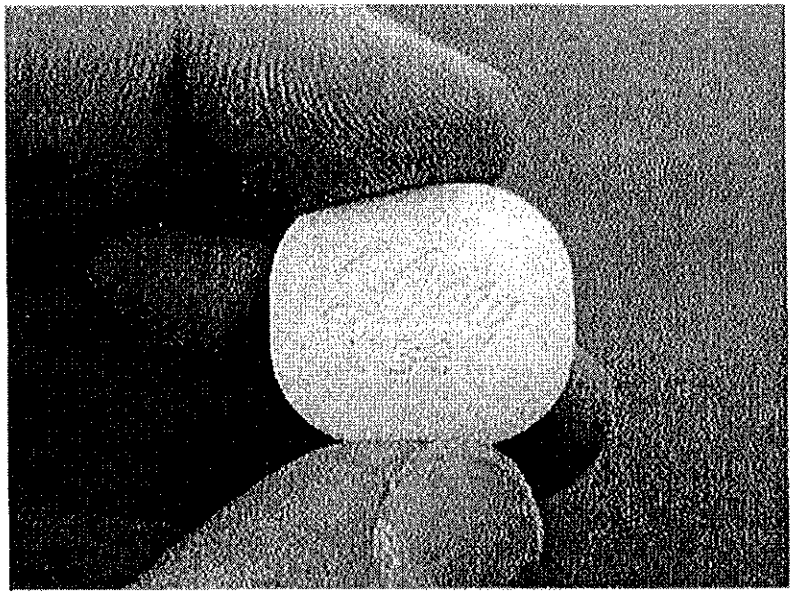
1. Relieve pain
2. Produce withdrawal signs and symptoms
3. Suppress the signs and symptoms of morphine withdrawal

Commonly-abused Opiates and Their Derivation From Opium



Common Synthetic Opiates

- Demerol
- MPPP
- Methadone
- Numorphan
- Darvon
- Fentanyl



The Concept of Tolerance for a Drug

1. The same dose of the drug will produce diminishing effects

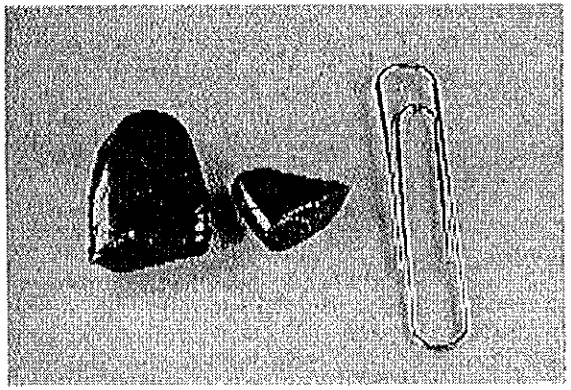
2. A steadily larger dose is needed to produce the same effect

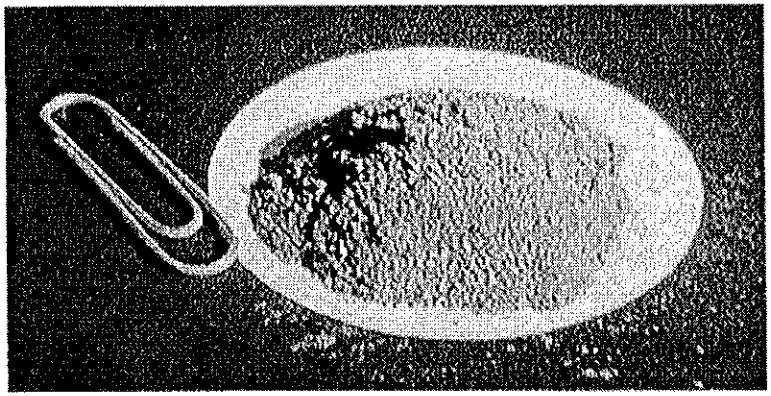
"On the Nod"

- Semi-conscious
- Droopy eyelids (ptosis)
- Head slumped forward,chin on chest
- Easily awakened
- Alert to questions

On-set and Duration of Heroin's Effects

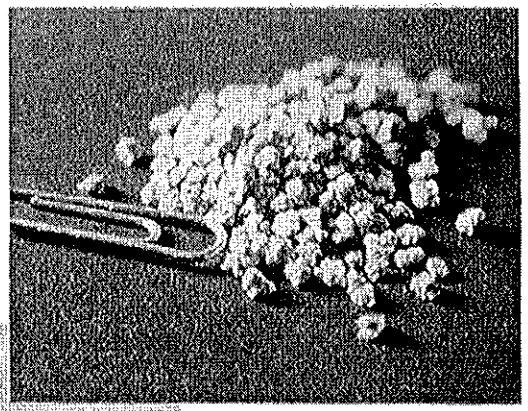
- Immediate
  - Pleasure or euphoria
  - Relief from withdrawal
  - Relief from pain

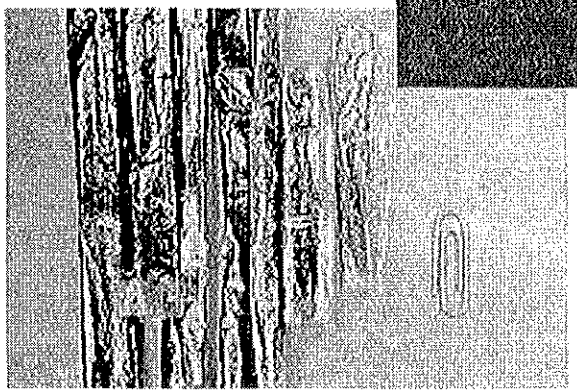




On-set and Duration of Heroin's Effects (continued)

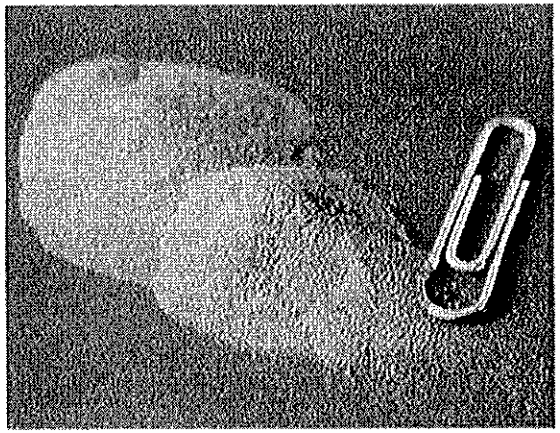
- 15-30 minutes: Onset of physical effects
  - "On the nod"
  - Poor motor coordination
  - Depressed reflexes
  - Slowed breathing

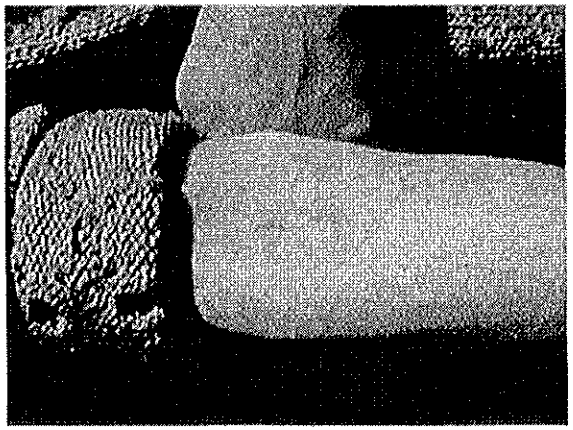


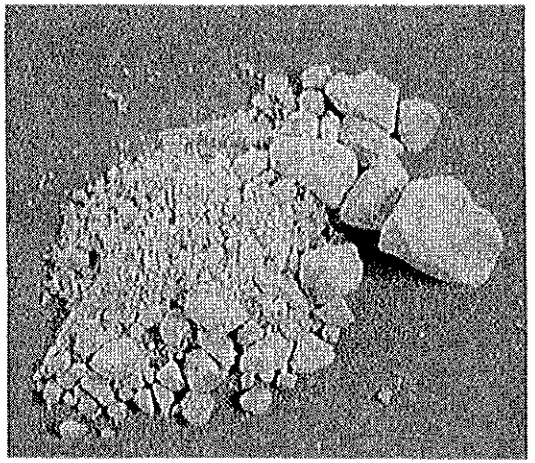


On-set and Duration of Heroin's Effects (continued)

- Physical effects usually are observable for up to 3-6 hours







Signs and Symptoms of Withdrawal From Heroin

Symptoms begin: 4-6 hours

- Chills
- Aches
- Nausea
- Insomnia

Signs and Symptoms of Withdrawal From Heroin (continued)

Signs appear: 8-12 hours

- Sweating
- Goose bumps
- Hyperactive reflexes
- Yawning
- Tearing
- Runny nose
- Vomiting

Signs and Symptoms of Withdrawal From Heroin (continued)

Signs and symptoms intensify: 14-24 hours

- Similar to influenza or the common cold
- Gooseflesh
- Slight tremors
- Loss of appetite
- Dilation of pupils

Signs and Symptoms of Withdrawal From Heroin (continued)

Situation worsening: 24-36 hours

- Insomnia
- Vomiting
- Diarrhea
- Weakness
- Depression
- Hot and cold flashes

Signs and Symptoms of Withdrawal From Heroin (continued)

Reaching the peak: 2-3 days

- Muscular and abdominal cramps
- Severe tremors and twitching
- Elevated temperature
- Sharp loss of weight

Evaluation of Suspects Under the Influence of Narcotic Analgesics

SFST Evidence:

- HGN or Vertical Nystagmus - none
- Impaired performance will be evident on divided attention tests if the suspect has exceeded his or her "normal" dose
- A tolerant user who has taken a "normal" dose may exhibit no impairment

Evaluation of Suspects Under the Influence of Narcotic Analgesics

General Indicators:

- "Track marks"
- On the nod
- Droopy eyelids
- Slowed reflexes
- Slow, low, raspy speech
- Facial itching
- Dry mouth
- Euphoria
- Nausea
- Pupils visibly and obviously constricted (miosis)

Evaluation of Suspects Under the Influence of Narcotic Analgesics

Eye Examinations:

- Lack of convergence - none
- Severely constricted pupils (miosis)
- Reaction to light - little or none visible
- As the effects of the drug wear off, hippus (pulsating pupils) may be evident

Evaluation of Suspects Under the Influence of Narcotic Analgesics

Vital Signs:

- Blood pressure down
- Pulse down
- Body temperature down

Narcotic Analgesic Symptomatology Chart

HGN	None
Vertical Nystagmus	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

Classifying the Age of Puncture Wounds

- Fresh - Under 12 hours after injection; will have 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
- 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

000622

Page 1 of 2

DRUG INFLUENCE EVALUATION

EVALUATOR: GAUNT, STEVEN
BOOKING NO: 015
DR#: XVII-1

ARRESTEE'S NAME (LAST, FIRST, MI): VAUGHN, JERRY T
AGE: 44 | SEX: M | RACE: B
ARRESTING OFFICER (NAME, SERIAL #, DIV.): O'DELL, S. #7650 IPD

DATE EXAMINED/TIME/LOCATION: AUG 15, 1996 2120 3RD PCT
BREATH RESULTS: ☐ Refused Results 0.00 Instrument # 1234
CHEMICAL TEST: ☐ Urine ☒ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ☒ Yes ☐ No
Given by: O'DELL, S.
What have you eaten today? When? NOTHING N/A
What have you been drinking? How much? NOTHING
Time of last drink? N/A

Time now? MIDNIGHT When did you last sleep? TODAY How long? 3HRS
Are you sick or injured? ☐ Yes ☒ No
Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No
Do you have any physical defects? ☐ Yes ☒ No
Are you under the care of a doctor/dentist? ☐ Yes ☒ No
Are you taking any medication or drugs? ☐ Yes ☒ No

ATTITUDE: COOPERATIVE BUT SLEEPY
COORDINATION: VERY LOOSE STUMBLING
SPEECH: LOW & RASPY
BREATH: NORMAL
FACE: NORMAL

CORRECTIVE LENS: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ☒ Normal ☐ Bloodshot ☐ Watery
Blindness: ☒ None ☐ L. Eye ☐ R. Eye
Tracking: ☒ Equal ☐ Unequal
PUPIL SIZE: ☒ Equal ☐ Unequal (explain)
HGN Present: ☐ Yes ☒ No
Able to follow stimulus: ☒ Yes ☐ No
Eyelids: VERY DROOPY ☐ Normal ☒ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 60 , 2125	Lack of Smooth Pursuit	NO	NO
2. 64 , 2140	Max. Deviation	NO	NO
3. 60 , 2153	Angle of Onset	NONE	NONE

Vertical Nystagmus? ☐ Yes ☒ No
Convergence: Right Eye ← Left Eye →

ONE LEG STAND: VERY SLOW REACHED 10/8 IN 30 SEC

BALANCE EYES CLOSED: 0 0 3 3

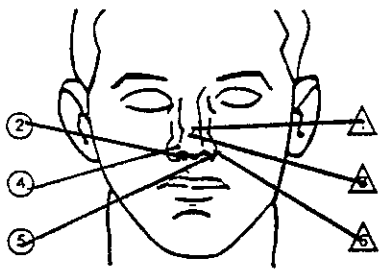
WALK AND TURN TEST: RUBBER LEGGED VERY SLOW DELIBERATE STEPS

	1st Nine	2nd Nine
Cannot keep balance	✓	
Starts too soon		
Stops Walking		
Misses Heel-Toe	VV	VV
Steps off Line	✓	
Raises Arms	VV	✓
Actual Steps Taken	9	9

☐ ☐ Sways while balancing.
☐ ☐ Uses arms to balance.
☐ ☐ Hopping.
☐ ☐ Puts foot down.

INTERNAL CLOCK: 30 Estimated as 30 sec.
Describe Turn: AS INSTRUCTED
Cannot do Test (explain): N/A
Type of Footwear: STREET SHOES

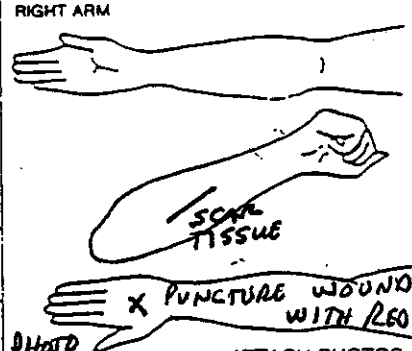
○ Right △ Left
Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	2.5	2.5	2.5	2.5
Right Eye	2.5	2.5	2.5	2.5

NASAL AREA: CLEAR
ORAL CAVITY: CLEAR
HIPPUS: ☐ Yes ☒ No
REBOUND DILATION: ☐ Yes ☒ No
Reaction to Light: LITTLE TO NONE VISIBLE

RIGHT ARM



LEFT ARM: SCAR TISSUE

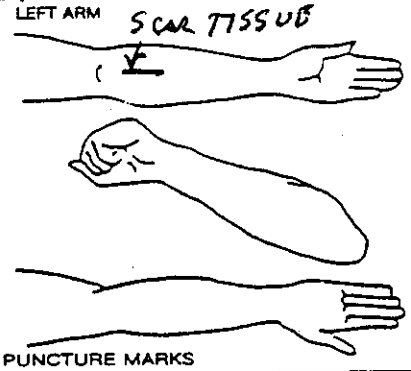


PHOTO ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 110 , 64
TEMP: 98.0 °
MUSCLE TONE: ☐ Near Normal ☒ Flaccid ☐ Rigid
Comments:

What medicine or drug have you been using? How much? I WON'T ANSWER ANY
Time of use? QUESTIONS
Where were the drugs used? (Location) NO ANSWER

DATE/TIME OF ARREST: AUG 15, 1996 2100
TIME DRE NOTIFIED: 2110
EVAL START TIME: 2120
TIME COMPLETED: 2210

CONTROL #:
EXAMINING OFFICER: S.R. Gaunt
SERIAL NO: 2520
DIVISION: IAD
UNAVAILABLE DATES:
REVIEWED BY: FLOEGEL, E

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Officer Steven Gaunt	ARRESTEE: Jerry T. Vaughn

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Jerry T. Vaughn, took place in the DRE room, 3rd Pct.

2. WITNESS: Arresting Officer - Trooper Stanely R. O'Dell

3. BREATH TEST: Trooper O'Dell administer a breath test to Vaughn at 2100 hours, the result was 0.00%.

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was contacted by radio and advised to return to the precinct to conduct a DRE evaluation. Tpr O'Dell informed me that he had observed the subject's vehicle weaving through the traffic lanes. Subject exhibited poor performance on the SFSTs, but there no odor of an alcoholic beverage.

5. INITIAL OBSERVATIONS: Writer observed subject sitting quietly in the DRE room. He appeared to be asleep; eyes were closed, head nodded forward, breathing was slow. Subject responded to questions and became more alert as time passed. His voice was low and raspy. He licked his lips repeatedly.

6. MEDICAL PROBLEMS: None noted or stated

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject swayed approximately 3" side to side and estimated 50 seconds as 30 seconds. Walk and Turn: Subject lost balance during the instructions, missed heel to toe, stepped off the line, and used his arms for balance. One Leg Stand: Subject put his foot down swayed and used his arms for balance. Finger to Nose: Subject missed tip of his nose on each attempt.

8. CLINICAL INDICATORS: Subject's blood pressure was below the normal range. The pupils were constricted and showed little or no visible reaction to light. Subjects eyelids were droopy.

9. SIGNS of INGESTION: Subject had "track" type scars on both the left and right forearms, and a fresh oozing puncture wound on the back of the right hand.

10. STATEMENTS: Subject denied using any medicine or drugs and refused t\o answer any questions regarding the puncture wound on the back of his right hand.

11. OPINION of EVALUATOR: In my opinion Jerry T. Vaughn is under the influence of a Narcotic Analgesic and unable to operate a vehicle safely

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide both a urine and a blood sample.

13. MISCELLANEOUS:

EVALUATOR: TOLAND, STEVE

Page 1 of 2

DRUG INFLUENCE EVALUATION

BOOKING NO.: 016 | DR.: XVII - 2

ARRESTEE'S NAME (LAST, FIRST, MI)	AGE	SEX	RACE	ARRESTING OFFICER (NAME, SERIAL #, DIV.)
HOLDEN, WILLIAM J.	39	M	W	BRADLEY, T #4779 MPD

DATE EXAMINED/TIME/LOCATION: NOV 1, 1996 1615 MESA PD

BREATH RESULTS: ☐ Refused; Results 0.100; Instrument # 1234

CHEMICAL TEST: ☐ Urine ☑ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ☑ Yes ☐ No; Given by: T. BRADLEY

What have you eaten today? NOTHING When? N/A

What have you been drinking? How much? NOTHING Time of last drink? N/A

Time now? DONT KNOW When did you last sleep? LAST NIGHT How long? FEW HRS

Are you sick or injured? ☐ Yes ☑ No

Are you diabetic or epileptic? ☐ Yes ☑ No

Do you take insulin? ☐ Yes ☑ No

Do you have any physical defects? ☐ Yes ☑ No

Are you under the care of a doctor/dentist? ☐ Yes ☑ No

Are you taking any medication or drugs? ☐ Yes ☑ No

ATTITUDE: COOPERATIVE

COORDINATION: POOR SLOPPY STUMBLING

SPEECH: SLOW + DELIBERATE

BREATH: NORMAL

FACE: NORMAL

CORRECTIVE LENS: ☑ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft

Eyes: ☑ Normal ☐ Bloodshot ☐ Watery

Blindness: ☑ None ☐ L. Eye ☐ R. Eye

Tracking: ☑ Equal ☐ Unequal

PUPIL SIZE: ☑ Equal ☐ Unequal (explain)

HGN Present: ☐ Yes ☑ No

Able to follow stimulus: ☑ Yes ☐ No

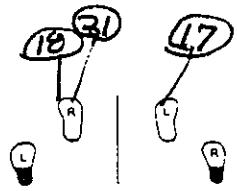
Eyelids: ☐ Normal ☑ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 60 / 1630	Lack of Smooth Pursuit	NO	NO
2. 56 / 1642	Max. Deviation	NO	NO
3. 60 / 1655	Angle of Onset	NONE	NONE

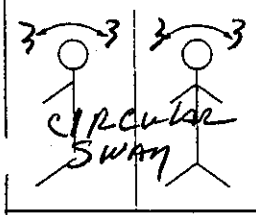
Vertical Nystagmus? ☐ Yes ☑ No

Convergence: Right Eye / Left Eye

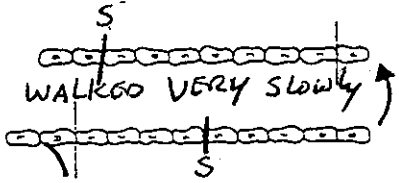
ONE LEG STAND



BALANCE EYES CLOSED



WALK AND TURN TEST



Cannot keep balance ✓

Starts too soon

	1st Nine	2nd Nine
Stops Walking	✓	✓
Misses Heal-Toe		
Steps off Line		
Raises Arms	✓	✓
Actual Steps Taken	9	9

☑ Sways while balancing. ☑ Uses arms to balance. ☐ Hopping. ☑ Puts foot down.

INTERNAL CLOCK: 50 Estimated as 30 sec.

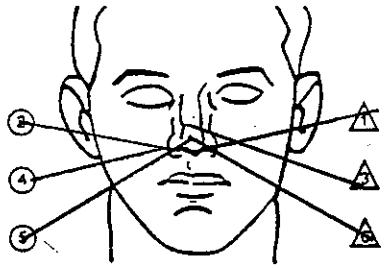
Describe Turn: LOST BALANCE STAGGERED TO THE LEFT

Cannot do Test (explain): N/A

Type of Footwear: LOAFERS

○ Right △ Left

Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	1.5	1.5	1.5	1.5
Right Eye	1.5	1.5	1.5	1.5

NASAL AREA: CLEAR

ORAL CAVITY: CLEAR

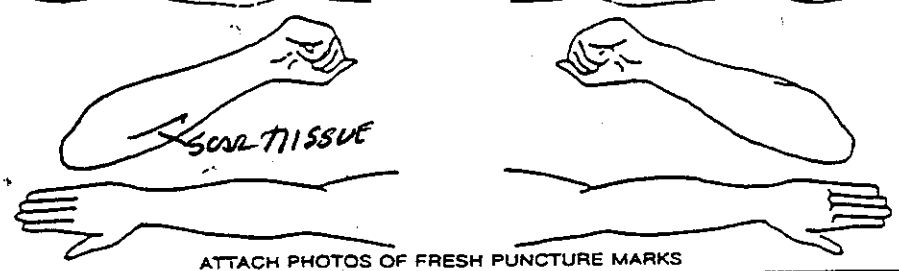
HIPPUS: ☐ Yes ☑ No

REBOUND DILATION: ☐ Yes ☑ No

Reaction to Light: LITTLE TO NONE VISIBLE

RIGHT ARM: PHOTO AREA; PUNCTURE WOUNDS 3 RED DOTS; XXX

LEFT ARM: 4 PUNCTURE WOUNDS WITH SCABS; XXXX



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 100 / 60 TEMP: 97.0 °

MUSCLE TONE: ☐ Near Normal ☑ Flaccid ☐ Rigid

Comments: ARMS & NECK VERY RELAXED

What medicine or drug have you been using? NONE How much? REFUSED Time of use? TO ANSWER Where were the drugs used? (Location)

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED
NOV 1, 1996 1600	1605	1615	1710

CONTROL #	EXAMINING OFFICER	SERIAL NO	DIVISION	UNAVAILABLE DATES	REVIEWED BY
	S. Toland	3529	MPD		PRYOR M

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Sgt. Steve Toland	ARRESTEE: William J. Holden

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of William Holden was conducted at the Mesa PD holding facility

2. WITNESS: Arresting Officer - Officer T. Bradley #4779 MPD

3. BREATH TEST: Writer observed Officer Bradley administer a breath test to Holden, the result was 0.00%.

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was contacted by radio and advised to return to the holding facility to conduct a DRE evaluation. Officer Bradley informed me that the subject had been involved in a car crash at the intersection of Dobson and Main St. Subject exhibited poor performance on the SFSTs, but there was no odor of an alcoholic beverage.

5. INITIAL OBSERVATIONS: Writer observed subject sitting quietly in the DRE room. He was scratching his face and neck. His eyelids were droopy and his voice was raspy

6. MEDICAL PROBLEMS: None noted or stated

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject swayed approximately 3" in a circular motion and estimated 50 seconds as 30 seconds. Walk and Turn: Subject stepped out of position during the instructions, stopped walking and used his arms for balance. One Leg Stand: Subject put his foot down swayed and used his arms for balance. Finger to Nose: Subject missed tip of his nose four times.

8. CLINICAL INDICATORS: Subject's blood pressure, body temperature and one pulse were all below the normal range. The pupils were constricted and showed litle or no visible reaction to light. Subjects eyelids were droopy

9. SIGNS of INGESTION: Subject had three puncture wounds on the right forearm and four puncture wounds with scars on the left forearm

10. STATEMENTS: Subject invoked his Miranda Rights.

11. OPINION of EVALUATOR: In my opinion William J. Holden is under the influence of a Narcotic Analgesic and unable to operate a vehicle safely

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a blood sample.

13. MISCELLANEOUS:

000626

DRUG INFLUENCE EVALUATION

Page 1 of 2

EVALUATOR	TETZLAFF, G #726
BOOKING NO.	017
DR.	XVII-3

ARRESTEE'S NAME (LAST, FIRST, MI)	AGE	SEX	RACE	ARRESTING OFFICER (NAME, SERIAL #, DIV.)
KURRUS, ROGER J.	40	M	W	PAGE, T. #752 T.C.S.

DATE EXAMINED/TIME/LOCATION: MAR 17, 1996 2200 PARROL JAIL DIV

BREATH RESULTS: ☐ Refused; Results 0.000; Instrument # 1234

CHEMICAL TEST: ☒ Urine ☒ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ☒ Yes ☐ No. Given by: G. TETZLAFF

What have you eaten today? When? I HAVEN'T EATEN FOR 6 YRS

What have you been drinking? How much? I DON'T DRINK. Time of last drink? N/A

Time now? ABOUT 8

When did you last sleep? How long? THIS MORNING 4 HRS

Are you sick or injured? ☐ Yes ☒ No

Are you diabetic or epileptic? ☐ Yes ☒ No

Do you take insulin? I DON'T TAKE ANYTHING ☐ Yes ☒ No

Do you have any physical defects? I'M THE PICTURE OF HEALTH ☐ Yes ☒ No

Are you under the care of a doctor/dentist? ☐ Yes ☒ No

Are you taking any medication or drugs? ☐ Yes ☒ No

ATTITUDE: SARCASTIC + SULLEN

COORDINATION: POOR STUMBLING — STAGGERING

SPEECH: LOW MUMBLED RASPY

BREATH: NORMAL

FACE: PALE

CORRECTIVE LENS: ☐ None REMOVED ☒ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft

Eyes: ☒ Normal ☐ Bloodshot ☐ Watery

Blindness: ☒ None ☐ L. Eye ☐ R. Eye

Tracking: ☒ Equal ☐ Unequal

PUPIL SIZE: ☒ Equal ☐ Unequal (explain)

HGN Present: ☐ Yes ☒ No

Able to follow stimulus: ☒ Yes ☐ No

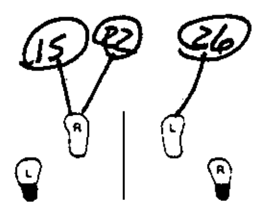
Eyelids: ☐ Normal ☒ Droopy VERY

PULSE & TIME	HGN	Left Eye	Right Eye
1. 60 / 2210	Lack of Smooth Pursuit	YES	YES
2. 58 / 2221	Max. Deviation	NO	NO
3. 58 / 2230	Angle of Onset	NONE	NONE

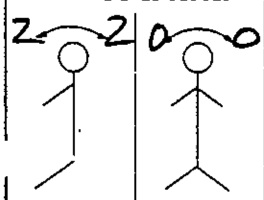
Vertical Nystagmus? ☐ Yes ☒ No

Convergence (Right Eye, Left Eye)

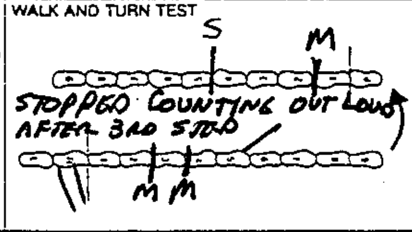
ONE LEG STAND



BALANCE EYES CLOSED



WALK AND TURN TEST



Cannot keep balance ✓✓

Starts too soon

	1st Nine	2nd Nine
Stops Walking		✓
Misses Heel-Toe	✓✓	✓
Steps off Line	✓	
Raises Arms	✓	✓✓
Actual Steps Taken	9	9

L R: ☒ ☒ Sways while balancing. ☒ ☒ Uses arms to balance. ☐ ☐ Hopping. ☒ ☒ Puts foot down.

INTERNAL CLOCK: 55 Estimated as 30 sec.

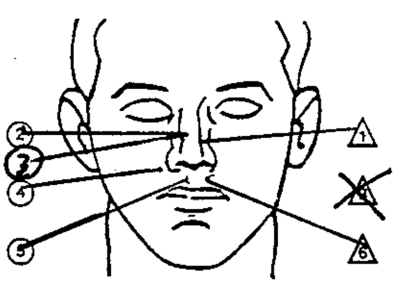
Describe Turn: AS INSTRUCTED BUT VERY SLOW

Cannot do Test (explain): N/A

Type of Footwear: WINGTIPS

○ Right △ Left

Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	1.5	2.0	1.5	1.5
Right Eye	1.5	2.0	1.5	1.5

NASAL AREA: CLEAR

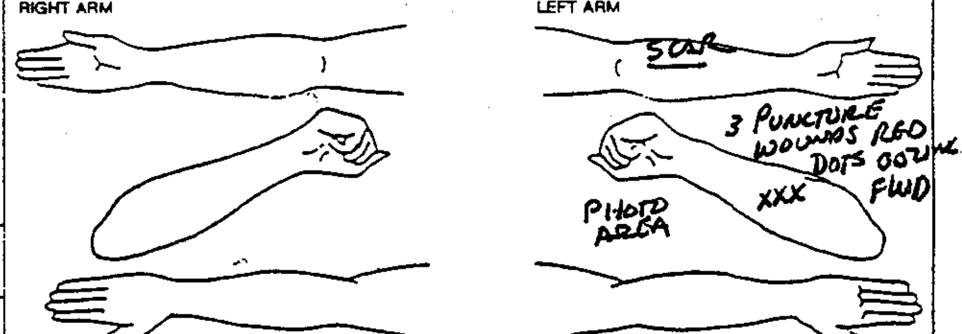
ORAL CAVITY: CLEAR

HIPPUS: ☐ Yes ☒ No

REBOUND DILATION: ☐ Yes ☒ No

Reaction to Light: LITTLE TO NONE VISIBLE

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 110 / 70 TEMP: 97.9°

MUSCLE TONE: ☐ Near Normal ☒ Flaccid ☐ Rigid

Comments:

What medicine or drug have you been using? How much? "NOTHING DO I LOOK LIKE I DO DOPE"

Time of use? I DIDN'T

Where were the drugs used? (Location) GO HAVE A HEART ATTACK

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED
MAR 17, 1996 2130	2140	2200	2300

CONTROL #	EXAMINING OFFICER	SERIAL NO.	DIVISION	UNAVAILABLE DATES	REVIEWED BY
	G. Tetzlaff	726	TCS		RICHARDSON, S.

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Sgt. Gary Tetzlaff	ARRESTEE: Roger J. Kurrus

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Roger J. Kurrus, took place in the DRE room, Jail Division, Parker Center

2. WITNESS: Arresting Officer - Sgt. Tom Page and Jack Oates NHTSA

3. BREATH TEST: Writer observed Sgt. Page administer breath test to Kurrus, the result was 0.00%.

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: At 2140 writer was contacted by Sgt. Page who requested a DRE evaluation. Sgt. Page informed me that he had observed subject driving westbound at 15 mph on Longlook Lane and the then failed to obey the stop sign at the intersection with Thunderhill Rd. Subject reacted slowly and stopped in the traffic lane approximately 800' past the point where the emergency lights had been activated. Subject appeared to be asleep and had his eyes closed and his chin on his chest.

5. INITIAL OBSERVATIONS: Writer observed subject at 2200 hrs. He was wearing a three piece business suit with no neck tie. Subject walked slowly, staggered and stumbled. He swayed constantly while standing still, and his head nodded forward repeatedly. Subject spoke slowly in a low raspy voice.

6. MEDICAL PROBLEMS: None noted or stated.

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject swayed approximately 2" front to back and estimated 55 seconds as 30 seconds. Walk and Turn: Subject lost his balance during the instructions stepped off the line, missed heel to toe, and used his arms for balance. One Leg Stand: Subject swayed, raised his arms, and put his foot down. Finger to Nose: Subject missed tip of his nose on each attempt and used the wrong hand on the 3rd trial.

8. CLINICAL INDICATORS: Subject's pupils were constricted, systolic blood pressure was below the normal range. His pulse was below the normal range on two (2) occasions. His eyelids were droopy.

9. SIGNS of INGESTION: Subject's left arm had three (3) recent puncture wounds and a one inch "track mark" scar.

10. STATEMENTS: Subject stated that he did not used any drugs. Stated "Do I look like I do dope?" When asked about the recent puncture wounds, subject said "Go have a heart attack."

11. OPINION of EVALUATOR: In my opinion Roger J. Kurrus is under the influence of a Narcotic Analgesic, and unable to operate a vehicle safely.

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide both a urine sample and a blood sample.

13. MISCELLANEOUS: It appears that the subject is right handed.

Two Hours and Thirty Minutes

MID-COURSE REVIEW

MID-COURSE REVIEW

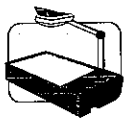
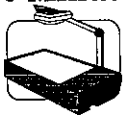
This is an after-normal-class-hours session that students are free to attend or not, but are encouraged to attend. Its principal purpose is to help solidify the knowledge and skills they have begun to acquire, from the PRE-School and from the first four days of this school.

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		

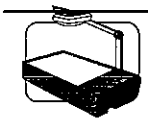
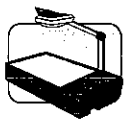
Aides	Lesson Plan	Instructor Notes
	MID-COURSE REVIEW	Total Session Time: Approximately 150 Minutes
60 Minutes	A. Drugs, Drug Categories and the Drug Influence Evaluation	
 **MCR-1** (Review of Drugs, ...)		
	1. Define the word "drug".	Any substance, which when taken into the human body can impair the ability to operate a vehicle safely.
	2. Name the seven categories.	CNS Depressants, CNS Stimulants, Hallucinogens, Phencyclidine, Narcotic Analgesics, Inhalants & Cannabis.
	a. Name the six sub-categories of Depressants.	Barbiturates, Non-Barbiturates, Anti-Anxiety Tranquilizers, Anti-Depressants, Anti-Psychotic Tranquilizers, & Combinations of the first five.
	b. Name three sub-categories of Stimulants.	Cocaine, the Amphetamines, and "Others".
	c. Name two sub-categories of Narcotics.	Opiates and Synthetics.
 **MCR-2** (What kinds of...)	3. Identify the category for each of the listed drugs.	
	a. Xanax	CNS Depressant
	b. Desoxyn	CNS Stimulant

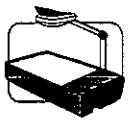
Aides	Lesson Plan	Instructor Notes
	c. Secobarbital	CNS Depressant
	d. Dilaudid	Narcotic Analgesic
	e. Alprazolam	CNS Depressant
	f. Phenyl Cyclohexyl Peperidine	Phencyclidine
	g. "Ecstasy"	Hallucinogen
	h. ETOH	CNS Depressant
	i. Numorphan	Narcotic Analgesic
	j. Psilocybin	Hallucinogen
	4. List the 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.	
	d. Demonstrate the Vital Signs Examinations.	

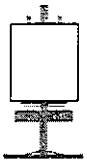
Aides	Lesson Plan	Instructor Notes
	e. Demonstrate the Darkroom Examinations.	
	f. Demonstrate the Check for Muscle Tone and the inspection for Injection Sites.	
 **MCR-3** (Name the...)	5. Identify the category for each of the listed drugs.	
	a. Demerol	Narcotic Analgesic
	b. Cylert	CNS Stimulant
	c. Chlordiazepoxide	CNS Depressant
	d. Ketamine	Phencyclidine
	e. Percodan	Narcotic Analgesic
	f. Ritalin	CNS Stimulant
	g. Isopropanol	CNS Depressant
	h. Bufotenine	Hallucinogen
	i. Thebaine	Narcotic Analgesic
	j. Methaqualone	CNS Depressant
 **50 Minutes**  **MCR-4** (Eyes and Vital...)	B. Eyes and Vital Signs	
	1. Name the three clues of horizontal gaze nystagmus.	Lack of smooth pursuit; distinct jerking at maximum deviation; angle of onset.

Aides	Lesson Plan	Instructor Notes
	a. Demonstrate the check for "Lack of smooth pursuit".	
	b. Demonstrate the check for "Distinct jerking at maximum deviation".	Ask the student-demonstrator: How long should the eye be held at maximum deviation? (About four seconds)
	c. Demonstrate the check for "Angle of Onset".	Ask the student-demonstrator: What is the formula that expresses the approximate relationships between BAC and Angle of Onset? (BA = 50 - Angle)
	2. Name the categories of drugs that will enhance Horizontal Gaze Nystagmus.	CNS Depressants, Phencyclidine, Inhalants.
	a. Name the categories that will produce **Vertical** Nystagmus.	Same as above.
	b. Demonstrate the check for Vertical Nystagmus.	Ask the student-demonstrator: How long should the eye be held at maximum elevation? (About four seconds)
	3. Name the test that is always administered immediately after Vertical Nystagmus.	Lack of Convergence.
	a. Demonstrate the test for Lack of Convergence.	
	b. Name the categories of drugs that usually will produce Lack of Convergence.	CNS Depressants; Phencyclidine; Inhalants; Cannabis.
	4. Name the lighting conditions under which we make estimations of pupil size.	Room light; near-total darkness; indirect light; direct light.

Aides	Lesson Plan	Instructor Notes
	a. Demonstrate the room light pupil size estimation procedure.	
	b. Demonstrate the near-total darkness procedure.	
	c. Demonstrate the indirect light procedure.	
	d. Demonstrate the direct light procedure.	Ask the student-demonstrator: How large should the circle of light appear on the suspect's face for the direct-light check? (Approximately the same as the eye socket) Ask the student-demonstrator: How long should the light be shined directly into the suspect's eye? (Fifteen seconds)
	e. Name the other things a DRE looks for while shining the light directly into the suspect's eye.	Pupil reaction to light; hippus; rebound dilation.
	f. How quickly must the pupil start to constrict if it is considered to exhibit **normal reaction to light**?	Within one second.
	g. Define Hippus.	A rhythmic pulsating of the pupils of the eyes, as they dilate and constrict within fixed limits.
	h. Define Rebound Dilation.	A pupil pulsating in size, and growing steadily larger on the expansion pulsations.
	5. State the normal range of pupil size.	3.0mm to 6.5mm (in diameter).

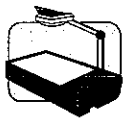
Aides	Lesson Plan	Instructor Notes
 **MCR-5** (What do these...)	a. Define each of the listed terms.	
	o Miosis	Abnormally constricted pupils
	o Mydriasis	Abnormally dilated pupils
	o Ptosis	Droopy eyelids
	b. What kinds of drugs will cause dilation of the pupils?	CNS Stimulants; Hallucinogens; Cannabis (although sometimes only slight dilation, if any).
	c. What kinds of drugs will cause constriction?	Narcotic Analgesics.
 **MCR-6** (More drugs...)	6. Identify the category for each of the listed drugs.	
	a. Fentanyl	Narcotic Analgesic
	b. Halcion	CNS Depressant
	c. Librium	CNS Depressant
	d. Peyote	Hallucinogen
	e. Darvon	Narcotic Analgesic
	f. Preludin	CNS Stimulant
	g. Diazepam	CNS Depressant
	h. Biphetamine	CNS Stimulant
	i. Hycodan	Narcotic Analgesic
	j. Percobarb	Combination of CNS Depressant and Narcotic Analgesic

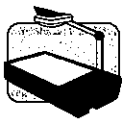
Aides	Lesson Plan	Instructor Notes
	7. Define "Pulse".	The expansion and relaxation of an artery, generated by the pumping action of the heart. (Also acceptable: The expansion and relaxation of an artery, caused by the surging flow of blood.)
	a. Define "Pulse Rate".	The number of pulsations in an artery per minute.
	b. Define "Artery".	A strong, elastic blood vessel that carries blood from the heart to the body tissues.
	c. Define "Vein".	A blood vessel that carries blood back to the heart from the body tissues.
 **MCR-7A&B** (Where are...)	d. Identify the location of each listed pulse point.	
	o Radial	In the wrist, at the base of the thumb.
	o Brachial	In the crook of the arm.
	o Carotid	In the neck, on either side of the Adam's Apple
	e. Demonstrate a pulse measurement, using the left Radial pulse point.	
	f. State the normal range of adult human pulse rate.	60 to 90 beats per minute.
	g. Name the drug categories that usually cause elevated pulse rate.	CNS Stimulants; Hallucinogens; Phencyclidine; Inhalants; Cannabis.

Aides	Lesson Plan	Instructor Notes
	h. Name the drug categories that usually cause lowered pulse rate.	CNS Depressants; Narcotic Analgesics.
	8. Define "Blood Pressure".	The force exerted by blood on the walls of the arteries.
	a. How often does a person's blood pressure change?	It is **always** changing, from instant to instant.
	b. When does the blood pressure reach its highest value?	When the heart is fully contracted, and blood is sent rushing into the arteries.
	c. When does the blood pressure reach its lowest value?	When the heart is fully expanded, just before it starts to contract for the next "pumping" action.
	d. Name the two medical instruments that are used to measure blood pressure.	Select a student to come to the chalkboard or flipchart and print "SPHYGMOMANOMETER" and "STETHOSCOPE".
	e. Name the sounds that we hear through the stethoscope when we make a blood pressure measurement.	Select a student to come to the chalkboard or flipchart and print "KOROTKOFF SOUNDS".
	f. What does this "Hg" mean?	Instructor: Print "Hg" on the chalkboard or flipchart. Chemical symbol for the element **Mercury**; abbreviation for the Latin word Hydrargyrum, meaning "Mercury".
	g. In what units is blood pressure measured?	Millimeters of Mercury. Instructor: Print "mm" on the chalkboard or flipchart, right in front of the "Hg".

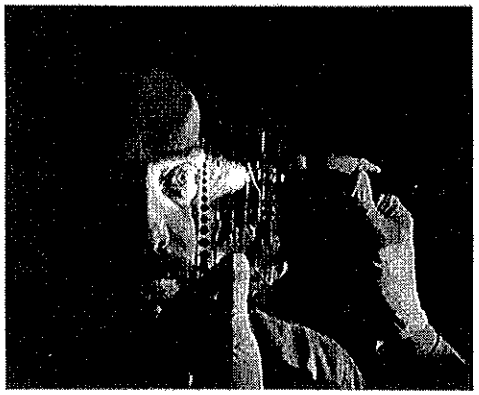
Aides	Lesson Plan	Instructor Notes
	h. Suppose that, at some particular instant, a person has a blood pressure of 120 mmHg. What does that "120 mmHg" mean?	It means the pressure would be strong enough to push a column of liquid Mercury up a glass tube to a height of 120 millimeters. INSTRUCTOR, IF ONE IS AVAILABLE, DISPLAY A SPHYGMOMANOMETER THAT HAS A LIQUID MERCURY PRESSURE GAUGE.
	i. Name the types of drugs that usually cause a lowered blood pressure.	CNS Depressants; Narcotic Analgesics; and, the **Anesthetic Gases** sub-category of Inhalants.
	j. Name the types of drugs that elevate blood pressure.	CNS Stimulants; Hallucinogens; Phencyclidine; Cannabis; and the other two sub-categories (Volatile Solvents and Aerosols) of Inhalants.
 **MCR-8** (Some technical...)	k. State the meaning of each of the listed terms.	
	o Systolic	The highest value of blood pressure.
	o Diastolic	The lowest value of blood pressure.
	o Bradycardia	Abnormally slow heart rate; pulse rate below the normal range.
	o Tachycardia	Abnormally rapid heart rate; pulse rate above the normal range.
	o Hypertension	Abnormally high blood pressure.

Aides	Lesson Plan	Instructor Notes
	o Hypotension	Abnormally low blood pressure.
	l. State the normal range of systolic blood pressure.	120 to 140 mmHg.
	m. State the normal range of diastolic blood pressure.	70 to 90 mmHg.
	n. Demonstrate the measurement of blood pressure.	Tell the student-demonstrator to explain out loud everything he or she does to take blood pressure measurement.
 **20 Minutes**  **MCR-9** (Physiology...)	C. Physiology	
	1. Define "Physiology".	The study of the functions of living organisms and their part.
	2. What is the expression we use to remember the names of the ten major body systems?	Select a student to come to the chalkboard or flipchart, and print "MURDERS INC" vertically.
	a. What is **M** for?	Muscular (Have a student print out each name).
	b. What is **U** for?	Urinary
	c. What is the first **R** for?	Respiratory (or, Reproductive)
	d. What is **D** for?	Digestive
	e. What is **E** for?	Endocrine
	f. What is the second **R** for?	Reproductive (or, Respiratory)
	g. What is **S** for?	Skeletal

Aides	Lesson Plan	Instructor Notes
	h. What is **I** for?	Integumentary
	i. What is **N** for?	Nervous
	j. What is **C** for?	Circulatory
	3. State the word that means "dynamic balance involving levels of salts, water, sugars and other materials in the body's fluids".	Homeostasis.
	4. Which artery carries blood from the heart to the lungs?	Pulmonary.
	a. What is unique about the Pulmonary artery, compared to all other arteries?	(1) it is the only artery that takes blood from the right side of the heart; (2) it is the only artery that carries **deoxygenated** blood (i.e., blood that is depleted of oxygen).
	b. What are the Pulmonary **veins**?	The veins that carry blood back to the heart from the <u>lungs</u>.
	c. What is unique about the Pulmonary veins?	(1) they are the only veins that bring blood to the left side of the heart; (2) they are the only veins that carry **oxygenated** blood.
 **MCR-10** Classification of nerves)	5. Name the various types of nerves.	Ask students to "fill in" the missing names. Use an acetate overlay on Visual MCR-10 to "write in" the students' responses.
	a. Sensory Nerves, carry messages to the brain.	Also known as Afferent Nerves.
	b. Motor Nerves, carry messages from the brain.	Also known as Efferent Nerves.

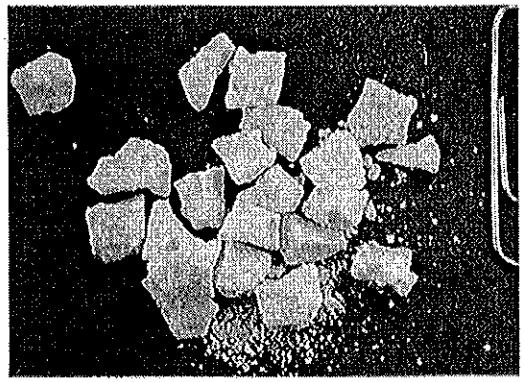
Aides	Lesson Plan	Instructor Notes
	c. Voluntary Nerves are motor nerves that carry messages to the muscles that we consciously control.	
	d. Autonomic Nerves are motor nerves that carry messages to the muscles and organs we do not consciously control.	
	e. Sympathetic Nerves are autonomic nerves that carry messages commanding the body to react to fear, stress, excitement, etc.	Clarification: Sympathetic nerves carry the brain's "fire alarms" and "wake up calls".
	f. Parasympathetic Nerves are autonomic nerves that carry messages to produce relaxed and tranquil activities.	Clarification: Para-sympathetic nerves carry the brain's "all clear" and "at ease" messages.
 **MCR-11** (Some more technical...)	6. Define each of the listed terms.	
	a. Neuron	A nerve cell; the basic "building block" of a nerve.
	b. Synapse	The gap or space between two nerve cells.
	c. Neurotransmitter	A chemical that flows across the synapse, to carry a message from one neuron to the next.
	d. Axon	The end of a neuron that sends out the neurotransmitter.
	e. Dendrite	The end of a neuron that receives the neurotransmitter.

Aides	Lesson Plan	Instructor Notes
	D. Questions and Answers	**Segment D: As long as necessary** Solicit and answer students' questions about anything covered thus far in their training.



Mid-Course Review

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



What Kinds of Drugs are These?

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

Name the Categories:

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

Eyes and Vital Signs Review

What Do These Words Mean?

- Miosis
- Mydriasis
- Ptosis

More Drugs to Categorize

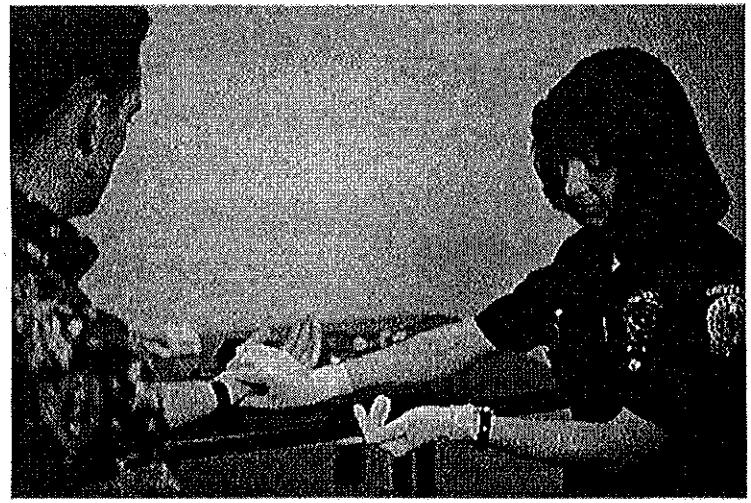
- Fentanyl
- Halcion
- Librium
- Peyote
- Darvon
- Preludin
- Diazepam
- Biphetamine
- Hycodan
- Percobarb

Where Are These Pulse Points Located?

- Radial
- Brachial
- Carotid

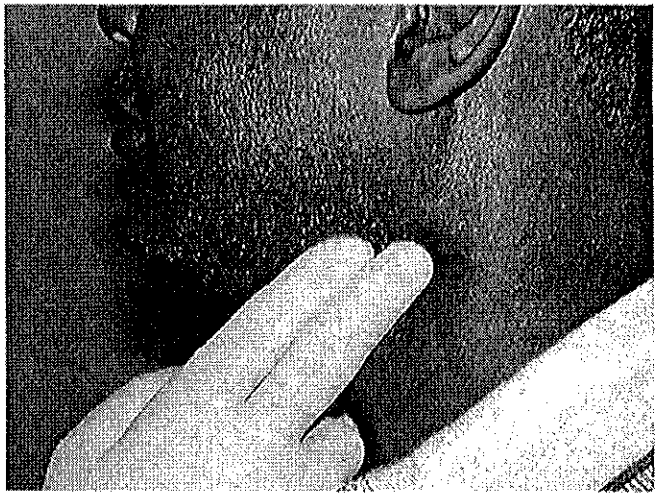
Pulse Point Location Answers

- Radial



- Brachial

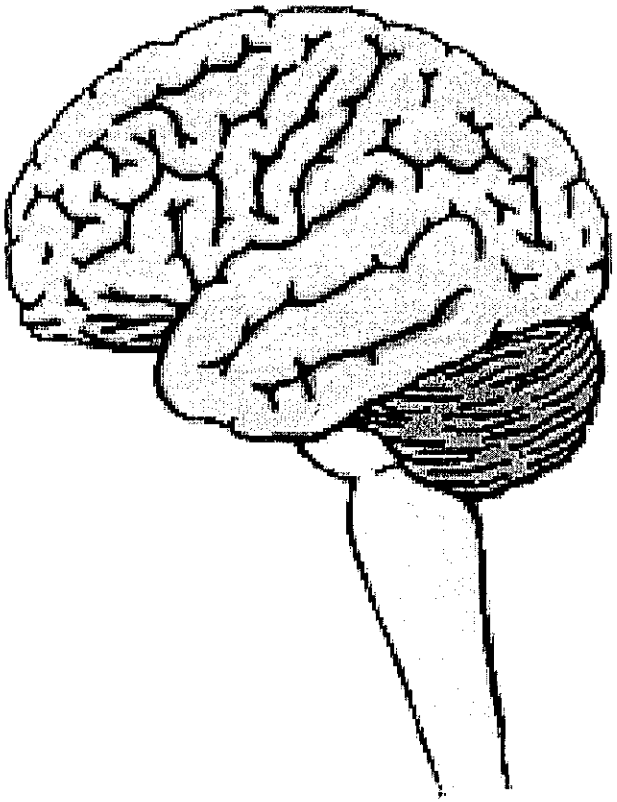
- Carotid

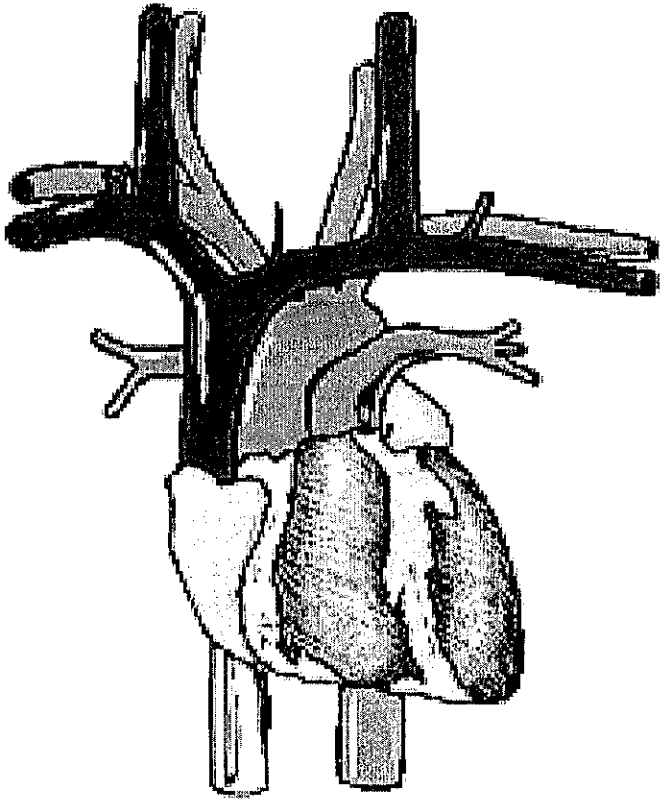


Some Technical Terms to Define

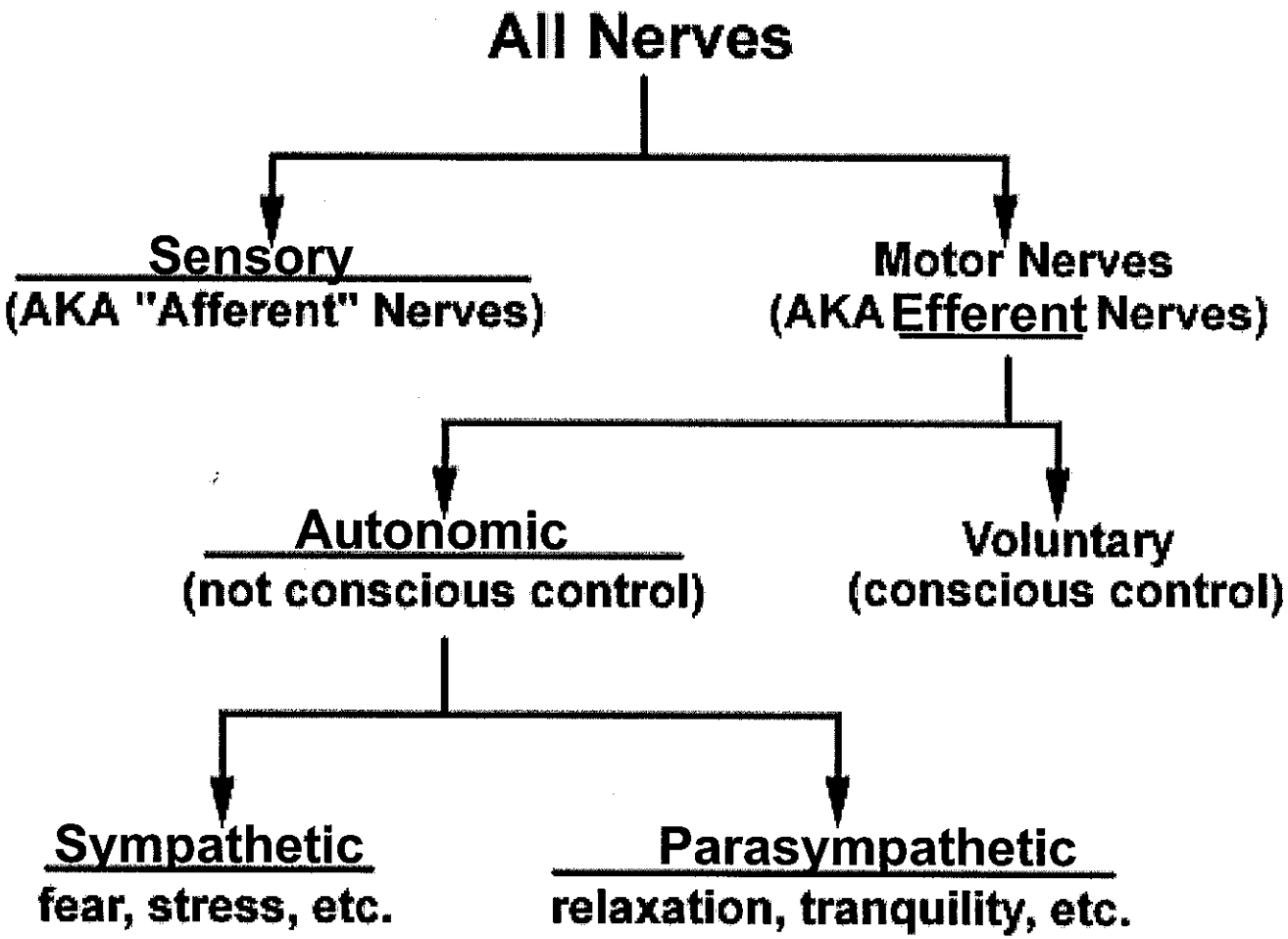
- Systolic
- Diastolic
- Bradycardia
- Tachycardia
- Hypertension
- Hypotension

Physiology Review





Classification of Nerves



Some More Technical Terms to Define

- Neuron
- Synapse
- Neurotransmitter
- Axon
- Dendrite

Forty-Five Minutes

SESSION XVIII

PRACTICE: TEST INTERPRETATION

SESSION XVIII PRACTICE: TEST INTERPRETATION

Upon successfully completing this session, the participants will be able to:

- Analyze the results of a complete DRE examination and identify the category or categories of drugs affecting the individual examined.
- Articulate the bases for the drug category identification.

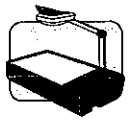
Content Segments

A. Interpretation Demonstrations

B. Interpretation Practice

Learning Activities

- Instructor Led Demonstrations
- Small Group Practice
- Participant Led Presentations

Aides	Lesson Plan	Instructor Notes
  **XVIII-O** (Objectives)  **20 Minutes**	PRACTICE: TEST INTERPRETATION	Total Lesson Time: Approximately 45 Minutes Point out the "Test Interpretation" wallchart. Briefly review the objective content and activities of this session.
	A. Interpretation Demonstrations.	
	1. Case #1 "Subject Foxx"	Direct students to turn to the "Subject Foxx" exemplar in Section XVIII of their manual.
	a. Preliminary Examination.	Review the results of the Preliminary Examination of Subject Foxx. <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.
	b. Eye Examinations.	Review the results of the eye examination of Subject Foxx. <u>Ask</u> students to discuss the category or categories of drugs that would produce these eye examination results.
	c. Psychophysical Tests.	Review the results of the psychophysical tests of Subject Foxx.

Aides	Lesson Plan	Instructor Notes
		Ask students to discuss the category or categories of drugs that would produce these psychophysical tests results.
	d. Vital Signs Examinations.	Review the results of the Vital Signs Examinations of Subject Foxx. Ask students to discuss the category or categories of drugs that would produce these results.
	e. Dark Room Examinations.	Review the results of the Dark Room Examinations of Subject Foxx. Ask students to discuss the category or categories of drugs that would produce these results.
	f. Other evidence.	Review the results of the examinations for injection sites and muscle rigidity, and of the final interview of Subject Foxx. Ask students to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.
	g. Opinions of Evaluator.	Point out that the evidence indicates that Subject Foxx is under the influence of PCP. Solicit students' questions concerning this demonstration.
	2. Case #2: "Subject Groves".	Direct students to review the "Subject Groves" exemplar.

Aides	Lesson Plan	Instructor Notes
	a. Preliminary Examination.	Review the results of the Preliminary Examination of Subject Groves. Ask 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.
	b. Eye Examinations.	Review the results of the eye examinations of Subject Groves. Ask students to discuss the category or categories of drugs that would produce these eye examination results.
	c. Psychophysical Tests.	Review the results of the psychophysical tests of Subject Groves. Ask students to discuss the category or categories of drugs that would produce these psychophysical test results.
	d. Vital Signs Examinations	Review the results of the Vital Signs Examinations of Subject Groves. Ask students to discuss the category or categories of drugs that would produce these results.
	e. Dark Room Examinations.	Review the results of the Dark Room Examinations of Subject Groves.

Aides	Lesson Plan	Instructor Notes
		Ask students to discuss the category or categories of drugs that would produce these results.
	f. Other evidence.	Review the results of the examinations for injection sites and muscle rigidity, and of the final interview of Subject Groves. Ask students to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.
	g. Opinions of Evaluator.	Point out that the evidence indicates that Subject Groves is under the influence of a Narcotic Analgesic. Solicit students' questions concerning this demonstration.
25 Minutes	B. Interpretation Practice	
	1. Team practice	Assign students to work in teams of three or four members. Tell teams that they are to review four exemplars (Subjects Hatos, Ingrahm, Jackson and Williams). Team members are to discuss the evidence among themselves and reach a conclusion concerning the category or categories of drugs, if any. Teams will present their conclusions to the entire class.

Aides	Lesson Plan	Instructor Notes
	a. Review and discussion of exemplars by teams.	Allow teams approximately 15 minutes to review the three exemplars and reach their conclusions.
	b. Feedback of results. o Subject Hatos o Subject Ingrahm o Subject Jackson o Subject Williams	Poll the teams to determine their conclusions concerning the category or categories of drugs present in each subject. Offer appropriate comments concerning the teams' performance.
	2. Session Wrap up.	Solicit students' comments and questions concerning this practice session.

DRUG CATEGORIES FOR INTERPRETATION PRACTICE

SUBJECT	CATEGORY(IES)
Foxx	PCP
Groves	Narcotic Analgesic
Hatos	CNS Stimulant and ETOH
Ingrahm	PCP and CNS Depressant
Jackson	PCP and Narcotic Analgesic
Williams	Medical rule out

Session XVIII

Practice: Test Interpretation

Practice: Test Interpretation

Upon successfully completing this session, the participants will be able to:

- Analyze the results of a complete Drug Evaluation and Classification examination and identify the category or categories of drugs affecting the individual examined
- Articulate the bases for the drug category identification

000665

DRUG INFLUENCE EVALUATION

Page 1 of 2

EVALUATOR: WARNER, WAYNE
BOOKING NO.: 018
DR: XVIII-1

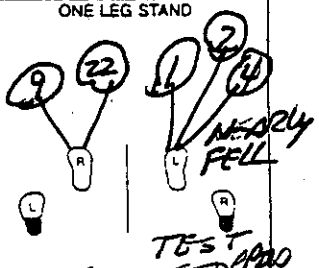
ARRESTEE'S NAME (LAST, FIRST, MI): FOXX, JAMES F
AGE: 30 | SEX: M | RACE: W
ARRESTING OFFICER (NAME, SERIAL #, DIV.): WARNER, W. 2379 NYSP

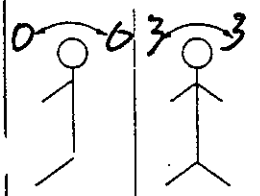
DATE EXAMINED/TIME/LOCATION: 2/22/96 2330 TROOP T ALBANY
BREATH RESULTS: ☐ Refused — Results: .000 — Instrument #: 1234
CHEMICAL TEST: ☐ Both Tests Refused — ☒ Urine ☐ Blood

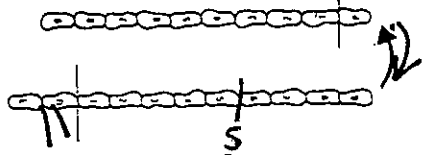
MIRANDA WARNING GIVEN: ☒ Yes ☐ No — Given by: W. WARNER
What have you eaten today? When? NOTHING N/A
What have you been drinking? How much? When? NOTHING N/A
Time now? NO ANSWER
When did you last sleep? How long? NO ANSWER
Are you sick or injured? ☐ Yes ☐ No — IT'S LATE
Are you diabetic or epileptic? ☐ Yes ☐ No — NOT SICK
Do you take insulin? ☐ Yes ☐ No — NOT SICK
Do you have any physical defects? ☐ Yes ☐ No — NOT SICK
Are you under the care of a doctor/dentist? ☐ Yes ☐ No — NO ANSWER
Are you taking any medication or drugs? ☐ Yes ☐ No — NOT SICK
ATTITUDE: NON RESPONSIVE PASSIVE
COORDINATION: POOR UNSTEADY STAGGERING
SPEECH: SLOW SLURRED
BREATH: CHEMICAL ODOR
FACE: BLANK STARE
CORRECTIVE LENS: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ☐ Normal ☒ Bloodshot ☐ Watery
Blindness: ☒ None ☐ L. Eye ☐ R. Eye
Tracking: ☒ Equal ☐ Unequal
PUPIL SIZE: ☒ Equal ☐ Unequal (explain)
HGN Present: ☒ Yes ☐ No
Able to follow stimulus: ☒ Yes ☐ No
Eyelids: ☒ Normal ☐ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 104 , 2340	Lack of Smooth Pursuit	YES	YES
2. 108 , 2356	Max. Deviation	YES	YES
3. 104 , 0010	Angle of Onset	30°	30°

Vertical Nystagmus? ☐ Yes ☐ No
Convergence: Right Eye / Left Eye

ONE LEG STAND


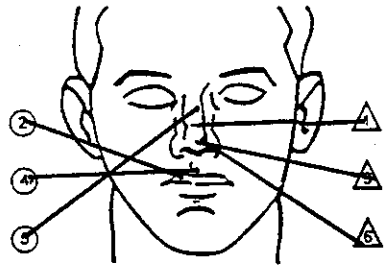
BALANCE EYES CLOSED


WALK AND TURN TEST "MOONWALKING"
LEGS + ARM RIGID


	1st Nine	2nd Nine
Cannot keep balance	✓	✓
Starts too soon		
Stops Walking	✓	
Misses Heal-Toe		
Steps off Line		
Raises Arms	✓✓✓	✓✓✓
Actual Steps Taken		

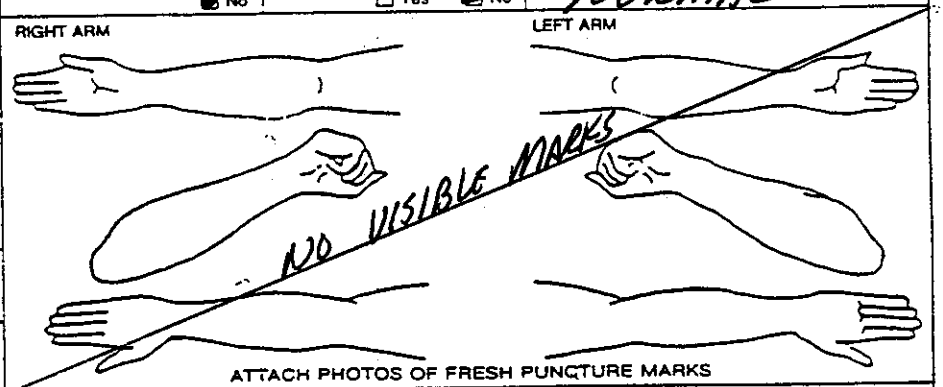
L R
☐ ☒ Sways while balancing.
☒ ☐ Uses arms to balance.
☐ ☐ Hopping.
☒ ☒ Puts foot down.

INTERNAL CLOCK: 30 Estimated as 30 sec.
Describe Turn: TURNED BACKWARDS
Cannot do Test (explain): STOPPED FOR 10 SEC AFTER TURN N/A
Type of Footwear: LOAFERS

☐ Right △ Left
Draw lines to spots touched


PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	4.5	6.0	5.5	4.0
Right Eye	4.5	6.0	5.5	4.0

NASAL AREA: CLEAR
ORAL CAVITY: CLEAR
HIPPUS: ☐ Yes ☒ No
REBOUND DILATION: ☐ Yes ☒ No
Reaction to Light: NORMAL

RIGHT ARM / LEFT ARM


ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 140 , 90
TEMP: 99.4 °
MUSCLE TONE: ☐ Near Normal ☐ Flaccid ☒ Rigid
Comments: ARMS + LEGS

What medicine or drug have you been using? How much? NO ANSWER
Time of use? NO ANSWER
Where were the drugs used? (Location) NO ANSWER

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED
2/22/96 2300	2300	2330	0015 2/23

CONTROL #	EXAMINING OFFICER	SERIAL NO	DIVISION	UNAVAILABLE DATES	REVIEWED BY
	M. Warner	2379	NYSP		Lt. M.

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Trooper Wayne Warner	ARRESTEE: James F. Foxx

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of James F. Foxx, took place in the DRE room, SP Albany, Troop T.

2. WITNESS: Robyn Mayer (NHTSA) and Chuck Pelitier (IACP)

3. BREATH TEST: Writer administered breath test to Foxx, the result was 0.00%.

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was the arresting officer.

5. INITIAL OBSERVATIONS: Writer observed subject seated in the drivers position of a blue, 1996 Oldsmobile, NY registration "277 BRX". Vehicle was stationary in the Northbound lane of Hannover Ave., at the intersection with Hugenot St. The traffic light was green and the other vehicles had to pull out and around subject's vehicle.

6. MEDICAL PROBLEMS: None noted or stated

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject swayed approximately 3" side to side. Walk and Turn: Subject lost his balance during the instructions, stopped walking, turned backwards. He paused for approximately ten (10) seconds after turning and exhibited muscle rigidity in his arms and legs throughout the test. One Leg Stand: Subject raised his arms, put his foot down, staggered and nearly fell at this point the test was stopped. Finger to Nose: Subject missed tip of his nose four times.

8. CLINICAL INDICATORS: Subject had HGN, Vertical Nystagmus and Lack of Convergence. His pulse was above the normal.

9. SIGNS of INGESTION: Subject's breath had a strong chemical odor.

10. STATEMENTS: Subject was very passive throughout the evaluation and was very slow at responding to questions. He repeatedly answered "not sick" to questions concerning the use of medication. He also failed to respond to a couple of the questions

11. OPINION of EVALUATOR: In my opinion James F. Foxx is under the influence of a and unable to operate a vehicle safely.

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a urine sample.

13. MISCELLANEOUS:

000667

Page 1 of 2

DRUG INFLUENCE EVALUATION

EVALUATOR: CLARK, KEN
BOOKING NO. 019
DR. XVIII - 2

ARRESTEE'S NAME (LAST, FIRST, MI): GROVES, ROBERT G
AGE: 27 | SEX: M | RACE: W
ARRESTING OFFICER (NAME, SERIAL #, DIV.): DELLAVECHIO, J. J. #172 VSP

DATE EXAMINED/TIME/LOCATION: AUG 15, 1996 0100 3RD PCT VBPD
BREATH RESULTS: ☐ Refused Results 0.00 Instrument # 1234
CHEMICAL TEST: ☐ Both Tests Refused ☑ Urine ☐ Blood

MIRANDA WARNING GIVEN: ☑ Yes ☐ No Given by: K. CLARK
What have you eaten today? When? FRIED CHICKEN 6PM
What have you been drinking? How much? NOTHING N/A
Time of last drink? N/A

Time now? MIDNIGHT
When did you last sleep? How long? LAST NIGHT 4 HRS
Are you sick or injured? ☐ Yes ☑ No
Are you diabetic or epileptic? ☐ Yes ☑ No
Do you take insulin? ☐ Yes ☑ No
Do you have any physical defects? ☐ Yes ☑ No
Are you under the care of a doctor/dentist? ☑ Yes I HAD A DOCTOR'S APPT TODAY ☐ No
Are you taking any medication or drugs? ☑ Yes CODEINE FOR BACK PAIN AS NEEDED ☐ No

ATTITUDE: COOPERATIVE
COORDINATION: POOR WOBBLY STUMBLING
SPEECH: SLOW + MUMBLED
BREATH: NORMAL ODOR BREATHING SLOW + SHALLOW
FACE: NORMAL

CORRECTIVE LENS: ☑ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ☑ Normal ☐ Bloodshot ☐ Watery
Blindness: ☑ None ☐ L. Eye ☐ R. Eye
Tracking: ☑ Equal ☐ Unequal
PUPIL SIZE: ☑ Equal ☐ Unequal (explain)
HGN Present: ☐ Yes ☑ No
Able to follow stimulus: ☑ Yes ☐ No
Eyelids: ☐ Normal ☑ Droopy

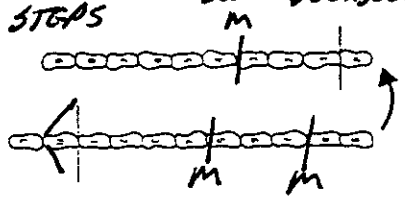
PULSE & TIME	HGN	Left Eye	Right Eye
1. 60 / 0110	Lack of Smooth Pursuit	NO	NO
2. 60 / 0127	Max. Deviation	NO	NO
3. 60 / 0137	Angle of Onset	NONE	NONE

Vertical Nystagmus? ☐ Yes ☑ No
Convergence: Right Eye → Left Eye ←

ONE LEG STAND
15 25 12 20
L R
COUNTED SLOWLY 1022/1024 AT 30 SEC
☐ ☐ Sways while balancing.
☑ ☑ Uses arms to balance.
☐ ☐ Hopping.
☑ ☑ Puts foot down.

BALANCE EYES CLOSED
3 1 2 2

WALK AND TURN TEST: SLOW DELIBERATE STEPS

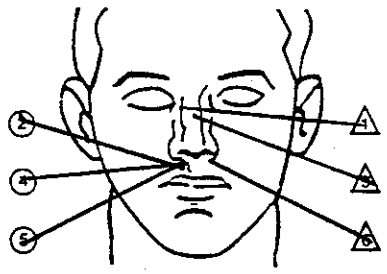


Cannot keep balance: VV
Starts too soon:

	1st Nine	2nd Nine
Stops Walking		
Misses Heal-Toe	VV	V
Steps off Line		
Raises Arms	VVV	VV
Actual Steps Taken	9	9

INTERNAL CLOCK: 53 Estimated as 30 sec.
Describe Turn: LOST BALANCE STAGGERED TO RIGHT
Cannot do Test (explain): N/A
Type of Footwear: STREET SHOES

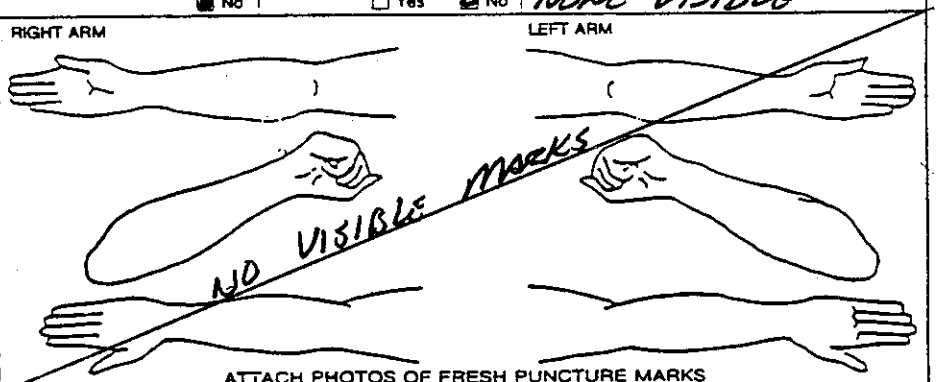
○ Right △ Left
Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	2.0	2.5	2.0	2.0
Right Eye	2.0	2.5	2.0	2.0

NASAL AREA: CLEAR
ORAL CAVITY: CLEAR
HIPPUS: ☐ Yes ☑ No
REBOUND DILATION: ☐ Yes ☑ No
Reaction to Light: LITTLE OR NONE VISIBLE

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 106 / 64
TEMP: 97.8 °
MUSCLE TONE: ☐ Near Normal ☑ Flaccid ☐ Rigid
Comments: ARMS + NECK RUBBERY

What medicine or drug have you been using? How much? A COUPLE OF PILLS FOR MY BACK
Time of use? AROUND DINNER
Where were the drugs used? (location) SAM'S RESTAURANT

DATE/TIME OF ARREST: 8/15/96 2345
TIME DRE NOTIFIED: 0025
EVAL START TIME: 0100
TIME COMPLETED: 0150

CONTROL #
EXAMINING OFFICER: Ken Clark
SERIAL NO: #172
DIVISION: VSP
UNAVAILABLE DATES:
REVIEWED BY: Traylor, M.

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Sgt. Ken Clark	ARRESTEE: Robert G. Groves

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Robert G. Groves, took place in the DRE room, 3rd Pct. Virginia Beach PD

2. WITNESS: Arresting Officer - Trooper J.J. Delavecchio

3. BREATH TEST: Writer observed Trooper J.J. Delavecchio administer a breath test to Groves, the result was 0.00%

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was contacted by radio and advised to return to the precinct to conduct a DRE evaluation. Tpr Delavecchio informed me that he had observed the subject's vehicle drifting across the center line and driving 15 mph in a 45 mph zone. Tpr Delavecchio further stated that the subject admitted to taking "a few" pain pills.

5. INITIAL OBSERVATIONS: Writer observed the subject seated int he breath testing room VBPD. Subject appeared sleepy with his eyes closed and head nodded forward. He was cooperative throughout the examination.

6. MEDICAL PROBLEMS: Subject stated that he had taken codiene pills to alleviate back pain, and that he'd had an apointment with his doctor earlier that day. He further stated that he was not experiencing any pain at this time.

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject swayed side to side and front to back, and estimated 53 seconds as 30 seconds. Walk and Turn: Subject lost his balance during the instructions, missed heel to toe, and lost his balance while turning. One Leg Stand: Subject raised his arms, put his foot down, and swayed. Finger to Nose: Subject missed tip of nose on each attempt.

8. CLINICAL INDICATORS: Subject's blood pressure was below the normal range and his pupils were constricted.

9. SIGNS of INGESTION: None were evident

10. STATEMENTS: Subject stated he had taken "a couple of pills for my back". He also staed that the pills contained Codiene.

11. OPINION of EVALUATOR: In my opinion Robert G. Groves is under the influence of a and unable to operate a vehicle safely.

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a urine sample.

13. MISCELLANEOUS:

000669

DRUG INFLUENCE EVALUATION

Page 1 of 2

EVALUATOR: KLIMA, J.

BOOKING NO.: 020 | OR: XVIII - 3

ARRESTEE'S NAME (LAST, FIRST, MI): HATOS, STEPHEN H | AGE: 52 | SEX: M | RACE: W

ARRESTING OFFICER (NAME, SERIAL #, DIV.): UNSWORTH, J. 1811 PHOENIX PD

DATE EXAMINED/TIME/LOCATION: 11-25-96 2330 MARICOPA COUNTY JAIL

BREATH RESULTS: ☐ Refused Results 0.04 Instrument # 1234

CHEMICAL TEST: ☐ Both Tests Refused ☒ Urine ☐ Blood

MIRANDA WARNING GIVEN: ☒ Yes ☐ No Given by: J. KLIMA

What have you eaten today? When? 2 HRS AGO: ROAST BEEF DINNER

What have you been drinking? How much? A GLASS OF WINE

Time of last drink? 2 HRS AGO

Time now? 11PM

When did you last sleep? How long? LAST NIGHT 8 HRS

Are you sick or injured? ☐ Yes ☒ No

Are you diabetic or epileptic? ☐ Yes ☒ No

Do you take insulin? ☐ Yes ☒ No

Do you have any physical defects? ☐ Yes ☒ No

Are you under the care of a doctor/dentist? ☐ Yes ☒ No

Are you taking any medication or drugs? ☐ Yes ☒ No

ATTITUDE: COOPERATIVE/NERVOUS

COORDINATION: POOR JERKY STUMBLING

SPEECH: NORMAL BUT VERY TALKATIVE

BREATH: ODOR of ALCOHOLIC BEVERAGE

FACE: NORMAL

CORRECTIVE LENS: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft

Eyes: ☒ Normal ☐ Bloodshot ☐ Watery

Blindness: ☒ None ☐ L. Eye ☐ R. Eye

Tracking: ☒ Equal ☐ Unequal

PUPIL SIZE: ☒ Equal ☐ Unequal (explain)

HGN Present: ☐ Yes ☒ No

Able to follow stimulus: ☒ Yes ☐ No

Eyelids: ☒ Normal ☐ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 100 / 2340	Lack of Smooth Pursuit	YES	YES
2. 104 / 2349	Max. Deviation	NO	NO
3. 108 / 2358	Angle of Onset	NONE	NONE

Vertical Nystagmus? ☐ Yes ☒ No

Convergence: Right Eye → Left Eye →

ONE LEG STAND: 27

BALANCE EYES CLOSED: 0 0 3 3 — EYELID TREMORS

WALK AND TURN TEST: WALKED VERY QUICKLY

	1st Nine	2nd Nine
Cannot keep balance	✓	
Starts too soon		
Stops Walking	✓	✓
Misses Heal-Toe		
Steps off Line		
Raises Arms	✓✓	✓
Actual Steps Taken	9	9

	L	R
Sways while balancing.	☐	☐
Uses arms to balance.	☒	☒
Hopping.	☐	☐
Puts foot down.	☐	☐

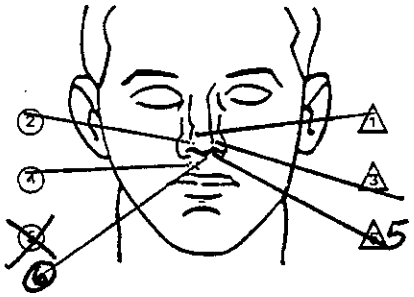
INTERNAL CLOCK: 20 Estimated as 30 sec.

Describe Turn: AS INSTRUCTED

Cannot do Test (explain): N/A

Type of Footwear: LOAFERS

○ Right △ Left — Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	6.0	8.5	8.0	5.5
Right Eye	6.0	8.5	8.0	5.5

NASAL AREA: REDNESS & ABRASIONS IN NOSE

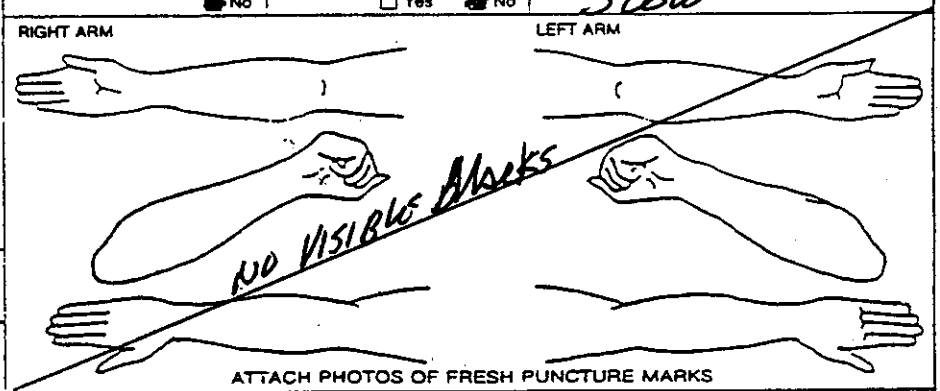
ORAL CAVITY: CLEAR

HIPPUS: ☐ Yes ☒ No

REBOUND DILATION: ☐ Yes ☒ No

Reaction to Light: SLOW

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 146 / 100 TEMP: 99.2°

MUSCLE TONE: ☒ Near Normal ☐ Flaccid ☐ Rigid

Comments:

What medicine or drug have you been using? How much? NONE N/A

Time of use? I DIDN'T DO ANY

Where were the drugs used? (Location) I DIDN'T SHOOT ANYTHING

DATE/TIME OF ARREST	TIME ORE NOTIFIED	EVAL START TIME	TIME COMPLETED
11-25-96 2250	2310	2330	11-26-96 0010

CONTROL #	EXAMINING OFFICER	SERIAL NO	DIVISION	UNAVAILABLE DATES	REVIEWED BY
	J. Klima	2120	PPD		CONRAD, M

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Lt. Joseph Klima	ARRESTEE: Stephen H. Hatos

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Stephen H. Hatos, took place in the DRE room, Maricopa County Jail

2. WITNESS: Arresting Officer - J. Unsworth #1811

3. BREATH TEST: Officer Unsworth administer a breath test to Hatos, the result was 0.04%

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was contacted by radio and advised to return to the jail to conduct a DRE evaluation. Officer Unsworth informed me that he had observed the subject driving at excessive speed and he failed to stop at a red traffic light. Officer Unsworth further stated that the subject appeared nervous and performed poorly on the SFSTs.

5. INITIAL OBSERVATIONS: Writer observed the subject seated in the breath testing room. Subject was very talkative, repeatedly shifted his weight from foot to foot, and exhibited nervous abrupt movements with his hands. When not speaking he appeared to grind his teeth. There was also an odor of alcoholic beverage on the subjects breath.

6. MEDICAL PROBLEMS: None noted or stated

7. PSYCHOPHYSICAL TESTS: Subject performed all of the tests in a stumbling jerky fashion. Romberg Balance: Subject swayed approximately 3" side, and estimated 20 seconds as 30 seconds. Walk and Turn: Subject lost his balance during the instructions, and stopped walking and used his arms for balance. One Leg Stand: Subject raised his arms, put his foot down, and swayed. Finger to Nose: Subject missed tip of nose on each attempt.

8. CLINICAL INDICATORS: Subject's blood pressure and pulse were above the normal range.

9. SIGNS of INGESTION: None were evident

10. STATEMENTS: Subject stated, "I didn't snort anything"

11. OPINION of EVALUATOR: In my opinion Stephen H. Hatos is under the influence of a and unable to operate a vehicle safely.

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a urine sample.

13. MISCELLANEOUS:

000671

DRUG INFLUENCE EVALUATION

Page 1 of 2

EVALUATOR: Poff, MEL
BOOKING NO.: 021
DR.: XVIII - 4

ARRESTEE'S NAME (LAST, FIRST, MI): INGRAHAM, ROBERT I
AGE: 31 | SEX: M | RACE: B
ARRESTING OFFICER (NAME, SERIAL #, DIV.): Poff, M. 3529 HPD

DATE EXAMINED/TIME/LOCATION: JAN 17, 1997 2200 CENTRAL INTOX
BREATH RESULTS: ☐ Refused Results 0.00 Instrument # 66-001286
CHEMICAL TEST: ☐ Both Tests Refused ☐ Urine ☐ Blood

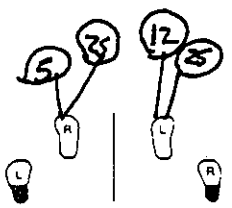
MIRANDA WARNING GIVEN: ☒ Yes ☐ No
Given by: M. Poff
What have you eaten today? When? CHINESE FOOD LUNCH
What have you been drinking? How much? JUST WATER N/A
Time of last drink? N/A
Time now? ABOUT 8 PM
When did you last sleep? How long? LAST NIGHT 2 HRS
Are you sick or injured? ☐ Yes ☒ No
Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No
Do you have any physical defects? ☐ Yes ☒ No
Are you under the care of a doctor/dentist? ☒ Yes ☐ No — DOCTOR FOR STRESS
Are you taking any medication or drugs? ☒ Yes ☐ No — VALIUM 10MG TWICE/DAY

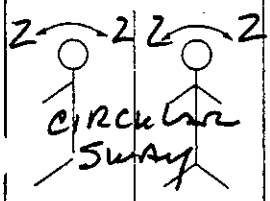
ATTITUDE: COOPERATIVE DETATCHED
COORDINATION: POOR STAGGERING
SPEECH: THICK, SLURRED, SLOW TO RESPOND
BREATH: CHEMICAL ODOR
FACE: NORMAL COLOR BLANK STARE

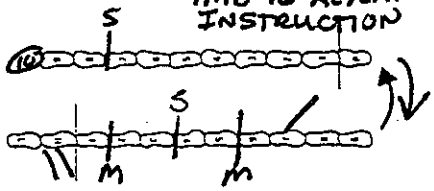
CORRECTIVE LENS: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ☐ Normal ☐ Bloodshot ☒ Watery
Blindness: ☒ None ☐ L. Eye ☐ R. Eye
Tracking: ☒ Equal ☐ Unequal
PUPIL SIZE: ☒ Equal ☐ Unequal (explain)
HGN Present: ☒ Yes ☐ No
Able to follow stimulus: ☒ Yes ☐ No
Eyelids: ☒ Normal ☐ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 92 / 2210	Lack of Smooth Pursuit	YES	YES
2. 92 / 2225	Max. Deviation	YES	YES
3. 94 / 2235	Angle of Onset	30°	30°

Vertical Nystagmus? ☒ Yes ☐ No
Convergence: Right Eye ✓ Left Eye ✓

ONE LEG STAND


BALANCE EYES CLOSED


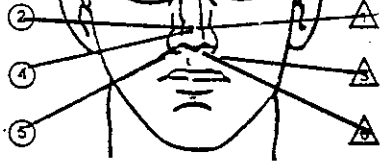
WALK AND TURN TEST — HAD TO REPEAT INSTRUCTION


Cannot keep balance: VV
Starts too soon:

	1st Nine	2nd Nine
Stops Walking	V	V
Misses Heal-Toe	VV	V
Steps off Line	V	
Raises Arms	VV	VV
Actual Steps Taken	9	10

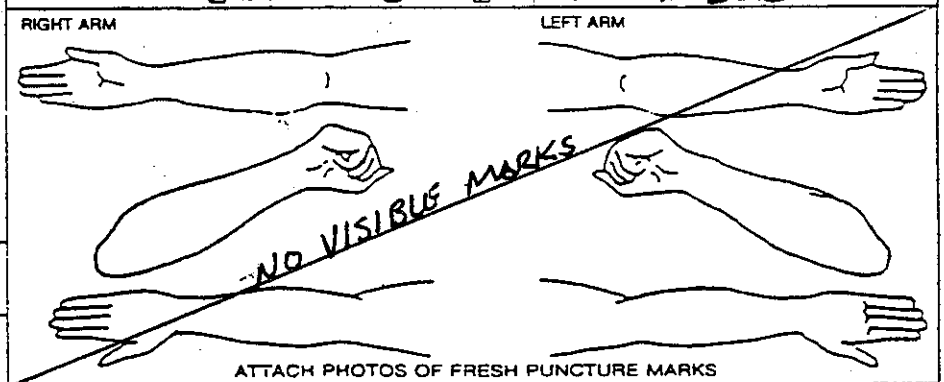
☐ ☐ Sways while balancing.
☐ ☐ Uses arms to balance.
☐ ☐ Hopping.
☐ ☐ Puts foot down.

INTERNAL CLOCK: 46 Estimated as 30 sec.
Describe Turn: TURNED BACKWARDS
Cannot do Test (explain): N/A
Type of Footwear: RUNNING SHOES

○ Right △ Left
Draw lines to spots touched
VERY RIGID ARM MOVEMENTS


PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	4.0	6.0	5.5	4.0
Right Eye	4.0	6.0	5.5	4.0

NASAL AREA: CLEAR
ORAL CAVITY: RED COATING ON TONGUE
HIPPUS: ☐ Yes ☒ No
REBOUND DILATION: ☐ Yes ☒ No
Reaction to Light: SLOW

RIGHT ARM / LEFT ARM


ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 144 / 100
TEMP: 99.2°
MUSCLE TONE: ☐ Near Normal ☐ Flaccid ☒ Rigid
Comments: ARMS + NECK RIGID

What medicine or drug have you been using? How much? JUST MY PILLS 2 A DAY
Time of use? YESTERDAY
Where were the drugs used? (Location) I DIDN'T DO ANYTHING ELSE

DATE/TIME OF ARREST: JAN 17, 1997 2120
TIME DRE NOTIFIED: 2120
EVAL START TIME: 2200
TIME COMPLETED: 2300

CONTROL #:
EXAMINING OFFICER: M. Poff
SERIAL NO: 314
DIVISION: ACCI
UNAVAILABLE DATES:
REVIEWED BY: PAQUETTE, D.

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Officer Mel Poff	ARRESTEE: Robert I. Ingraham

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Robert I. Ingraham, took place in the DRE room, HPD

2. WITNESS: Mr. John McKay (Texas DECP Cordinator)

3. BREATH TEST: Writer administered breath test to Ingraham, the result was 0.00%.

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was the arresting officer.

5. INITIAL OBSERVATIONS: Writer observed subject seated in the drivers position of a blue, 1990 Oldsmobile, NJ registration "297 BXX". Vehicle was stationary in the driving lane of Easton Ave., at the intersection with West St. The traffic light was green and the other vehicles had to pull out and around subject's vehicle.

6. MEDICAL PROBLEMS: None noted or stated

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject swayed approximately 2" in a circular motion and estimated 46 seconds as 30 seconds. Walk and Turn: Subject lost his balance during the instructions, missed heel to toe, stopped walking, stepped off the line, turned backwards, and returned taking ten (10) steps. One Leg Stand: Subject raised his arms,put his foot down, and swayed. Finger to Nose: Subject missed tip of his nose, and had very rigid arm movements.

8. CLINICAL INDICATORS: Subject had HGN, Vertical Nystagmus and Lack of Convergence. His pulse, and blood pressure were above the normal range.

9. SIGNS of INGESTION: Subject's breath had a strong chemical odor and a red coating on the tongue.

10. STATEMENTS: Subject stated he regularly takes Valium for stress. He further stated "I don't do anything else."

11. OPINION of EVALUATOR: In my opinion Robert I. Ingraham is under the influence of a and unable to operate a vehicle safely.

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a urine sample.

13. MISCELLANEOUS:

000673

DRUG INFLUENCE EVALUATION

Page 1 of 2

EVALUATOR: STUDDARD, R. C

BOOKING NO.: 022 | DR.: XVIII-5

ARRESTEE'S NAME (LAST, FIRST, MI): JACKSON, REGINA J. | AGE: 33 | SEX: F | RACE: W

ARRESTING OFFICER (NAME, SERIAL #, DIV.): KOCHUBKA, D. 732 MPDC

DATE EXAMINED/TIME/LOCATION: 3/18/96 2030 USCP

BREATH RESULTS: ☐ Refused Results 0.100 Instrument # 1234

CHEMICAL TEST: ☐ Urine ■ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ■ Yes ☐ No Given by: KOCHUBKA, D

What have you eaten today? When? SOME TOAST THIS MORNING

What have you been drinking? How much? COFFEE N/A

Time of last drink? N/A

Time now? MIDNIGHT | When did you last sleep? How long? LAST NIGHT 8 HRS

Are you sick or injured? ☐ Yes ■ No

Are you diabetic or epileptic? ☐ Yes ■ No

Do you take insulin? ☐ Yes ■ No

Do you have any physical defects? ☐ Yes ■ No

Are you under the care of a doctor/dentist? ☐ Yes ■ No

Are you taking any medication or drugs? ☐ Yes ■ No

ATTITUDE: PASSIVE COOPERATIVE

COORDINATION: POOR VERY UNSTEADY

SPEECH: SLOW, LOW, RASPY

BREATH: HALITOSIS

FACE: FLUSHED BLANK STARE

CORRECTIVE LENS: ■ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft

Eyes: ■ Normal ☐ Bloodshot ☐ Watery

Blindness: ■ None ☐ L. Eye ☐ R. Eye

Tracking: ■ Equal ☐ Unequal

PUPIL SIZE: ■ Equal ☐ Unequal (explain)

HGN Present: ■ Yes ☐ No

Able to follow stimulus: ■ Yes ☐ No

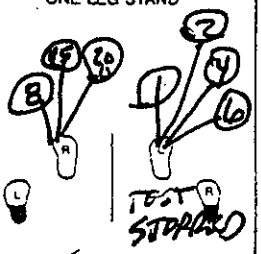
Eyelids: ☐ Normal ■ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 92 / 2038	Lack of Smooth Pursuit	YES	YES
2. 96 / 2051	Max. Deviation	YES	YES
3. 92 / 2103	Angle of Onset	35°	35°

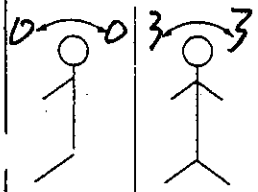
Vertical Nystagmus? ■ Yes ☐ No

Convergence: Right Eye ✓ Left Eye ✓

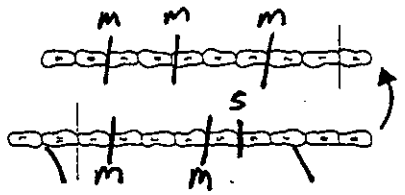
ONE LEG STAND



BALANCE EYES CLOSED



WALK AND TURN TEST



	1st Nine	2nd Nine
Cannot keep balance	✓	
Starts too soon	✓	
Stops Walking	✓	
Misses Heal-Toe	✓✓	✓✓✓
Steps off Line	✓	
Raises Arms	✓✓	✓✓✓
Actual Steps Taken	9	9

L R
☑ Sways while balancing.
☐ Uses arms to balance.
☐ Hopping.
☑ Puts foot down.

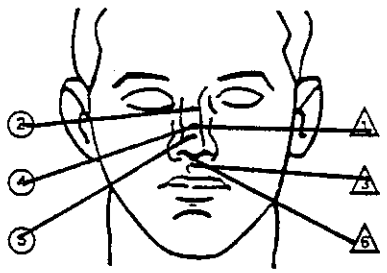
INTERNAL CLOCK: 50 Estimated as 30 sec.

Describe Turn: ABRUPT SWIVEL FOLLOWED BY STAGGERING

Cannot do Test (explain): N/A

Type of Footwear: BAREFOOT

○ Right △ Left
Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	2.0	2.5	2.0	2.0
Right Eye	2.0	2.5	2.0	2.0

NASAL AREA: CLEAR

ORAL CAVITY: CLEAR

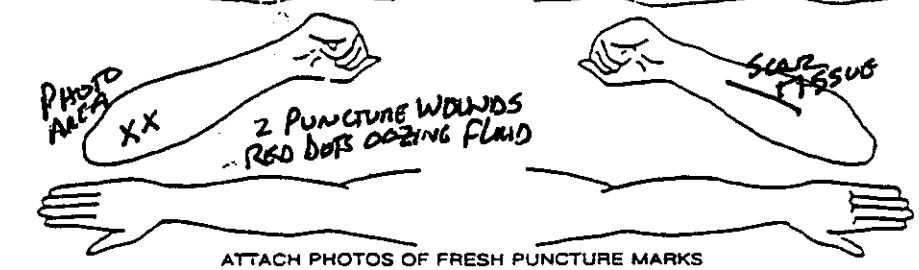
HIPPUS: ☐ Yes ■ No

REBOUND DILATION: ☐ Yes ■ No

Reaction to Light: LITTLE OR NONE VISIBLE

RIGHT ARM: NUMEROUS PUNCTURE WOUNDS WITH SCABS

LEFT ARM: SCAR TISSUE



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 130 / 90 TEMP: 98.9 °

MUSCLE TONE: ■ Near Normal ☐ Flaccid ☐ Rigid

Comments:

What medicine or drug have you been using? How much? NO I DIDN'T USE NOTHING

Time of use? I DIDN'T USE IT

Where were the drugs used? (Location) I DON'T DO THAT ANY MORE

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED
MAR 8, 1996 2010	2020	2030	2120

CONTROL #	EXAMINING OFFICER	SERIAL NO	DIVISION	UNAVAILABLE DATES	REVIEWED BY
	R STUDDARD	102	LARD		Lyon M.

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Sgt. Richard Studdard	ARRESTEE: Regina J. Jackson

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Regina J. Jackson, took place in the DRE room, US Capitol Police HDQT.

2. WITNESS: Arresting Officer D. Kochubka, MPDC and Officer G. Bird USCP

3. BREATH TEST: Officer D. Kochubka administered breath test to Jackson, the result was 0.00%.

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was on duty at USCP HDQTs administering the DRE knowledge examination when notified that Officer Kochubka was in route with a "drugee". Officer Kochubka stated he had observed the subject walking eastbound on East Capitol St., staggering and stumbling. She appeared dazed confused and mumbling softly. He further stated that the subject was wearing only shorts, a tee shirt, and w as barefoot. The temperature at the time was approximately 34' F. No odor of alcoholic beverage was detected.

5. INITIAL OBSERVATIONS: Writer observed subject as she was being brought into the building. She repeatedly staggered, stumbled, exhibited a blank stare and appeared to be unaware of her surroundings.

6. MEDICAL PROBLEMS: None noted or stated

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject swayed approximately 3" side to side and estimated 50 seconds as 30 seconds. Walk and Turn: Subject lost her balance during the instructions, stepped off the line, stopped walking, repeatedly missed heel to toe, and raised her arms for balance. One Leg Stand: Subject raised her arms, put her foot down, swayed, and raised her arms for balance. Finger to Nose: Subject had to be reminded several times to keep her eyes closed, and consistently missed the tip of the nose.

8. CLINICAL INDICATORS: Subject had HGN, Vertical Nystagmus and Lack of Convergence. Her pulse was above the normal range, and her blood pressure and temperature were within the normal range. Pupils were constricted.

9. SIGNS of INGESTION: Subject's had numerous scars resembling track marks on both arms, and had a fresh oozing puncture wound on the right arm.

10. STATEMENTS: Subject stated, "No I didn't use anything" , " I didn't use it " and "I don't do that anymore"

11. OPINION of EVALUATOR: In my opinion Regina J. Jackson is under the influence of a and unable to operate a vehicle safely.

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a blood sample.

13. MISCELLANEOUS:

000675

Page 1 of 2

DRUG INFLUENCE EVALUATION

EVALUATOR: HALLENBECK 26129
BOOKING NO.: —
DR: XVIII-6

ARRESTEE'S NAME (LAST, FIRST, MI)	AGE	SEX	RACE	ARRESTING OFFICER (NAME, SERIAL #, DIV.)
WILLIAMS CLINTON	67	M	BLK	FELIX 14117 STD

DATE EXAMINED/TIME/LOCATION: 06-10-93 1245 S/W STA
BREATH RESULTS: ☐ Refused Results .00% .00% Instrument # 1234
CHEMICAL TEST: ■ Urine ☐ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ■ Yes ☐ No — Given by FELIX 14117

What have you eaten today? When? NOTHING YET —

What have you been drinking? How much? I DIDN'T NOTHING AT ALL — Time of last drink?

Time now? YEAH — When did you last sleep? How long? ABOUT 2 DAYS ?

Are you sick or injured? 10 (10 SEC PAUSE) I'M NOT ☐ Yes ■ No

Are you diabetic or epileptic? UH, NO ☐ Yes ■ No

Do you take insulin? UMM (PAUSE) NOT YET ☐ Yes ■ No

Do you have any physical defects? ☐ Yes ■ No

Are you under the care of a doctor/dentist? I DON'T GO TO THE DOCTOR ☐ Yes ■ No

Are you taking any medication or drugs? I TOOK TYLENOL THIS AM ☐ Yes ■ No

ATTITUDE: COOPERATIVE SLOW TO RESPOND

COORDINATION: SLOW, BUT SHAKEY

SPEECH: LOW VOICE, SLOW AND SOMETIMES SLURRED

BREATH: NOTHING UNUSUAL

FACE: NOTHING UNUSUAL

CORRECTIVE LENS: ■ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft

Eyes: CLOUDY AT EYE ☐ Normal ☐ Bloodshot ■ Watery

Blindness: ■ None ☐ L. Eye ☐ R. Eye

Tracking: ■ Equal ☐ Unequal

PUPIL SIZE: ☐ Equal ■ Unequal (explain) RT PUPIL 2MM LARGER IN ALL LIGHTING

HGN Present: ☐ Yes ■ No

Able to follow stimulus: ■ Yes ☐ No

Eyelids: ■ Normal ☐ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 120 / 1245	Lack of Smooth Pursuit	NO	NO
2. 120 / 1305	Max. Deviation	NO	NO
3. 120 / 1345	Angle of Onset	NONE	NONE

Vertical Nystagmus? ☐ Yes ■ No

Convergence: Right Eye Left Eye

ONE LEG STAND: 16 3

BALANCE EYES CLOSED: NO SWAY USED

WALK AND TURN TEST: WOULD NOT PLACE RIGHT FOOT IN FRONT OF LEFT. STATED, "THIS IS IMPOSSIBLE" AND STEPPED OFF LINE WOULD NOT CONTINUE TEST

	1st Nine	2nd Nine
Cannot keep balance	V V V	
Starts too soon		
Stops Walking		
Misses Heal-Toe		
Steps off Line		
Raises Arms		
Actual Steps Taken		

L	R	
■	■	Sways while balancing.
☐	☐	Uses arms to balance.
☐	☐	Hopping.
■	■	Puts foot down.

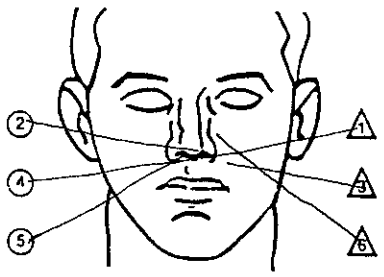
INTERNAL CLOCK: 15 Estimated as 30 sec.

Describe Turn: N/A

Cannot do Test (explain): —

Type of Footwear: WORK BOOTS

○ Right △ Left — Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	4.5	6.5	5.0	4.0
Right Eye	3.5	5.5	4.0	3.0

NASAL AREA: CLEAR

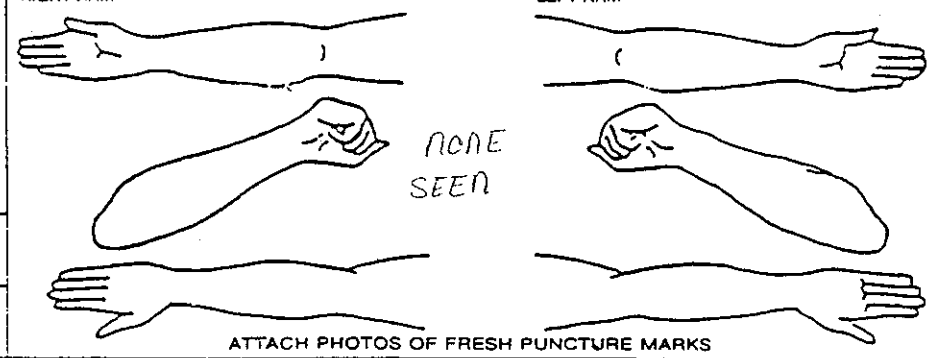
ORAL CAVITY: CLEAR

HIPPUS: ☐ Yes ■ No

REBOUND DILATION: ☐ Yes ■ No

Reaction to Light: NORMAL

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 160 / 80 TEMP: 99.0 °

MUSCLE TONE: ■ Near Normal ☐ Flaccid ☐ Rigid

Comments:

What medicine or drug have you been using? How much? JUST TYLENOL 2, THIS MORNING

Time of use? NO ANSWER

Where were the drugs used? (Location) —

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED
06-10-93 1130	1205	1245	1345

CONTROL #	EXAMINING OFFICER	SERIAL NO	DIVISION	UNAVAILABLE DATES	REVIEWED BY
93-10	HALLENBECK	26129	STD	—	TE PAGE

DRUG INFLUENCE EVALUATION Page 2 of 2

LOG NO.	DRE: Officer J. Hallenback	ARRESTEE: Clinton Williams

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Clinton Williams, took place in the DRE examination room Southwest Div., LAPD

2. WITNESS: Arresting Officer - Officer P. Felix #14117, South Traffic Division

3. BREATH TEST: Writer administered breath test to Williams, the result was 0.00%

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: I was advised via dispatch to respond to Southwest Division to conduct an evaluation at the request of Officer Felix. Officer Felix stated that the subject had been a driver of a vehicle involved in a fatal crash.

5. INITIAL OBSERVATIONS: Writer first observed the defendant standing next to the breath testing instrument at the rear door of Southwest Station. He was standing upright on his own without assistance and was not swaying.

6. MEDICAL PROBLEMS: The defendant did state that high blood pressure runs in his family and defendant sometimes stutters uncontrollably.

7. PSYCHOPHYSICAL TESTS: During the instruction portions of all the divided attention tests. Defendant appeared to be confused. When asked if he understood the instructions of the test, Williams would say "yes" or "yeah" but would still appear to be confused. I had to continually show the defendant how to perform the test, and after the defendant would perform the test, he would still appear to not have understood what he had just done. The defendant would not complete or even attempt to complete the walk and turn test. He just stated "This is impossible" and stand there staring at the line on which he had been standing. I had to physically move the defendant's right foot in front of his left foot on the line during the instruction phase, even after repeated demonstrations he didn't seem to understand. Romberg Balance: Subject estimated 15 seconds as 30 seconds. Williams exhibited non-bilateral impairment on certain divided attention tasks: for example during the finger to nose test, he correctly touched his nose with his right index finger, but missed on all three occasions with his left hand.

8. CLINICAL INDICATORS: Subjects pulse and systolic blood pressure were above the normal range. He was sweating heavily around the neck and chest area. Pupils were unequal (1 millimeter) in all light levels.

9. SIGNS of INGESTION: None were evident

10. STATEMENTS: Defendant stated "I do not use (stutter pause) drugs at all, I only took two Tylenol this morning. (long pause 10 -seconds) I don't drink that much anymore, either."

11. OPINION of EVALUATOR: In my opinion, Clinton Williams is not exhibiting any symptoms of drug intoxication but was possibly exhibiting signs of mental impairment.

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a urine sample

One Hour and Thirty-Five Minutes

SESSION XIX

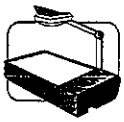
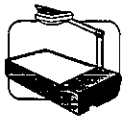
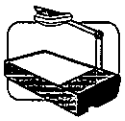
INHALANTS

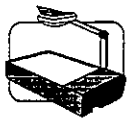
SESSION XIX INHALANTS

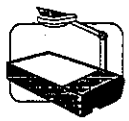
Upon successfully completing this session, the participant will be able to:

- 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.
- Explain the symptoms, observable signs and other effects associated with this category.
- Explain the typical time parameters, i.e., onset and duration of effects, associated with this category.
- State the clues that are likely to emerge when the drug evaluation and classification process 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 Section.

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

Aides	Lesson Plan	Instructor Notes
	INHALANTS	Total Lesson Time: Approximately 95 Minutes Session title on wall chart.
 **XIX-OA&B** (Objectives)		Briefly review the objectives, content and activities of this session.
 **15 Minutes**	A. Overview of the Category	
	1. Inhalants are breathable chemicals that produce mind altering results. a. Inhalants vary widely in terms of the chemicals involved and the specific effects produced. b. Depending on the nature of the particular Inhalant, the effects produced may be similar to those of Stimulants, Depressants or Hallucinogens.	INSTRUCTOR NOTES: Inhalants are sometimes called "Deliriants," in that they may produce delirium. Delirium is usually a brief state characterized by incoherent excitement, confused speech, restlessness and possible hallucinations.
 **XIX-1** ("Major Types of Inhalants")	2. There are three major subcategories of Inhalants. a. Volatile Solvents b. Aerosols c. Anesthetic gases	
	3. The <u>Volatile Solvents</u> include a large number of readily available substances, none of which are intended by their manufacturers to be used as drugs.	"Volatile" means that they evaporate easily to produce fumes.
	a. One widely abused Volatile	Ask students to name a

Aides	Lesson Plan	Instructor Notes
XIX-2 ("Volatile Solvents")	Solvent is plastic cement, or "model airplane glue".	Volatile Solvent that often is abused as a drug.
	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	Contains Naphtha Rubber Cements contain Benzene Contains Acetone
 **XIX-3** ("Aerosols")	4. Aerosols are chemicals discharged from a pressurized container by the propellant force of a compressed gas.	Older stocks contain Trichlorethylene.
	a. Commonly abused Aerosols	E.g., Freon, which is now

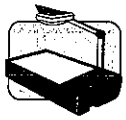
Aides	Lesson Plan	Instructor Notes
	include hair sprays, deodorants, insecticides, glass chillers and vegetable frying pan lubricants.	available primarily in many medical Aerosols. If available, display 35mm slides of typically abused Aerosols.
	b. All of these abused Aerosols contain various hydrocarbon gases that produce drug effects.	
 **XIX-4** ("Typical Abusers")	5. The overwhelming majority of abusers of Volatile Solvents and Aerosols are children. a. Male Inhalant abusers outnumber females	Some reasons: These substances appear in nearly every household. They are inexpensive and readily accessible.
	6. The third subcategory, <u>Anesthetic gases</u>. a. Anesthetic gases are drugs that abolish pain. b. They are used medically during surgical procedures such as childbirth, dental surgery, etc.	Adults may be more frequent users of the anesthetic gases subcategory than of the Aerosols or Volatile Solvents.
 **XIX-5** ("Anesthetic Gases")	c. Anesthetic gases that sometimes are abused as Inhalants:	
	o Ether o Chloroform	These substances have a long history of medical use and illicit use, e.g., Ether abuse dates to the 1790's in England, where it was taken orally. Chloroform was used in 1849 in England as a childbirth anesthetic. Nitrous oxide has been used

Aides	Lesson Plan	Instructor Notes
		since 1845. It is still used in certain dental procedures.
	o Nitrous Oxide	Nitrous Oxide is a propellent 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.
	d. Other comman Inhalants in this subcategory that do not relieve pain are: o Amyl Nitrite o Butyl Nitrite o Isobutyl NitriteButyl nitrite and isobutyl nitrite have essentially identical effects to amyl nitrite.	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. Common slang and brand names for the nitrites are: "Rush" and "Locker Room".
	7. Inhalants obviously are ingested by breathing, or inhaling, their fumes.	
	a. Some are ingested directly from the source.	Examples: Amyl Nitrite and Butyl Nitrite are sold in small glass bottles or bulbs. The user simply opens the bottle and breathes in the fumes. They have been marketed in drug paraphernalia stores as room deodorizers.

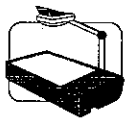
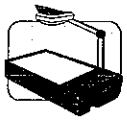
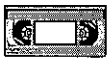
Aides	Lesson Plan	Instructor Notes
	b. Some are soaked into rags, handkerchiefs or tissue papers for repeated inhalation.	
	c. Some are placed in paper or plastic bags which the user places over the face or head. These may be placed in twist lock beverage containers.	
	d. Some are used by breathing the fumes or vapors from balloons.	Solicit students' comments or questions concerning this overview of Inhalants.
 **10 Minutes**	B. Possible Effects	
	1. The effects of Inhalants vary somewhat from one substance to another.	
 **XIX-6** ("Effects of Inhalants")	2. Common effects of Inhalants include:	
	a. Inebriation similar to alcohol intoxication.	In fact, many of the Inhalants are classified as Depressants in medical texts. Their effects, consequently, often mirror Alcohol intoxication.
	b. Bizarre thoughts.	
	c. Dizziness and numbness.	
	d. Euphoria and grandiosity.	
	e. Floating sensations.	
	f. Distorted perceptions of space and time.	

Aides	Lesson Plan	Instructor Notes
	g. Possible hallucinations. h. Nausea and excessive salivation. i. Drowsiness and weakness. j. Light headedness. k. Altered shapes and colors. l. Antagonistic behavior. m. Intense headaches.	
	3. Persons under the influence of Inhalants generally will appear confused and disoriented, and their speech will be slurred.	Solicit students' questions and comments concerning possible effects of Inhalants.
5 Minutes	C. On-Set and Duration of Effects	
	1. Inhalants' effects are felt virtually immediately.	Point out that the route of passage of the drugs from lungs to brain can be traveled very quickly.
	2. Duration very much depends on the particular substance.	
	a. Amyl Nitrite, Isobutyl Nitrite, Butyl Nitrite produce effects that last a few seconds up to 20 minutes.	Inhalation of these produces a distinct "rush" similar to that of the related substance, Nitrous Oxide. Users claim these Nitrites enhance sexual excitement. This may occur from dilation of genital arteries (vasodilation) and relaxation of other smooth muscles.

Aides	Lesson Plan	Instructor Notes
	b. The effects of nitrous oxide last 5 minutes or less.	
	c. Glue, paint, gasoline and other commonly abused Inhalants produce effects that last several or more hours.	Point out that residue of these substances may be deposited inside the nostrils, causing the user to breathe the fumes constantly. Solicit students' comments and questions concerning the time parameters of Inhalants.
 **5 Minutes**	D. Overdose Signs and Symptoms	
	1. There is a risk of death due to overdose of Inhalants.	All 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.
	a. Some Inhalants will depress the Central Nervous System to the point where respiration ceases.	
	b. Others can produce instant death from heart failure.	
	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.	
	2. Death can also result indirectly, if a person places a plastic bag over the head, loses consciousness and suffocates.	

Aides	Lesson Plan	Instructor Notes
	3. Long term abuse of Inhalants can cause permanent damage to the Central Nervous System,and greatly reduced mental and physical abilities.	
	4. Evidence also exists of liver, kidney, bone and bone marrow damage resulting from long term Inhalant abuse.	
	5. There is not well defined withdrawal syndrome with these substances. Physical dependence has not been documented, although habituation is common.	Solicit students' questions and comments concerning overdose signs and symptoms.
60 Minutes	E. Expected Results of the Evaluation.	
	1. Observable evidence of impairment.	Emphasize that, with Inhalants, there is significant variation in effects from one substance to another.
 **XIX-7A** ("SFST Evidence")	a. Standardized Field Sobriety Tests.	
	o Horizontal Gaze Nystagmus will generally be present.	Point out that immediate onset of Nystagmus may be observed.
	o Vertical Nystagmus may be present.	Point out that high doses (for that individual) of Inhalants may produce Vertical Nystagmus.
	o Performance on the Walk and Turn and One Leg Stand tests will be impaired.	Point out that subjects will tend to take slow, deliberate steps on the Walk and Turn, and will tend to stagger.

Aides	Lesson Plan	Instructor Notes
	o Performance on the Romberg and Finger to Nose tests will be impaired.	Point out that subjects will tend to sway when performing this test.
 **XIX-7B** ("General Indicators")	b. General indicators o odor of the inhaled substance o possible traces of the substance around the face and nose and on the hand or clothing o bloodshot, watery eyes o confused, disoriented appearance o muscle tone varies o flushed face, possibly sweating o slow, thick, slurred speech o non-communicative	
	2. Evidence associated with the physiologic examinations.	
 **XIX-7C** ("Eye Examinations")	a. Eye examinations o Lack of Convergence will be present.	
	o Pupil size will be normal but may be dilated.	Anesthetic gases may produce some dilation, although usually not to the extent seen with Stimulants or Hallucinogens. No Inhalants produce pupillary constriction.

Aides	Lesson Plan	Instructor Notes
 **XIX-7D** ("Vital Signs Examinations")	o Reaction to light will be slowed. b. Vital signs examinations o blood pressure will be up or down o pulse will be up o effect on body temperature may be up, down or normal.	NOTE: The Anesthetic Gases generally lower blood pressure while elevating pulse rate. The Volatile Solvents and the Aerosols usually elevate both blood pressure and pulse rate. 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. 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.
 **XIX-8** ("Inhalants Symptomatology Chart")	3. Summary	
	4. Demonstrations a. Video tape demonstrations (if available) b. Drug Evaluation and Classification exemplar demonstrations	Show video tape of subject(s) under the influence of Inhalants. Relate behavior/ observations to the Symptomatology Chart. Refer students to the exemplars found at the end of Section XIX of their student manuals. Relate the items noted on the exemplars to the Symptomatology chart.

Aides	Lesson Plan	Instructor Notes
		Solicit students' comments and questions concerning expected results of the evaluation of subjects under the influence of Inhalants.

Session XIX

Inhalants

Inhalants

Upon successfully completing this session, the participant 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
- Explain the symptoms, observable signs, and other effects associated with this category

Inhalants
(continued)

- Explain the typical time parameters, (i.e., on-set and duration of effects, associated with this category)
- State the clues that are likely to emerge when the drug evaluation and classification process 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 section

Major Types of Inhalants

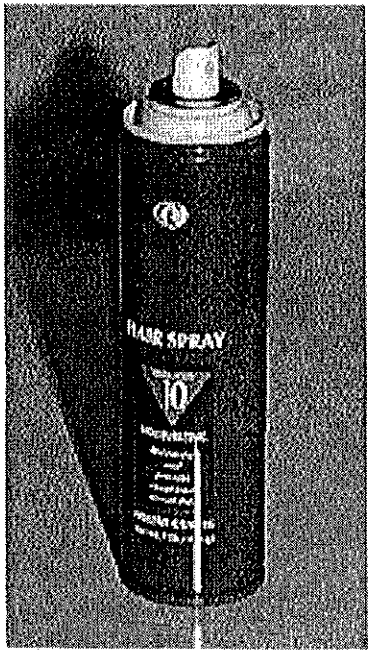
- Volatile solvents
- Aerosols
- Anesthetic gases

Volatile Solvents

- Plastic cement ("model airplane glue")
- Petroleum products
  - Gasoline
  - Kerosene
- Lighter fluid
- Household cements and glue
- Fingernail polish remover
- Paint thinners
- Typewriter correction fluid
- Paints (particularly oil or solvent based)
- Dry cleaning fluids
- Spray paints

Aerosols

- Hair sprays
- Deodorants
- Insecticides
- Glass chillers
- Frying pan lubricants

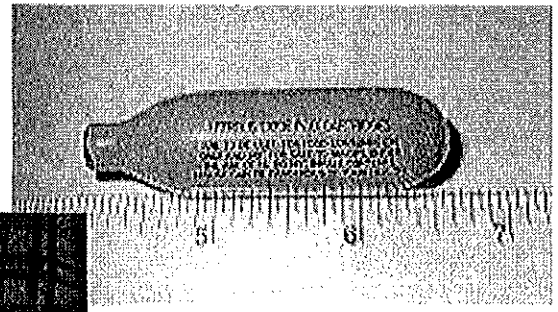


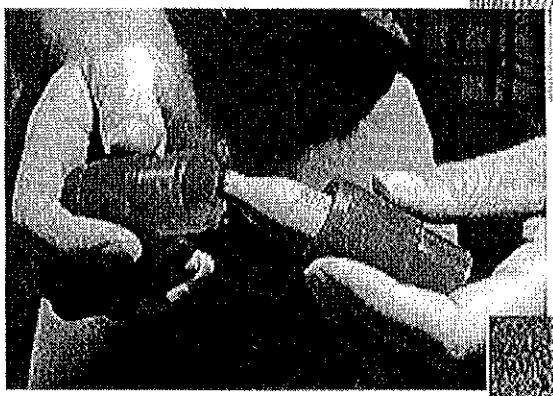
Typical Abusers of Inhalants

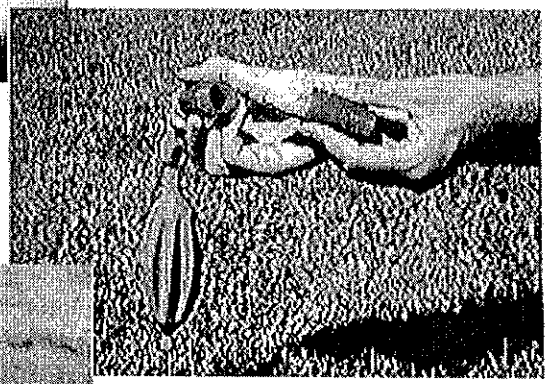
- Children aged 10-15
- Males outnumber females
- Poor children are significantly overrepresented

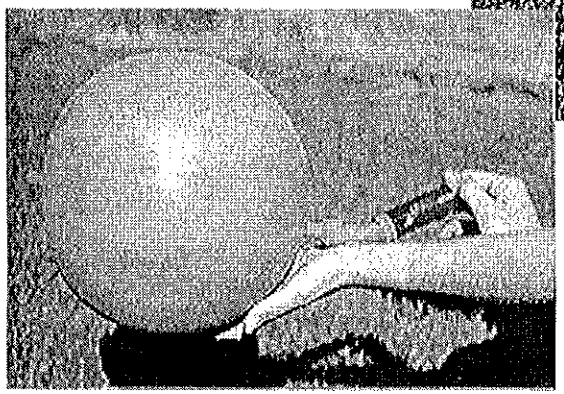
Anesthetics

- Ether
- Chloroform
- Nitrous Oxide
- Amyl Nitrite
- Butyl Nitrite
- Isobutyl Nitrite









Effects of Inhalants

- Inebriation similar to alcohol intoxication
- Bizarre thoughts
- Dizziness and numbness
- Euphoria and grandiosity
- Floating sensations
- Distorted perceptions of space and time
- Possible hallucinations
- Nausea and excessive salivation
- Drowsiness and weakness
- Lightheadedness
- Altered shapes and colors
- Antagonistic behavior
- Intense headaches

Evaluation of Suspects Under the Influence of Inhalants

669000

SFST Evidence:

- Horizontal gaze nystagmus will be present
- Vertical nystagmus present (high dose for that individual person)
- Impaired performance will be evident on Walk and Turn and One Leg Stand
- Impaired performance will be evident on Romberg and Finger to Nose

Evaluation of Suspects Under the Influence of Inhalants

General Indicators:

- Odor of the inhaled substance
- Possible traces of the substance around the face and nose
- Bloodshot, watery eyes
- Confused, disoriented appearance
- Lack of muscle control
- Flushed face, possibly sweating
- Slow, thick, slurred speech
- Non-communicative

Evaluation of Suspects Under the Influence of Inhalants

Eye Examinations:

- Lack of convergence will be present
- Pupil size normal*
- Pupil reaction to light will be slow

*may be dilated

Evaluation of Suspects Under the Influence of Inhalants

Vital Signs:

- Blood pressure may be up or down*
- Pulse will be up
- Effect on body temperature will be up, down or normal

*up with volatile solvents or aerosols; down with anesthetic gases

Inhalants Symptomatology Chart

HGN	Present
Vertical Nystagmus	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

*But may be dilated

**Up with volatile solvents or aerosols; down with anesthetic gases

000704

Page 1 of 2

DRUG INFLUENCE EVALUATION

EVALUATOR: BUSTRUM, ROB
BOOKING NO. 023 | DR. XIX-1

ARRESTEE'S NAME (LAST, FIRST, MI): BROWNLEE, MICHAEL M | AGE 18 | SEX M | RACE H
ARRESTING OFFICER (NAME, SERIAL #, DIV.): BLEA, J. 779 DPD

DATE EXAMINED/TIME/LOCATION: 7-2-96 2200 DPD TRAFFIC DIV
BREATH RESULTS: ☐ Refused Results 0.00 Instrument # 1234
CHEMICAL TEST: ☐ Both Tests Refused ■ Urine ☐ Blood

MIRANDA WARNING GIVEN: ■ Yes ☐ No Given by: R. BUSTRUM
What have you eaten today? HAMBURGER When? 6 PM
What have you been drinking? How much? JUST WATER N/A Time of last drink? N/A
Time now? ABOUT 10 When did you last sleep? How long? LAST NIGHT 6
Are you sick or injured? ☐ Yes ■ No
Are you diabetic or epileptic? ☐ Yes ■ No
Do you take insulin? ☐ Yes ■ No
Do you have any physical defects? ☐ Yes ■ No
Are you under the care of a doctor/dentist? ☐ Yes ■ No
Are you taking any medication or drugs? ☐ Yes ■ No

ATTITUDE: COOPERATIVE BUT DAZED
COORDINATION: VERY POOR COULD BARELY STAND
SPEECH: SLURRED / MUMBLED
BREATH: CHEMICAL ODOR LIKE PAINT
FACE: PAINT SMEARS UPPER LIP AND CHIN

CORRECTIVE LENS: ■ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ☐ Normal ☐ Bloodshot ■ Watery
Blindness: ■ None ☐ L Eye ☐ R. Eye
Tracking: ■ Equal ☐ Unequal
PUPIL SIZE: ■ Equal ☐ Unequal (explain)
HGN Present: ■ Yes ☐ No
Able to follow stimulus: ■ Yes ☐ No
Eyelids: ■ Normal ☐ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 104, 2210	Lack of Smooth Pursuit	YES	YES
2. 102, 2224	Max. Deviation	YES	YES
3. 104, 2240	Angle of Onset	30°	30°

Vertical Nystagmus? ☐ Yes ■ No
Convergence: Right Eye ✓ Left Eye ✓

ONE LEG STAND: TEST STOPPED (SUBJ) FELL

BALANCE EYES CLOSED: TEST STOPPED STAGGERED NEARLY FELL

WALK AND TURN TEST: TEST STOPPED COULD NOT STAND

Cannot keep balance VVV
Starts too soon

	1st Nine	2nd Nine
Stops Walking		
Misses Heel-Toe		
Steps off Line		
Raises Arms		
Actual Steps Taken		

	L	R
Sways while balancing.	☐	☐
Uses arms to balance.	☐	☐
Hopping.	☐	☐
Puts foot down.	☐	☐

INTERNAL CLOCK: N/A Estimated as 30 sec.
Describe Turn: N/A
Cannot do Test (explain): UNABLE TO STAND HEEL-TOE
Type of Footwear

○ Right △ Left
Draw lines to spots touched
SUBJ USED PALM OF HAND TO TOUCH NOSE ON ALL TRIES

TEST ADMINISTERED IN SEATED POSITION

PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	4.0	6.5	6.0	3.5
Right Eye	4.0	6.5	6.0	3.5

NASAL AREA: DRIP PAINT UPPER LIP
ORAL CAVITY: ODOR OF PAINT

HIPPUS: ☐ Yes ■ No
REBOUND DILATION: ☐ Yes ■ No
Reaction to Light: NORMAL

BLOOD PRESSURE: 140 / 100 TEMP: 98.6°
MUSCLE TONE: ■ Near Normal ☐ Flaccid ☐ Rigid
Comments:

RIGHT ARM: PAINT SMEARS
LEFT ARM: PAINT SMEARS
PAINT SMEARS

ATTACH PHOTOS OF FRESH PUNCTURE MARKS

What medicine or drug have you been using? I SNIFFED A LITTLE GOLD How much? NOT MUCH
Time of use? ABOUT 8
Where were the drugs used? (Location) IN THE PARK

DATE/TIME OF ARREST: 7-2-96 2130
TIME DRE NOTIFIED: 2145
EVAL START TIME: 2200
TIME COMPLETED: 2245

CONTROL #
EVALUATING OFFICER: R. Bustrum
SERIAL NO: 9822 DIVISION: DRD
UNAVAILABLE DATES
REVIEWED BY: M. Joyce

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Sgt. Rob Bustrum	ARRESTEE: Michael M. Brownlee

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Michael M. Brownlee, took place in the DRE room, Traffic Office, Denver PD

2. WITNESS: Arresting Officer John Blea, Denver Police Department

3. BREATH TEST: Arresting Officer John Blea, administered breath test to Brownlee, the result was 0.00%.

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was contacted by radio and advised to return to the holding facility to conduct a DRE evaluation. Officer Blea stated he had arrested the subject for failing to obey a traffic control device, at Colfax and 6th Ave. Subject was uncooperative, uncoordinated, and unable to perform the SFSTs. A can of Krylon Gold spray paint was found on the front seat of the subjects vehicle along paint soaked rags.

5. INITIAL OBSERVATIONS: Writer observed subject seated in the DRE room, he appeared passive and dazed. Gold colored paint smears were visible on his hands chin and upper lip.

6. MEDICAL PROBLEMS: None noted or stated

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject unable to perform test, and it was terminated for his safety. Walk and Turn: Subject unable to perform test, and it was terminated for his safety. One Leg Stand: Subject unable to perform test, and it was terminated for his safety. Finger to Nose: Subject was seated and used the palm of his hand to touch his nose on each attempt.

8. CLINICAL INDICATORS: Subject had HGN, and Lack of Convergence. His pulse and blood pressure were above the normal range.

9. SIGNS of INGESTION: Subject's breath had a strong chemical odor "like paint." There were gold colored paint smears on his face and hands.

10. STATEMENTS: Subject was asked "how much paint did you sniff today?" He replied, "I sniffed a little gold - not to much - just a little bit". When asked when and where he'd sniffed, he replied, "about 8 o'clock in the park".

11. OPINION of EVALUATOR: In my opinion Michael M. Brownlee is under the influence of an Inhalant and unable to operate a vehicle safely.

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a urine sample.

13. MISCELLANEOUS:

000706

Page 1 of 2

DRUG INFLUENCE EVALUATION

EVALUATOR: TIDWELL, Jerry
BOOKING NO. 024
DR. X1X-2

ARRESTEE'S NAME (LAST, FIRST, MI): DERBY, ADELE S.
AGE: 16 | SEX: F | RACE: W
ARRESTING OFFICER (NAME, SERIAL #, DIV.): TIDWELL, J 617 CHP

DATE EXAMINED/TIME/LOCATION: DEC 7, 1996 2000 STOCKTON PD
BREATH RESULTS: Results 0.03 ☐ Refused Instrument # 1234
CHEMICAL TEST: ☐ Urine ☐ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ☒ Yes ☐ No
Given by: J. TIDWELL
What have you eaten today? When? SOME PIZZA RIGHT AFTER SCHOOL
What have you been drinking? How much? COUPLE OF WINE COOLERS 2
Time of last drink? 7PM

Time now? ABOUT 8PM
When did you last sleep? How long? LAST NIGHT 7HRS
Are you sick or injured? I FEEL DIZZY & WOOZY ☒ Yes ☐ No
Are you diabetic or epileptic? ☐ Yes ☒ No

Do you take insulin? ☐ Yes ☒ No
Do you have any physical defects? ☐ Yes ☒ No
Are you under the care of a doctor/dentist? ☐ Yes ☒ No

Are you taking any medication or drugs? ☐ Yes ☒ No
ATTITUDE: COOPERATIVE VERY SLOW TO RESPOND
COORDINATION: POOR STAGGERING

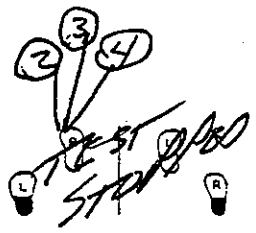
SPEECH: SLOW, SLURRED AND LOW
BREATH: DISTINCT ODOR OF GASOLINE
FACE: FLUSHED

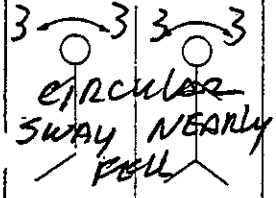
CORRECTIVE LENS: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ☐ Normal ☒ Bloodshot ☒ Watery
Blindness: ☒ None ☐ L. Eye ☐ R. Eye
Tracking: ☒ Equal ☐ Unequal

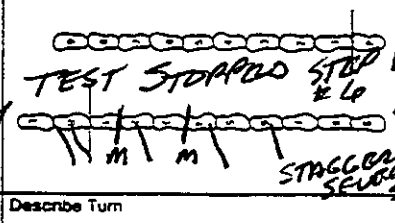
PUPIL SIZE: ☒ Equal ☐ Unequal (explain)
HGN Present: ☒ Yes ☐ No
Able to follow stimulus: ☒ Yes ☐ No
Eyelids: ☒ Normal ☐ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 100 : 2010	Lack of Smooth Pursuit	YES	YES
2. 100 : 2024	Max. Deviation	YES	YES
3. 100 : 2036	Angle of Onset	35°	35°

Vertical Nystagmus? ☐ Yes ☒ No
Convergence: Right Eye ☒ Left Eye ☒

ONE LEG STAND


BALANCE EYES CLOSED


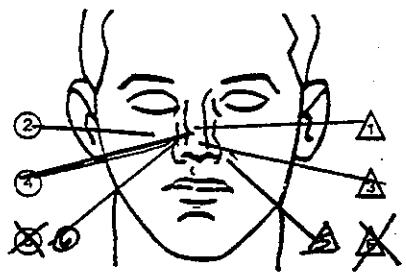
WALK AND TURN TEST


Cannot keep balance: W
Starts too soon:

	1st Nine	2nd Nine
Stops Walking		
Misses Heel-Toe	W	
Steps off Line	W	
Raises Arms		
Actual Steps Taken	6	

L R
☐ ☐ Sways while balancing.
☐ ☐ Uses arms to balance.
☐ ☐ Hopping.
☐ ☐ Puts foot down.

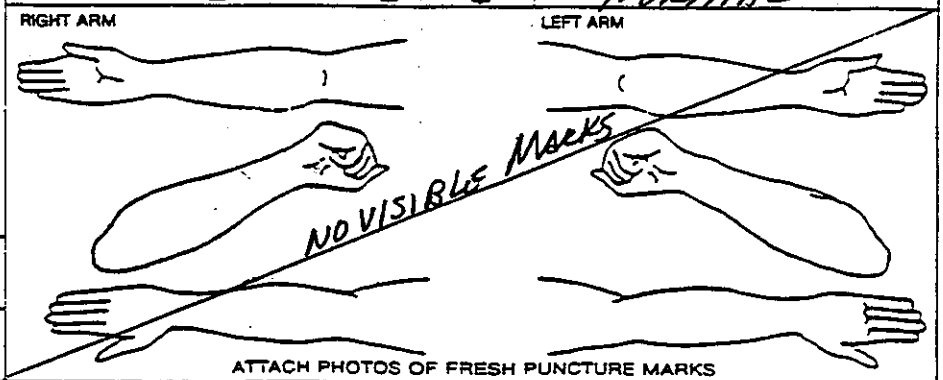
INTERNAL CLOCK: 19 Estimated as 30 sec.
Describe Turn:
Cannot do Test (explain): TEST STOPPED WHEN NEARLY FELL
Type of Footwear: TENNIS SHOES

○ Right △ Left
Draw lines to spots touched


PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	5.0	6.5	6.0	4.5
Right Eye	5.0	6.5	6.0	4.5

NASAL AREA: RUNNY NOSE ODOR OF GASOLINE
ORAL CAVITY: ODOR OF GASOLINE

HIPPUS: ☐ Yes ☒ No
REBOUND DILATION: ☐ Yes ☒ No
Reaction to Light: NORMAL

RIGHT ARM / LEFT ARM


ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 146 / 104
TEMP: 98.8°
MUSCLE TONE: ☒ Near Normal ☐ Flaccid ☐ Rigid
Comments:

What medicine or drug have you been using? How much? I DIDN'T SNIFF ANYTHING
Time of use? I DON'T DO GAS
Where were the drugs used? (Location) I DIDN'T DO IT TONIGHT

DATE/TIME OF ARREST: DEC 7, 1996 1920 HRS
TIME DRE NOTIFIED: 1920
EVAL START TIME: 2000
TIME COMPLETED: 2040

CONTROL #
EXAMINING OFFICER: J. Tidwell
SERIAL NO: 617
DIVISION: CHP
UNAVAILABLE DATES:
REVIEWED BY:

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Lt. Jerry Tidwell	ARRESTEE: Adele S. Derby

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Adele S. Derby, took place in the DRE room, Central Testing Unit, Stockton P.D.

2. WITNESS: Arnie Trotter, California Office of Traffic Safety

3. BREATH TEST: Writer administered breath test to Derby, the result was 0.03%.

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was the arresting officer.

5. INITIAL OBSERVATIONS: Writer observed subject walking northbound in the northbound lane of traffic on State St. Vehicular traffic was moderate to heavy, and oncoming vehicles were forced to swerve to avoid her. She was staggering, stumbling, and reeling as she walked.

6. MEDICAL PROBLEMS: None noted or stated

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject swayed approximately 3" in a circular manner, nearly fell and estimated 19 seconds as 30 seconds. Walk and Turn: Subject lost his balance during the instructions, staggered and nearly fell. The test was terminated for subject's safety. One Leg Stand: Test was terminated for the subject's safety. Finger to Nose: Subject was seated, and missed the tip of her nose each time. On #5 and #6 subject used the wrong finger.

8. CLINICAL INDICATORS: Subject had HGN, and Lack of Convergence. Her pulse and blood pressure were above the normal range.

9. SIGNS of INGESTION: Subject's breath had a strong odor of gasoline.

10. STATEMENTS: Subject was asked "where did you sniff the gasoline?" She replied, "I didn't sniff anything, I don't do gas." Subject was then told that there was an odor of gasoline on her breath and asked "what time did you sniff the gas?" She replied, "I didn't do it tonight."

11. OPINION of EVALUATOR: In my opinion Adele S. Derby is under the influence of an Inhalant and unable to operate a vehicle safely.

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a urine sample.

13. MISCELLANEOUS:

Sixty Minutes

SESSION XX

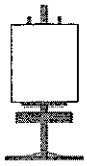
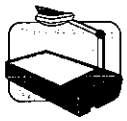
PRACTICE: VITAL SIGNS EXAMINATIONS

SESSION XX PRACTICE: VITAL SIGNS EXAMINATIONS

Upon successfully completing this session, the participants will be able to:

- o Conduct examinations of pulse and blood pressure.
- o Articulate the vital signs examination procedures.
- o Document the results of the vital signs examinations.

Content Segments	Learning Activities
A. Procedures For This Session	o Instructor Led Presentations
B. Pulse Measurements	o Students Hands On Practice
C. Blood Pressure Measurements	o Instructor Led Coaching
D. Session Wrap Up	o Student Led Coaching

Aides	Lesson Plan	Instructor Notes
  **XX-O** (Objectives)  **10 Minutes**	PRACTICE: VITAL SIGNS EXAMINATIONS A. Procedures For This Session 1. Participants will work in three or four member teams. a. At any given time, one member of the team will be engaged in conducting and recording vital signs examinations of another member. b. The remaining member(s) will help coach and critique the student who is conducting the examinations. c. Students will take turns serving as test administra-- tor, test subject and coach. 2. Teams initially will practice taking one another's pulse.	Total Lesson Time: Approximately 60 Minutes Point out "Practice Sessions" wallchart. Briefly review the objectives, content and activities of this session. REFER TO CHAPTER VII IF THERE ARE ANY QUESTIONS ON VITAL SIGNS. Make team assignments. Emphasize that students can help each other learn by pointing out errors of omission or commission. Point out 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.

Aides	Lesson Plan	Instructor Notes
		Then, the administrator and coach can compare the measurements they obtain. Demonstrate this, using a student subject and two instructors.
	3. Teams subsequently will practice taking one another's blood pressure.	NOTE: If specially designed training stethoscopes are available, the student coach can "listen in" on the blood pressure measurements being taken by the student administrator.
	4. Students will record their measurements, using the Vital Signs Examination Data Sheet.	Hand out copies of the Vital Signs Examination Data Sheet to each student. Solicit students' questions concerning procedures for this practice session.
 **20 Minutes**	B. Pulse Measurements	Monitor teams and coach students as necessary and appropriate. Terminate this segment after 20 minutes, or after each student has administered a pulse measurement to each of their team members (whichever comes first).
 **25 Minutes**	C. Blood Pressure Measurements	Monitor teams and coach students as necessary and appropriate. If a training Stethoscope is available, "listen in" on occasional blood pressure measurements to verify that the students are taking accurate measurements.

Aides	Lesson Plan	Instructor Notes
		Terminate this segment after 25 minutes, or after each student has measured the blood pressure of each member of their team (whichever comes first).
 **5 Minutes**	D. Session Wrap up	Offer appropriate comments and observations about the students' performance. Solicit students' comments concerning the practice session.

VITAL SIGNS EXAMINATIONS DATA SHEET

EXAMINER'S NAME _____

DATE _____/_____/_____

PULSE MEASUREMENTS

SUBJECT'S NAME _____

TIME _____

PULSE POINT USED _____

BEATS PER MINUTES _____

BLOOD PRESSURE MEASUREMENTS

SUBJECT'S NAME _____

TIME _____

SYSTOLIC _____

DIASTOLIC _____

SUBJECT'S NAME _____

TIME _____

PULSE POINT USED _____

BEATS PER MINUTES _____

SUBJECT'S NAME _____

TIME _____

SYSTOLIC _____

DIASTOLIC _____

SUBJECT'S NAME _____

TIME _____

PULSE POINT USED _____

BEATS PER MINUTES _____

SUBJECT'S NAME _____

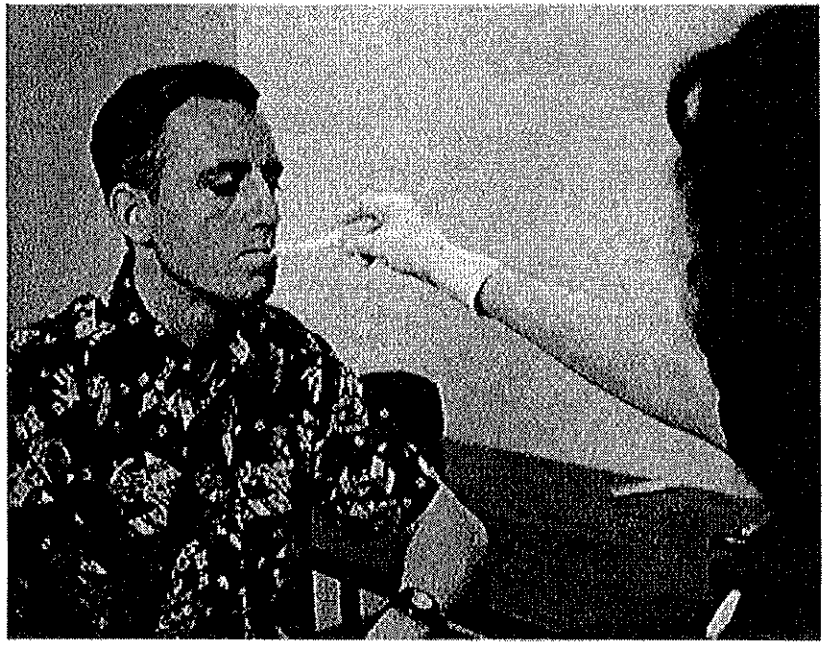
TIME _____

SYSTOLIC _____

DIASTOLIC _____

Session XX

Practice:
Vital Signs Examinations



Practice:
Vital Signs Examinations

000715

Upon successfully completing this session, the participants will be able to:

- Conduct examinations of pulse and blood pressure
- Articulate the vital signs examination procedures
- Document the results of the vital signs examinations

One Hour and Twenty-Five Minutes

SESSION XXI

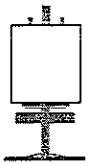
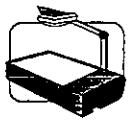
CANNABIS

SESSION XXI CANNABIS

Upon successfully completing this session, the participant 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.
- Explain the symptoms, observable signs and other effects associated with Cannabis.
- Explain the typical time parameters, i.e., onset and duration of effects, associated with Cannabis.
- State the clues that are likely to emerge when the Drug Evaluation and Classification Process is conducted for a person under the influence of Cannabis.
- Correctly answer the "topics for study" questions at the end of this Section.

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

Aides	Lesson Plan	Instructor Notes
  **XXI-OA&B** (Objectives)  **10 Minutes**	CANNABIS	Total Lesson Time: Approximately 85 Minutes Session title on wall chart. Briefly review the objectives, content and activities of this session.
	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.	<u>If available</u>, display 35mm 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.
	a. Cannabis grows readily throughout the temperate zones of the world.	
	b. It has been cultivated for centuries.	<u>Example</u>: At the first permanent English settlement in America, Jamestown, VA, where it was grown to produce hemp.
	2. The primary psychoactive ingredient in Cannabis is Delta-9 Tetrahydrocannabinol.	<u>Point out</u>: "Δ- 9 THC" on wall chart.
	a. THC is found principally in the leaves and flowers of the plant rather than in the stem or branches.	18-20% in a Northern California Study

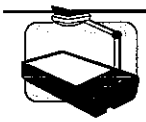
Aides	Lesson Plan	Instructor Notes
	b. Different varieties of the Cannabis have different concentrations of THC.	28-30% - Indoor Cultivated 35-37% Long Beach, CA Study in 1988-89
	c. One variety that has a relatively high concentration of THC is Sinsemilla, which is the unfertilized female Cannabis Sativa plant.	Explanatory note: "Sinsemilla" is a Spanish derivative of the latin expression "sine semina" meaning "without seed".
 **XXI-1** ("Forms of Cannabis")	3. There are four principal forms of Cannabis. a. Marijuana The dried leaves of the plant. b. Hashish Basically a concentrated version of Marijuana, produced by crushing and boiling the leaves and allowing them to dry into a semi-solid mass. c. Hashish Oil Also known as "Hash Oil", a liquid extracted from Hashish.	Show Slides - of Special Types
	d. Marinol (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. Nabilone - A synthetic form of THC and is used as an anti-vomiting agent.	"Dronabinol" is the generic, or chemical name for the synthetic THC. "Marinol" is the trade name used by the Roxane Laboratories, Inc.

Aides	Lesson Plan	Instructor Notes
	4. Cannabis has some limited medical applications.	
	a. It lowers intraocular pressure, which can be helpful for Glaucoma patients.	"Intraocular": within the eyeball. Cannabis lowers the intraocular pressure by dilating in size the blood vessels of the eyes (more size-less pressure) This causes the reddened Sclera that is a key indicator of Cannabis.
	b. It suppresses nausea, and sometimes is recommended for cancer patients to relieve the nausea accompanying chemotherapy.	
	c. Cannabidiol, a non-psychoactive ingredient found in Cannabis, is used in treating Epilepsy; it helps to inhibit seizures.	
	d. Cannabis has also had some limited medical applications as:	Marijuana has been legalized for medical treatment in some states including Arizona and California
	o an appetite enhancer for victims of Anorexia Nervosa;	
	o a muscle relaxant;	
	o a tumor growth retardant.	
	5. Marijuana usually is smoked.	

Aides	Lesson Plan	Instructor Notes
	6. Marijuana, Hashish and Hash oil also can be ingested orally, for example, baked in cookies or brownies and eaten.	
	7. 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.	Solicit students' comments and questions concerning this overview of Cannabis.
	B. Possible Effects	
5 Minutes	1. One major effect of Marijuana is that it appears to interfere with a person's ability to <u>pay attention</u>.	
	a. People under the influence of Marijuana simply seem not to pay attention, or to have very brief attention spans.	
	b. In particular, they do not divide their attention very successfully.	<u>Clarification</u>: They have a difficult time dealing with more than one or two tasks at once.
	c. This can make them very unsafe drivers, since driving requires the ability to divide attention among many simultaneous tasks, i.e.	<u>Ask</u> students: "What are some of the things that drivers have to do simultaneously?"
	o steering o operating the accelerator o signaling o observing other traffic	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.

Aides	Lesson Plan	Instructor Notes
	o recognizing traffic control o devices o shifting d. People under the influence of Marijuana may attend to one or a few of these driving tasks, but simply ignore the other tasks. 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.	Remind students that WAT and OLS are divided attention Field Sobriety Tests.
	2. Other effects of Marijuana. a. Diminished inhibitions b. Impaired perception of time and space c. Disorientation d. Body tremors e. Eyelid tremors	Point out that this may become evident when the suspect attempts to estimate the passage of 30 seconds when performing the Romberg test. Solicit students' comments or questions concerning possible effects of Marijuana.
5 Minutes  **XXI-2** ("On-set and Duration")	C. Onset and Duration of Effects 1. Persons begin to feel and exhibit the effects within 8-9 seconds after smoking Marijuana.	

Aides	Lesson Plan	Instructor Notes
	2. The effects reach their peak within 10-30 minutes.	NOTE: 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.
	3. Depending on the amount smoked and on the concentration of THC in the Marijuana, the person will continue to feel and exhibit the effects for 2 - 3 hours.	
	4. Generally, the person will feel "normal" within 3-6 hours after smoking Marijuana.	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 impaired at 24 hours after smoking Cannabis, only one reported any awareness of the drugs effects.
	a. The user may be impaired long after the euphoric feelings have ceased.	
	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.	Source Marijuana Alert, Peggy Mann (Bibliography) NIDA Study, "Blood Brain Barrier"
	a. Blood tests may disclose Marijuana use for at least 3 days after smoking.	
	b. Urine tests may indicate the presence of metabolites of THC for a month or more.	Solicit students' comments and questions concerning onset and duration factors.
	c. There are two important metabolites, or chemical by-products of THC.	

Aides	Lesson Plan	Instructor Notes
 XXI-3 	o Hydroxy THC, which causes the user to feel euphoric. o Carboxy THC, there is no evidence at this time that it is psychoactive. d. Hydroxy THC usually is eliminated from the blood plasma within six hours. e. Carboxy THC may be found in the blood plasma for several days following Marijuana use. 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. 7. Cannabis principally is eliminated from the body in feces and urine.	Write "Hydroxy THC: Causes Impairment and Euphoria" on the chalkboard or flip chart.
 **5 Minutes**	D. Overdose Signs and Symptoms 1. Excessive or long term use of Marijuana can have very undesirable consequences. 2. Marijuana has been observed to produce sharp personality changes, especially in adolescent users. 3. It can create paranoia and possible psychosis.	

Aides	Lesson Plan	Instructor Notes
	4. Long term effects include:	Ask students: "Is there danger of death from Cannabis overdose?"
	a. Lung damage b. Chronic Bronchitis c. Lowering of Testosterone (male sex hormone)	Answer: It is not likely that there is a direct risk of death from an overdose. However, persons impaired by Cannabis may behave in foolishly dangerous ways, and become injured or killed as a result.
	d. Possible birth defects, still births and infant deaths e. Acute anxiety attacks f. Chronic reduction of attention span g. Increased sensitivity h. Research indicates that life threatening overdoses rarely if ever occur. i. Withdrawal - is similar to alcohol dependence withdrawal.	
	j. Physical dependence can occur with chronic use.	Solicit students' questions concerning signs and symptoms of Cannabis overdose. IF AVAILABLE, BURN SOME "Marijuana AWARENESS WAFERS", TO ACQUAINT THE STUDENTS WITH THE ODOR OF Marijuana. "Marijuana Awareness Wafers" may be obtained at nominal cost from: Drug Prevention Resources, Inc. 214-518-1821, or 1-800-989-3774

Aides	Lesson Plan	Instructor Notes
60 Minutes	E. Expected Results of the Evaluation	
	1. Observable evidence of impairment	
XXI-3A ("SFST Evidence")	a. Standardized Field Sobriety Tests	
	o neither Horizontal nor Vertical Nystagmus will be present.	But 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 produce Nystagmus.
	o performance on the Walk and Turn and One Leg Stand tests will be impaired.	Point out that, with suspects under the influence of Marijuana, poor performance on these tests usually will result principally from their inability to divide attention, and less so from impaired coordination or balance.
	o performance on the Romberg and Finger to Nose tests will be impaired.	Remind students to be especially alert for evidence of the suspect's distorted perception of time when performing the Romberg test.
XXI-3B ("General Indicators")	b. General indicators	
	o odor of burnt Marijuana on suspect's breath, clothing, etc.	NOTE: Odor of Marijuana is similar to odor of burnt rope.

Aides	Lesson Plan	Instructor Notes
	o marked reddening of the Conjunctiva (white part of the eyeball)	Properly called Conjunctival Injection. 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. Visine causes vaso-constriction in the eyes and is often used to reduce the reddening.
	c. Marijuana debris (leaves, seeds, etc.) in mouth or on clothing. o body tremors o disorientation o relaxed inhibitions o muscle tone is normal	
 **XXI-3C** ("Eye Examina-tions")	2. Evidence associated with the physiologic examinations. a. Eye examinations o Lack of Convergence generally will be evident. o pupil size generally will be dilated or possibly normal.	The content and potency could effect pupil size. The higher THC content will increase the likelihood of pupil dilation. However, Cannabis does not cause pupil constriction. Government grown Cannabis has a low THC levels. Studies using it tends to show a normal range of pupil size.

Aides	Lesson Plan	Instructor Notes
	o pupil reaction to light will be normal.	
	o DREs report a phenomenon termed "Rebound Dilation" in suspects under the influence of Marijuana.	Clarification: "Rebound Dilation" is described as fluctuating pupils, with the pupils dilating to increasing size on the expansion fluctuations. NOTE HOWEVER that this phenomenon has not been systematically investigated in controlled research. Draw an eyeball on a balloon and squeeze it to demonstrate the difference between Hippus and Rebound.
 **XXI-3D** ("Vital Signs Examina-tions")	b. Vital signs examinations	
	o blood pressure generally will be up	Vasodilation - allows for greater blood flow but an increase in the amount of heat lost.
	o pulse generally will be up	
	o body temperature will be normal	
 **XXI-4** ("Cannabis Symptomatol ogy Chart")	3. Summary	

Aides	Lesson Plan	Instructor Notes
	4. Demonstrations a. Video tape demonstrations (if available)	Show video tape of suspect(s) under the influence of Cannabis. Relate behavior/observations to the symptomatology chart.
	b. Drug Evaluation and Classification exemplar demonstrations.	Refer students to the exemplars found at the end of Section XXI of their student manuals. Solicit students' comments and questions concerning expected results of the evaluation.

Session XXI

Cannabis

Cannabis

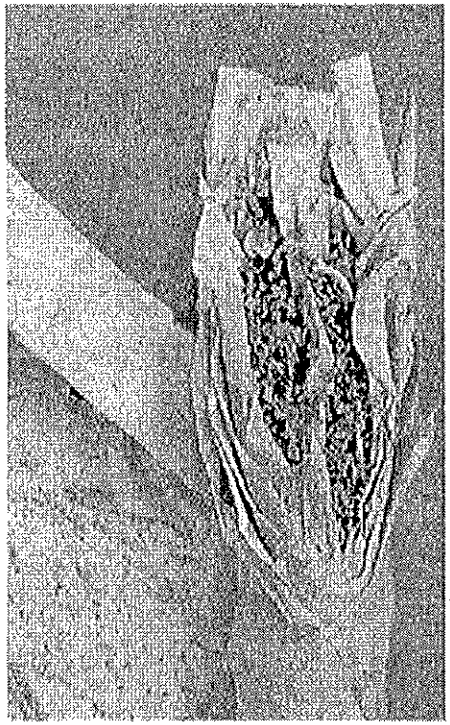
Upon successfully completing this session, the participant will be able to:

- Explain a brief history of Cannabis
- Identify common names and terms associated with Cannabis
- Identify common methods of administration for Cannabis
- Explain the symptoms, observable signs and other effects associated with Cannabis

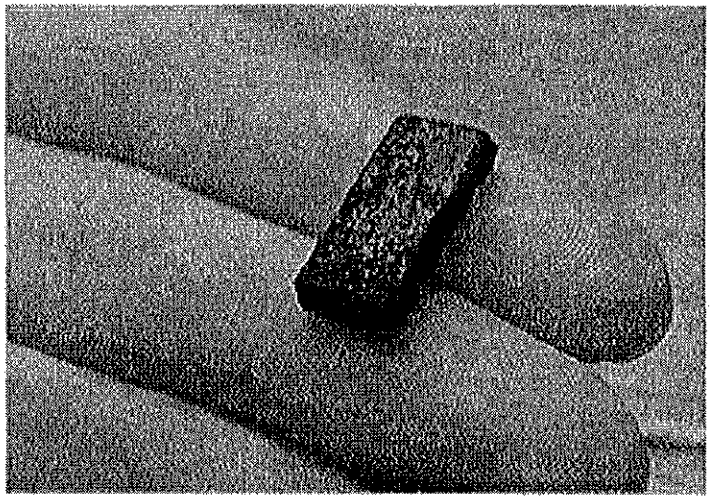
Cannabis (continued)

- Explain the typical time parameters, i.e., on-set and duration of effects, associated with Cannabis
- State the clues that are likely to emerge when the drug evaluation and classification process is conducted for a person under the influence of Cannabis
- Correctly answer the "topics for study" questions at the end of this section

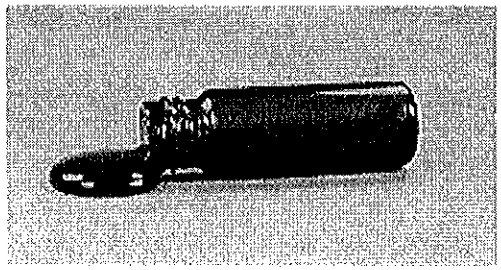
Forms of Cannabis



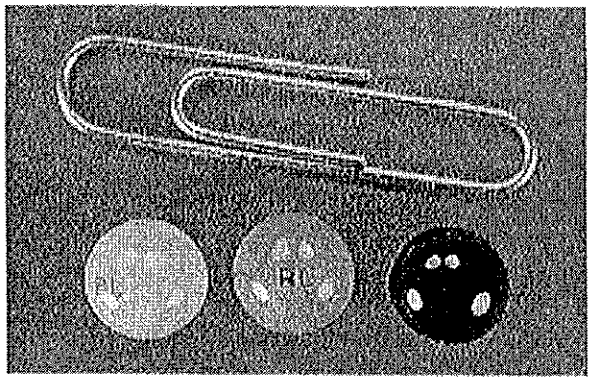
Marijuana



Hashish

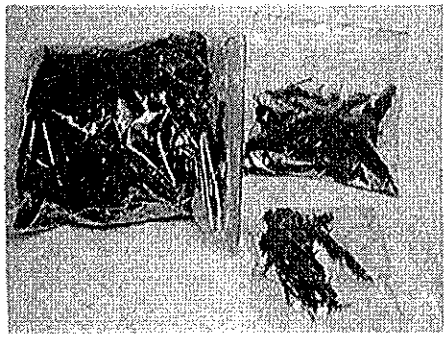


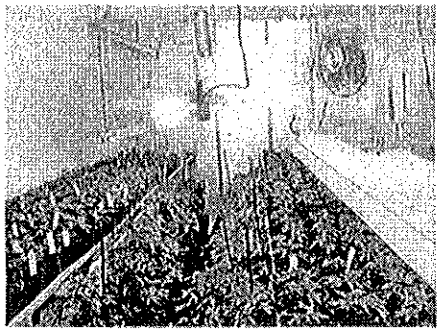
Hashish oil

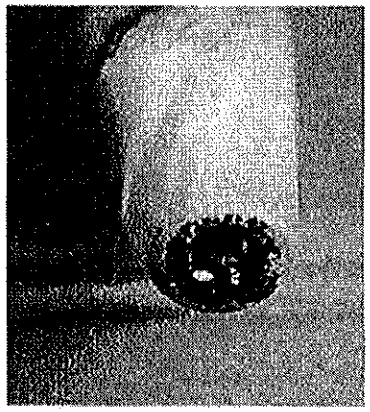


Marinol

On-set 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: for days later, blood and urine tests will continue to disclose evidence of marijuana use

Metabolites of THC

- Hydroxy THC

  Causes impairment and euphoria

- Carboxy THC

  Causes impairment but no euphoria

Evaluation of Suspects Under the Influence of Cannabis

SFST Evidence:

- HGN or Vertical Nystagmus - none
- Impaired performance will be evident on Walk and Turn and One Leg Stand
- Impaired performance will be evident on Romberg and Finger to Nose

Evaluation of Suspects Under the Influence of Cannabis

General Indicators:

- Odor of marijuana
- Marked reddening of conjunctiva
- Marijuana debris in mouth
- Body tremors
- Disorientation
- Relaxed inhibitions

Evaluation of Suspects Under the Influence of Cannabis

Eye Examinations:

- Lack of convergence present
- Pupil size will be dilated*
- Pupil reaction to light will be normal

*possibly normal

Evaluation of Suspects Under the Influence of Cannabis

Vital Signs:

- Blood pressure up
- Pulse up
- Body temperature normal

Cannabis Symptomatology Chart

HGN	None
Vertical Nystagmus	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

000741

Page 1 of 2

DRUG INFLUENCE EVALUATION

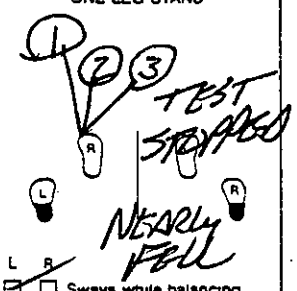
EVALUATOR: GAUNT, STEVE
BOOKING NO: 025
DR#: XXI-1

ARRESTEE'S NAME (LAST, FIRST, MI): CURRY, JERRY R
AGE: 56 | SEX: M | RACE: B
ARRESTING OFFICER (NAME, SERIAL #, DIV.): BURSTEN, D. 909 ISP
DATE EXAMINED/TIME/LOCATION: 11-5-96 2200 MARION CITY S.O.
BREATH RESULTS: Results 0.00 ☐ Refused Instrument # 1234
CHEMICAL TEST: ☐ Urine ☐ Blood ☐ Both Tests Refused
MIRANDA WARNING GIVEN: ☒ Yes ☐ No — Given by: S. GAUNT
What have you eaten today? When? COUPLE OF HOT DOGS AROUND 5PM
What have you been drinking? How much? NOTHING AT ALL N/A
Time of last drink? N/A
Time now? ABOUT 10:30 PM
When did you last sleep? How long? LAST NIGHT 6 HRS
Are you sick or injured? ☐ Yes ☒ No — HELL NO I FEEL GREAT
Are you diabetic or epileptic? ☐ Yes ☒ No — NO - ARE YOU?
Do you take insulin? NO AND I DON'T TAKE A LOT OF S'T ☐ Yes ☒ No
Do you have any physical defects? ☐ Yes ☒ No — HELL I'M ARNOLD SWARTZENEGGER
Are you under the care of a doctor/dentist? ☐ Yes ☒ No
Are you taking any medication or drugs? ☐ Yes ☒ No — DRUGS! HELL NO!
ATTITUDE: BOISTEROUS BUT FAIRLY COOPERATIVE
COORDINATION: NEARLY FELL SEVERAL TIMES
SPEECH: LOUD & BOISTEROUS
BREATH: ODOR OF MARIJUANA
FACE: FLUSED AND SWEATY

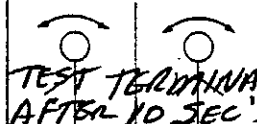
CORRECTIVE LENS: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ☐ Normal ☒ Bloodshot ☒ Watery
Blindness: ☒ None ☐ L. Eye ☐ R. Eye
Tracking: ☒ Equal ☐ Unequal
PUPIL SIZE: ☒ Equal ☐ Unequal (explain)
HGN Present: ☐ Yes ☒ No
Able to follow stimulus: ☒ Yes ☐ No
Eyelids: ☒ Normal ☐ Droopy

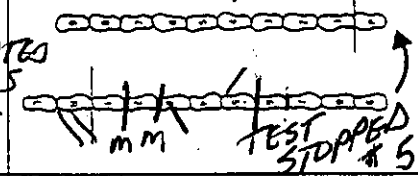
PULSE & TIME	HGN	Left Eye	Right Eye
1. 106 / 2210	Lack of Smooth Pursuit	NO	NO
2. 106 / 2227	Max. Deviation	NO	NO
3. 104 / 2240	Angle of Onset	NONE	NONE

Vertical Nystagmus? ☐ Yes ☒ No
Convergence: Right Eye ☒ Left Eye ☒

ONE LEG STAND


NEARLY FELL
L R ☐ ☐ Sways while balancing.
☐ ☐ Uses arms to balance.
☐ ☐ Hopping.
☒ ☐ Puts foot down.

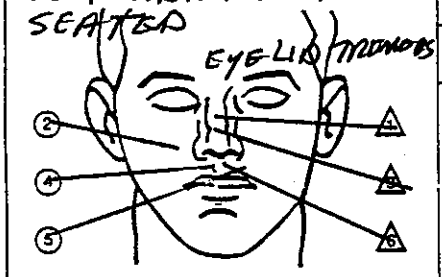
BALANCE EYES CLOSED

TEST TERMINATED AFTER 10 SEC'S STAGGERED + NEARLY FELL

WALK AND TURN TEST — LEGS SHAKING BADLY NEARLY FELL


Cannot keep balance: VV
Starts too soon:

	1st Nine	2nd Nine
Stops Walking		
Misses Heal-Toe	VV	
Steps off Line	✓	
Raises Arms		
Actual Steps Taken		

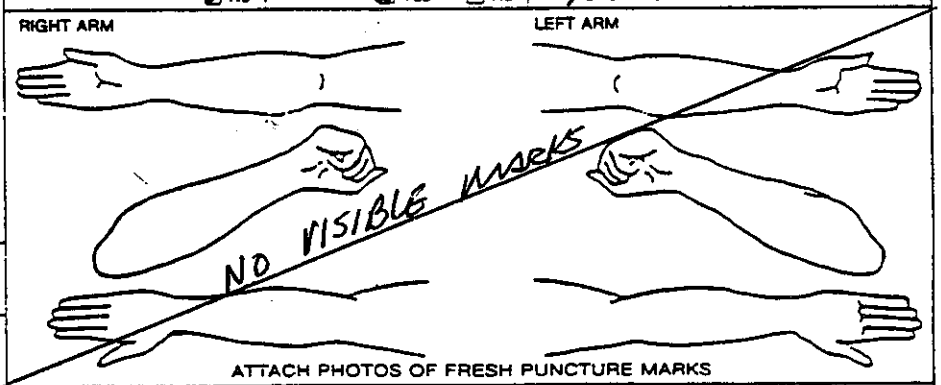
INTERNAL CLOCK: N/A Estimated as 30 sec.
Describe Turn: N/A
Cannot do Test (explain): NEARLY FELL TEST TERMINATED
Type of Footwear: LOAFERS

○ Right △ Left
Draw lines to spots touched


PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	5.5	7.0	6.5	5.0-6.5
Right Eye	5.5	7.0	6.5	5.0-6.5

NASAL AREA: clear
ORAL CAVITY: CLEAR
HIPPUS: ☐ Yes ☒ No
REBOUND DILATION: ☒ Yes ☐ No
Reaction to Light: NORMAL

BLOOD PRESSURE: 154 / 106 TEMP: 98.6°
MUSCLE TONE: ☒ Near Normal ☐ Flaccid ☐ Rigid
Comments:

RIGHT ARM / LEFT ARM


ATTACH PHOTOS OF FRESH PUNCTURE MARKS

What medicine or drug have you been using? DON'T HASSLE ME THIS IS BS
How much? NOT MUCH JUST A LITTLE
Time of use? NO I AIN'T SAYING NO MORE
Where were the drugs used? (Location) NO ANSWER

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED
11-5-96 2115	2150	2200	2245

CONTROL #	EXAMINING OFFICER	SERIAL NO	DIVISION	UNAVAILABLE DATES	REVIEWED BY
	S. Gaunt	2222	ISP		RICHARDSON

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Sgt. Steve Gaunt	ARRESTEE: Jerry R. Curry

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Jerry R. Curry, took place in the DRE room, Marion County Jail.

2. WITNESS: Arresting Officer: Trooper David Bursten, Indiana State Police

3. BREATH TEST: Arresting officer administered breath test to Curry, the result was 0.00%.

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was contacted by radio and advised to return to the holding facility to conduct a DRE evaluation. Trooper Bursten stated he had observed the subject for operating a vehicle at a high rate of speed east bound on Purdue Ave. and weaving around slower traffic. Subject seemed unconcerned about being stopped and readily admitted driving fast. Subject stated, "I'm just out to enjoy myself tonight!"

5. INITIAL OBSERVATIONS: Writer observed subject seated in the breathalyzer room and was laughing loudly and repeatedly saying "The machine says I'm not drunk." There was also reddening of the conjunctiva.

6. MEDICAL PROBLEMS: None noted or stated

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject unable to perform test, and it was terminated for his safety. Walk and Turn: Subject unable to perform test, and it was terminated for his safety. One Leg Stand: Subject unable to perform test, and it was terminated for his safety. Finger to Nose: Subject was seated and missed the tip of his nose on each attempt. Subject also exhibited eyelid tremors.

8. CLINICAL INDICATORS: Subject had lack of convergence, pupils were dilated in near total darkness and rebound dilation was observed. Subject's pulse and blood pressure were above the normal range.

9. SIGNS of INGESTION: Subject's breath had an odor of marijuana.

10. STATEMENTS: Subject initially denied using any drugs. When told he looked and acted like someone who had smoked marijuana, he gigled and said, "come on, don't hassle me: this is bullshit." When asked how much pot he smoked, he replied, "not much just a little." When asked where he smoked, subject paused and said, "No, I ain't saying no more."

11. OPINION of EVALUATOR: In my opinion Jerry R. Curry is under the influence of a Cannabis and unable to operate a vehicle safely.

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a urine sample.

13. MISCELLANEOUS: Subject maintained a jovial and boisterous attitude throughout the entire evaluation

EVALUATOR: JOHN, CLARK

Page 1 of 2 **DRUG INFLUENCE EVALUATION**

BOOKING NO.	DR.
027	XXI-2

ARRESTEE'S NAME (LAST, FIRST, MI)	AGE	SEX	RACE	ARRESTING OFFICER (NAME, SERIAL #, DIV.)
PELTIER, CHARLES E	34	M	B	GRAHAM, G, 703 CHP

DATE EXAMINED/TIME/LOCATION: 9-11-96 2320 PARKER CTR LAPD
BREATH RESULTS: ☐ Refused Results 0.06 Instrument # 1234
CHEMICAL TEST: ☒ Urine ☐ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ☒ Yes ☐ No Given by: C. JOHN
What have you eaten today? CHICKEN CHOW MEIN When? 3 HRS AGO
What have you been drinking? COUPLE GLASSES OF WINE How much? 2 Time of last drink? 2 HRS AGO

Time now? I HAVE NO IDEA
When did you last sleep? LAST NIGHT I THINK How long? 5 HRS
Are you sick or injured? NO AND I'M NOT DRUNK EITHER ☐ Yes ☒ No
Are you diabetic or epileptic? NO WHY DON'T YOU LET ME GO ☐ Yes ☒ No

Do you take insulin? I DON'T TAKE ANYTHING ☐ Yes ☒ No
Do you have any physical defects? ☐ Yes ☒ No
Are you under the care of a doctor/dentist? ☐ Yes ☒ No

Are you taking any medication or drugs? OF COURSE NOT ☐ Yes ☒ No
ATTITUDE: IMPATIENT ANXIOUS COOPERATIVE
COORDINATION: VERY POOR DISORIENTED STUMBLING

SPEECH: SLOW SLURRED
BREATH: ODOR OF AN ALCOHOLIC BEVERAGE
FACE: NORMAL

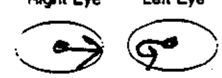
CORRECTIVE LENS: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: VERY BLOODSHOT ☐ Normal ☒ Bloodshot ☒ Watery
Blindness: ☒ None ☐ L. Eye ☐ R. Eye
Tracking: ☒ Equal ☐ Unequal

PUPIL SIZE: ☒ Equal ☐ Unequal (explain)
HGN Present: ☒ Yes ☐ No
Able to follow stimulus: ☒ Yes ☐ No
Eyelids: ☒ Normal ☐ Droopy

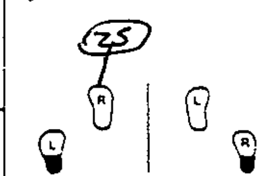
PULSE & TIME	HGN	Left Eye	Right Eye
1. 110 / 2330	Lack of Smooth Pursuit	YES	YES
2. 112 / 2342	Max. Deviation	YES	YES
3. 110 / 2353	Angle of Onset	NONE	NONE

Vertical Nystagmus? ☐ Yes ☒ No

Convergence: Right Eye / Left Eye

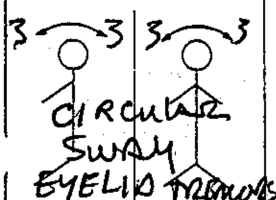


ONE LEG STAND: LEG TREMORS

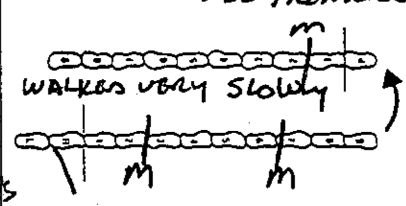


☒ ☒ Sways while balancing.
☒ ☒ Uses arms to balance.
☐ ☐ Hopping.
☒ ☐ Puts foot down.

BALANCE EYES CLOSED



WALK AND TURN TEST: LEG TREMORS

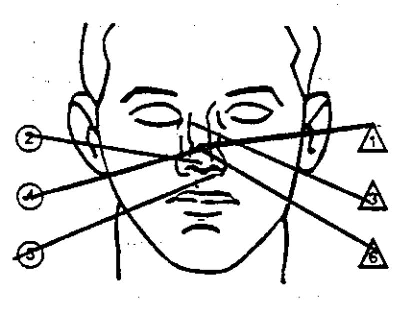


Cannot keep balance ✓
Starts too soon

	1st Nine	2nd Nine
Stops Walking		
Misses Heel-Toe	✓✓	✓
Steps off Line	✓	
Raises Arms	✓✓	✓✓✓
Actual Steps Taken	9	9

INTERNAL CLOCK: 42 Estimated as 30 sec.
Describe Turn: STAGGERED 2 STEPS TO THE RIGHT
Cannot do Test (explain): N/A
Type of Footwear: RUNNING SHOES

○ Right △ Left
Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	5.5	7.5	6.5	5.0
Right Eye	5.5	7.5	6.5	5.0

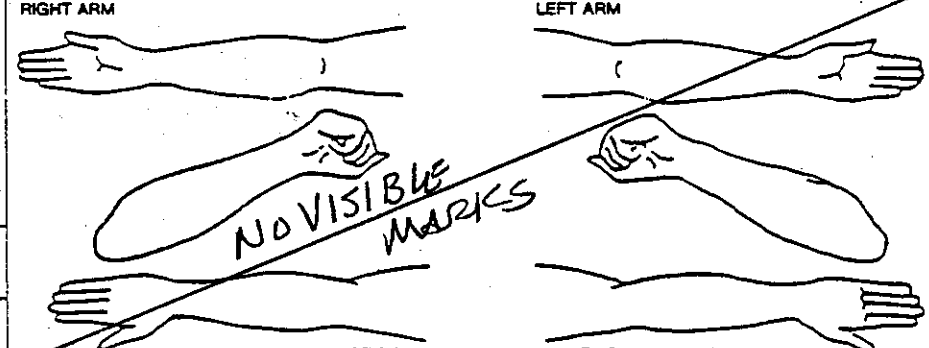
NASAL AREA: CLEAR
ORAL CAVITY: BROWNISH COATING ON TONGUE

HIPPUS: ☐ Yes ☒ No
REBOUND DILATION: ☐ Yes ☒ No
Reaction to Light: SLOW

BLOOD PRESSURE: 148 / 100 TEMP: 98.4°

MUSCLE TONE: ☒ Near Normal ☐ Flaccid ☐ Rigid
Comments:

RIGHT ARM LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

What medicine or drug have you been using? How much? I HAD A FEW GLASSES OF WINE THATS ALL
Time of use? (SMILING) CAN'T BS A BSER
Where were the drugs used? (Location) OH COME ON I'M NOT GOING TO TELL

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED
9-11-96 2245	2315	2320	2358

CONTROL #	EXAMINING OFFICER	SERIAL NO	DIVISION	UNAVAILABLE DATES	REVIEWED BY
	Clark John	2222	LAPD		Rickerson, L

DRUG INFLUENCE EVALUATION Page 2 of 2

LOG NO.	DRE: Sgt. Clark John	ARRESTEE: Charles E. Peltier

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Charles E. Peltier, took place in the DRE room, Parker Center, LAPD

2. WITNESS: Arresting Officer was Sgt. Gordon Graham, CHP

3. BREATH TEST: Sgt. Graham administered breath test to Peltier, the result was 0.06%.

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was contacted by radio and advised to return to Parker Center to conduct a DRE evaluation. Sgt. Graham stated he had observed the subject traveling southbound on the San Diego Fwy. operating a vehicle with no head or tail lights. Upon stopping the vehicle, the subject stated, "hey I can see fine I don't need any f'ing lights cowboy!" Subject further stated "cute little bow tie --- you must be Little Bow Peep.

5. INITIAL OBSERVATIONS: Writer observed the subject seated in the breath testing room. Subject appeared anxious, impatient, and several times asked to be "let go". Generally he was polite and cooperative. His speech was slow and slurred, and he stumbled while walking,

6. MEDICAL PROBLEMS: None noted or stated

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject swayed approximately 3" in a circular motion, and exhibited eyelid tremors, and estimated 42 seconds as 30 seconds. Walk and Turn: Subject lost his balance during the instructions, staggered while turning, raised arms and missed heel to toe.

One Leg Stand: Subject raised his arms, swayed, put his foot down, and exhibited leg tremors. Finger to Nose: Subject missed tip of his nose five times and exhibited eyelid tremors.

8. CLINICAL INDICATORS: Subject's pulse and blood pressure were above the normal range. His pupils were dilated, there was lack of convergence, and HGN was present. There was also a reddening of the conjunctiva.

9. SIGNS of INGESTION: Subject had a brownish coloration on his tongue.

10. STATEMENTS: Subject admitted to drinking "a few glasses of wine" When subject was asked, "when did you smoke the marijuana?" He responded, "I guess I can't bullshit a bullshitter, can I?" "marijuana? who me?" and then laughed. When asked where he had used the marijuana, the subject replied, "oh, come on, I'm not going to tell you."

11. OPINION of EVALUATOR: In my opinion Charles E. Peltier is under the influence of Alcohol and Cannabis and unable to operate a vehicle safely.

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a urine sample.

13. MISCELLANEOUS:

EVALUATOR: Mike Pryor

Page 1 of 2 **DRUG INFLUENCE EVALUATION**

BOOKING NO. 026 | DR. XXI - 3.

ARRESTEE'S NAME (LAST, FIRST, MI)	AGE	SEX	RACE	ARRESTING OFFICER (NAME, SERIAL #, DIV.)
WRIGHT, JAMES B	40	M	W	KENNEDY, B 8132 NYSP

DATE EXAMINED/TIME/LOCATION: 12-7-96 2300 COLONIE PD
BREATH RESULTS: ☐ Refused — Results 0.00 Instrument # 1234
CHEMICAL TEST: ☒ Urine ☐ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ☒ Yes ☐ No — Given by: B. KENNEDY
What have you eaten today? COUPLE OF BURGERS — When? 7PM
What have you been drinking? How much? NOTHING I DON'T DRINK — Time of last drink? N/A

Time now? ABOUT MIDNIGHT
When did you last sleep? How long? LAST NIGHT 9 HRS
Are you sick or injured? I'M JUST FINE ☐ Yes ☒ No
Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No
Do you have any physical defects? ☐ Yes ☒ No
Are you under the care of a doctor/dentist? ☐ Yes ☒ No
Are you taking any medication or drugs? OF COURSE NOT ☐ Yes ☒ No
ATTITUDE: RELAXED, CAREFREE GENERALLY COOPERATIVE
COORDINATION: POOR STUMBLING
SPEECH: SLOW DELIBERATE
BREATH: ODOR OF MARIJUANA
FACE: NORMAL

CORRECTIVE LENS: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ☐ Normal ☒ Bloodshot ☐ Watery
Blindness: ☒ None ☐ L Eye ☐ R Eye
Tracking: ☒ Equal ☐ Unequal
PUPIL SIZE: ☒ Equal ☐ Unequal (explain)
HGN Present: ☐ Yes ☒ No
Able to follow stimulus: ☒ Yes ☐ No
Eyelids: ☒ Normal ☐ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 108 / 2307	Lack of Smooth Pursuit	NO	NO
2. 110 / 2318	Max. Deviation	NO	NO
3. 108 / 2325	Angle of Onset	NONE	NONE

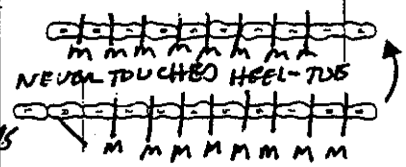
Vertical Nystagmus? ☐ Yes ☒ No

Convergence: Right Eye / Left Eye

ONE LEG STAND: 16 (R) 19 (L)
COUNTED VERY SLOWLY
L R ☒ ☐ Sways while balancing.
☐ ☒ Uses arms to balance.
☐ ☐ Hopping.
☒ ☒ Puts foot down.

BALANCE EYES CLOSED: 2 – 2 2 – 2
CIRCULAR SWAY
EYELID TREMORS

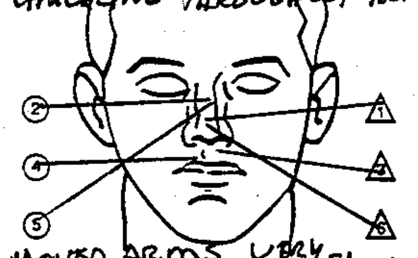
WALK AND TURN TEST: INSTRUCTION HAD TO BE REPEATED TWICE



	1st Nine	2nd Nine
Cannot keep balance	✓	
Starts too soon	✓	
Stops Walking		
Misses Heel-Toe	ALL STEPS	ALL STEPS
Steps off Line		
Raises Arms	✓✓	✓✓
Actual Steps Taken	9	9

INTERNAL CLOCK: 51 Estimated as 30 sec.
Describe Turn: ABRUPT SWIVEL ABOUT FACE
Cannot do Test (explain): N/A
Type of Footwear: LOAFERS

○ Right △ Left — Draw lines to spots touched
EYE LID TREMORS CHUCKLING THROUGHOUT TEST

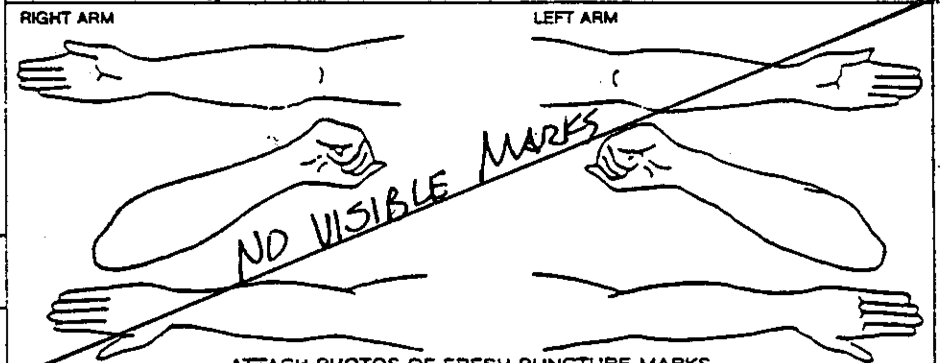


MOVED ARMS VERY SLOWLY

PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	6.0	7.5	6.5	5.0-6.5
Right Eye	6.0	7.5	6.5	5.0-6.5

NASAL AREA: CLEAR
ORAL CAVITY: BITS OF GREEN LEAFY MATERIAL
HIPPUS: ☐ Yes ☒ No
REBOUND DILATION: ☒ Yes ☐ No
Reaction to Light: NORMAL

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 140 / 96 TEMP: 98.8°
MUSCLE TONE: ☒ Near Normal ☐ Flaccid ☐ Rigid
Comments:

What medicine or drug have you been using? How much? "SMOKE"? "WHO ME? HAH HAH HAH"
Time of use? OH I DON'T KNOW
Where were the drugs used? (Location) OH GEE I CANT REMEMBER

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED
12-7-96 2230	2240	2300	2330

CONTROL #	EXAMINING OFFICER	SERIAL NO.	DIVISION	UNAVAILABLE DATES	REVIEWED BY
	Mike Pryor	2239	TPD		PAQUETTE

DRUG INFLUENCE EVALUATION		Page 1 of 2
LOG NO.	DRE: Sgt. Mike Pryor	ARRESTEE: James B. Wright

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of James B. Wright, took place in the DRE room, Colonie Police Department

2. WITNESS: Arresting Officer Trooper Brian Kennedy, NYSP

3. BREATH TEST: Trooper Kennedy administered breath test to Wright, the result was 0.00%.

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was contacted by radio and advised to return to the Department to conduct a DRE evaluation. Trooper Kennedy stated he had observed the subject operating a vehicle at a very slow rate of speed (15/55) southbound on St. Rt 22. When the emergency lights were activated, subject's vehicle slowly drifted left, crossing the northbound lane, through a low hedge and finally coming to rest in a corn field. Subject climbed out of the vehicle laughing.

5. INITIAL OBSERVATIONS: Writer observed the subject seated int he breath testing room. Subject was humming softly. While interviewing Trooper Kennedy, the subject shouted, "Hey Brian, tell him about my wild ride tonight!"

6. MEDICAL PROBLEMS: None noted or stated

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject swayed approximately 2" in a circular motion, and exhibited eyelid tremors, and estimated 51 seconds as 30 seconds. Walk and Turn: Subject lost his balance during the instructions, started walking to soon, raised arms repeatedly, and never touched heel to toe. Subject twice requested that the instructions be repeated. One Leg Stand: Subject raised his arms, put his foot down, and swayed. Finger to Nose: Subject missed tip of his nose each time.

8. CLINICAL INDICATORS: Subject's pulse and blood pressure were above the normal range. His pupils were dilated they exhibited rebound dilation and there was lack of convergence.

9. SIGNS of INGESTION: Subject's breath had an odor of marijuana and there were bits of green vegetation on tongue and between the teeth.

10. STATEMENTS: Subject was asked, "when did you smoke the marijuana?" He responded, "what? smoke marijuana? who me?" and then laughed. When asked where he had used the marijuana, the subject replied, "oh, I don't know. Oh gee, seriously, I can't remember."

11. OPINION of EVALUATOR: In my opinion James B. Wright is under the influence of Cannabis and unable to operate a vehicle safely.

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a urine sample.

13. MISCELLANEOUS: Subject exhibited eyelid tremors and chuckled throughout the evaluation.

Sixty Minutes

SESSION XXII

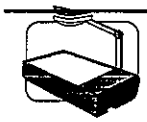
OVERVIEW OF SIGNS AND SYMPTOMS

SESSION XXII OVERVIEW OF SIGNS AND SYMPTOMS

Upon successfully completing this session, the participant will be able to:

- Name the possible effects that may be observed in each major indicator of drug impairment.
- Identify the effects that will most likely be observed with suspects under the influence of each drug category.

Content Segments		Learning Activities	
A.	The Major Indicators and Their Possible Effects	o	Instructor Led Presentations
B.	Effects Associated With the Drug Categories	o	Interactive Discussions

Aides	Lesson Plan	Instructor Notes
 **XXII-O** (Objectives 	OVERVIEW OF SIGNS AND SYMPTOMS	Total Lesson Time: Approximately 60 Minutes NOTE: PRIOR TO THE START OF THIS SESSION, DRAW THE FOLLOWING MATRIX ON THE CHALKBOARD OR FLIPCHART:

	Possible Effects	Depress	Stimul	Halluc	PCP	Narcot	Inhal	Canna
HGN								
Vert Nyst								
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:

   a. Horizontal Gaze Nystagmus
   b. Vertical Nystagmus
   c. Lack of Convergence

Point to the major indicators on the matrix.

Aides	Lesson Plan	Instructor Notes
	d. Pupil Size	
	e. The Reaction of the Pupils to Light.	Point out that the first five major indicators all concern the **eyes**.
	f. Pulse Rate	
	g. Blood Pressure	
	h. Body Temperature	Point out that the last three major indicators concern the **vital signs**.
		ANNOUNCE TO THE STUDENTS: WE WILL NOW REVIEW ALL OF THE POSSIBLE EFFECTS THAT WE MIGHT OBSERVE WITH EACH MAJOR INDICATOR.
	2. Possible effects that might be observed with **Nystagmus**.	
	a. With Horizontal Gaze Nystagmus, there are only two possible effects that might be observed.	
	o Either HGN will be **present**;	Under the "Possible Effects" column of the matrix, opposite "HGN", write: **PRESENT OR NONE**
	o or it will be **none**.	Point out that there is no drug that stops Horizontal Gaze Nystagmus. Some drugs enhance HGN to be present, others do not; but there is no drug that "cures" HGN.
		Now ask students: What are the possible effects we might observe with Vertical Nystagmus?

Aides	Lesson Plan	Instructor Notes
	b. With Vertical Nystagmus, there are also only two possible effects. o Either it will be **present**; o or it will be **none**.	Opposite "Vert NYST", write: **PRESENT** **OR** **NONE** **Now ask students**: What effects might we observe with Lack of Convergence?
	3. For **Lack of Convergence**, there are also only two possible effects. a. Either Lack of Convergence will be **present**; b. Or it will be **none**.	Opposite "Lack Conv", write: **PRESENT** **OR** **NONE**
	c. Just as with Nystagmus, there is no drug that "cures" Lack of Convergence.	Point out that, when we say that "Lack of Convergence is present", we mean that the eyes are **unable** to converge or cross properly. **Now ask students**: What effects might we observe with Pupil Size?
	4. For **Pupil Size**, there are three possible effects that might be seen. a. The pupils might be **normal** of size; b. or, the pupils might be **dilated**; c. or, they might be **constricted**.	Opposite "Pupil Size", write: **NORMAL** **OR** **DILATED** **OR** **CONSTRICTED** **Now ask students**: What effects might we observe with the pupils' reaction to light?

Aides	Lesson Plan	Instructor Notes
	5. There are a number of effects that might be observed in the pupils' **Reaction to Light**. a. The pupils might react in a **normal** manner, i.e., by constricting somewhat in one second or less. b. Or, the pupils might react **slow**, i.e., by constricting somewhat, but requiring more than one second to do so. c. In some instances, you may observe very little, or no visible reaction to light. d. If there is a visible reaction of the pupils, it is possible that two other effects might be seen. o **Hippus**, i.e., pupils rhythmically pulsating in size. o **Rebound Dilation**, i.e., pupils fluctuating in size, and growing steadily larger on the expansion fluctuations.	Opposite "React Light", write: **NORMAL** **OR** **SLOW** **OR** **LITTLE TO NONE VISIBLE** 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".
	6. For each of the **Vital Signs**, there are three possible effects. a. The pulse rate, or blood pressure, or body temperature could be **normal.** b. Or, it could be **UP**.	Opposite "Pulse Rate", write: **NORMAL** **OR** **UP** **OR** **DOWN**

Aides	Lesson Plan	Instructor Notes
	c. Or, it could be **DOWN.**	Write exactly the same things opposite "Blood Press". Write exactly the same things opposite "Body Temp". Solicit students' comments and questions about the possible effects of the eight major indicators.
45 Minutes	B. Effects Associated with the Drug Categories.	Ask for a student to volunteer to state the major effects that usually will be seen in a suspect under the influence of a **CNS Depressant**. Correct the students' statements, as necessary, and **write** the correct effects on the matrix, under the "Depress." column.
	1. CNS Depressants.	
	a. HGN: **present**	
	b. Vert. NYST: **present**	i.e., at high doses for that individual.
	c. Lack Conv: **present**	
	d. Pupil Size: **normal,** <u>except</u> with the specific depressant Methaqualone and Soma, which **dilates** pupils.	
	e. React Light: **slow**	
	f. Pulse Rate: **down except Methaqualones and ETOH, which may elevate.**	
	g. Blood Pressure: **down**	

Aides	Lesson Plan	Instructor Notes
	h. Body Temp: **normal**	Emphasize that these are the **usual** major effects that will be observed with CNS Depressants, but we cannot always be certain that all of these effects will be seen. Thank the "volunteer" student for their help. Pick another volunteer to state the usual major effects of **CNS Stimulants**. Correct the student's statements as necessary, and **write** the correct effects under the "Stimul" column.
	2. CNS Stimulants a. HGN: **none** b. Vert NYST: **none** c. Lack Conv: **none** d. Pupil Size: **dilated** e. React Light: **slow** f. Pulse Rate: **up** g. Blood Press: **up** h. Body Temp: **up**	Emphasize that these are the effects **usually** seen with CNS Stimulants, but we can't guarantee that all of these effects will be observed in each and every case. Thank the "volunteer" student for his or her help. Select another volunteer to help with identifying the usual major effects of **Hallucinogens**.

Aides	Lesson Plan	Instructor Notes
	3. Hallucinogens	
	a. HGN: **none**	
	b. Vert NYST: **none**	
	c. Lack Conv: **none**	
	d. Pupil Size: **dilated**	
	e. React Light: **normal, certain Psychedelic Amphetamines cause slow reaction.**	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.
	f. Pulse Rate: **up**	
	g. Blood Press: **up**	Thank the "volunteer" for thier help with Hallucinogens. Pick another volunteer to help with PCP.
	h. Body Temp: **up**	
	4. Phencyclidine	
	a. HGN: **present**	
	b. Vert NYST: **present**	i.e., at high doses; however, it is more common than not to see Vertical Nystagmus in someone under the influence of PCP.
	c. Lack Conv: **present**	
	d. Pupil Size: **normal**	
	e. React Light: **normal**	
	f. Pulse Rate: **up**	

Aides	Lesson Plan	Instructor Notes
	g. Blood Press: **up**	
	h. Body Temp: **up**	Thank the "volunteer" for their help with PCP. Select another volunteer to help with **Narcotic Analgesics**.
	5. Narcotic Analgesics	
	a. HGN: **none**	
	b. Vert NYST: **none**	
	c. Lack Conv: **none**	
	d. Pupil Size: **constricted**	
	e. React Light: **little or none visible**	
	f. Pulse Rate: **down**	
	g. Blood Press: **down**	Thank the "volunteer" for their help with Narcotic Analgesics.
	h. Body Temp: **down**	
	6. Inhalants	Select another volunteer to help with **Inhalants**. Remind the volunteer that, with Inhalants, many of the effects noted on the major indicators will depend upon the specific substance inhaled.
	a. HGN: **present**	The vast majority of Inhalants will enhance HGN; but it is possible that HGN would not be observed with a few specific Inhalants.
	b. Vert NYST: **present**	High dose for that individual

Aides	Lesson Plan	Instructor Notes
	c. Lack Conv: **present**	
	d. Pupil Size: **normal but may be dilated**	
	e. React Light: **slow**	
	f. Pulse Rate: **up**	
	g. Blood Press: **up/down**	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.
	h. Body Temp: **up/down/normal**	Some Inhalants leave body temperature within the normal range; others may elevate the temperature. Thank the "volunteer" for their help with Inhalants. Select another volunteer to help with **Cannabis**.
	7. Cannabis	
	a. HGN: **none**	
	b. Vert NYST: **none**	
	c. Lack Conv: **present**	
	d. Pupil Size: **dilated or possibly normal**	
	e. React Light: **normal**	
	f. Pulse Rate: **up**	

Aides	Lesson Plan	Instructor Notes
	g. Blood Press: **up** h. Body Temp: **normal**	Thank the "volunteer" for their help with Cannabis. Solicit students' comments or questions about the drug categories. REFER STUDENTS TO 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. Stress 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.

Session XXII

Overview of Signs and Symptoms

Overview of Signs and Symptoms

Upon successfully completing this session, the participant will be able to:

- Name the possible effects that may be observed in each major indicator of drug impairment
- Identify the effects that will most likely be observed with suspects under the influence of each drug

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, 6th Ed. 1992, pp. 61-63.

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	talkativeness
irritability	insomnia
tremor	flushing
Diaphoresis	combativeness
nausea	vomiting
pallor	dry mucous membranes
Moderate:	
hyperactivity	confusion
hypertension	Tachypnea
Tachycardia	premature ventricular contraction
chest discomfort	vomiting
abdominal pain	Profuser Diaphoresis
mild temperature elevation	impulsivity
repetitive behavior	hallucinations
panic reactions	
Serious:	
delirium	marked Hypertension/Tachycardia
Hyperreflexia	convulsions
Hypotension	coma

Cocaine, page 650-659

Early Stimulation:	
euphoria	Garrulity
excitement	apprehension
irritable behavior	Mydriasis
sudden headache	nausea
vomiting	dizziness
twitching of small muscles	tics
tremor	jerks
Cocaine Psychosis	hallucinations
elevation of pulse	increased respiration

Advanced:	
convulsions	Hyperreflexia
decreased consciousness	increased pulse and blood pressure
Later Stages:	
Hypotension	Hypothermia
Dyspnea et al	

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	urinary retention
teeth grinding (Bruxism)	fidgety, jerky, random motions
illogical, loose thoughts	

Page 295: Cocaine:

dilated pupils	Tachycardia
increased blood pressure	vasoconstriction
Hyperpyrexia	

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	increased blood pressure
possibly increased temperature	increased wakefulness
general increase in psychomotor activity	

page 145: Cocaine

Mydriasis (dilated pupils);	may cause psychosis
euphoria	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	Tachycardia
elevated blood pressure	perspiration or chills
nausea or vomiting	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	Tachycardia
elevated blood pressure	perspiration or chills
nausea or vomiting	

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	

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, 1992, 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, Vertical	
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 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
droopy eyelids	(Ptosis) "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, Opiods 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, 1992, page 196-198: Morphine:

constructed 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
tremors cerebellar
rambling speech
light headedness
CNS depression that mimics Narcotic Analgesics
blank stare
euphoric mood
mental dulling
Ataxia
irritability
tremors
Ataxia

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
incoordination
unsteady gait
depressed reflexes
tremor generalized muscle
stupor or coma
euphoria
dizziness
slurred speech
lethargy
psychomotor retardation
blurred vision or diplopia
weakness

CANNABIS

DRE Symptomatology:
dilated pupils
odor of Marijuana
body tremors
relaxed inhibitions
paranoia
impaired perception of time and distance
marked reddening of conjunctivae
debris in mouth
eyelid tremors
increased appetite
disorientation

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, 1985 : page 178, 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

Fifty Minutes

SESSION XXIII

RESUME PREPARATION AND MAINTENANCE

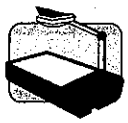
SESSION XXIII RESUME PREPARATION AND MAINTENANCE

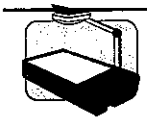
Upon successfully completing this session, the participant will be able to:

- Describe and discuss the purpose of the resume.
- Identify the elements of a Drug Recognition Expert's resume.
- Prepare a basic resume summarizing their relevant training, education, experience and accomplishments to date.
- Update and extend the resume, as their relevant achievements continue to expand.

Content Segments		Learning Activities	
A.	Purpose of the Resume	o	Instructor Led Presentations
B.	Preparation for Court Qualification	o	Group Work session
C.	Resume Content	o	Reading Assignments
D.	Guidelines for Resume Preparation and Maintenance		

Aides	Lesson Plan	Instructor Notes
	RESUME PREPARATION AND MAINTENANCE	Total Session Time: Approximately 50 Minutes Session title on wallchart.
 **XXIII-O** (Objectives)		Overview session objectives, content segments and learning activities.
 **10 Minutes**	A. Purpose of the Resume	
 **XXIII-1**	1. The basic purpose of the resume is to record education, training and experience in a single document for use in establishing qualifications when testifying in court.	
	2. Generally a witness can testify only to personal knowledge.	<u>Point out</u> that this generally consists of facts which they observed or witnessed.
	3. Witness cannot give an opinion on a matter.	<u>Point out</u> that opinions are allowed only if the witness is qualified as an expert.
 **XXIII-2**	4. Basic rule is that a person skilled in some art, trade, science or profession, having a knowledge of matters not within 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.	(People vs. Willis, 70 Cal APP. 465)

Aides	Lesson Plan	Instructor Notes
	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.	(People vs McLean, 56 Cal 2d 660)
 **XXIII-3** (CA Code 405)	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.	(People vs Perry, 44 Cal 2d 861)
 **XXIII-4**	8. Witnesses' qualification is achieved through Voir Dire Examination.	Voir Dire - literally, French for "to see, to say"; loosely translated as "to seek the truth").
 **5 Minutes**	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 greater than what the public has is required to qualify as an expert, your testimony will carry much more "weight" if you have good credentials.	
	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.	Point out that it is imperative that each officer maintain an ongoing resume to establish their credentials as an expert.

Aides	Lesson Plan	Instructor Notes
 XXIII-5	4. Drug Recognition Experts will base their expertise on the following areas: a. Formal education and training b. Relevant Experience c. Outside readings and studies	
 20 Minutes	C. Resume Content	
 XXIII-6	1. Formal education.	
	a. High school(s) attended	o list dates - highlight classes which provided knowledge in the area of drugs.
	b. Colleges and Universities attended.	o list dates, major, degree, etc. highlight classes which provided knowledge in the area of drugs.
	c. Specialized College or University level courses.	o list dates, instructor, subject(s) covered, credits, etc.
	2. Formal training.	
	a. Police Academy (recruit training)	o list dates, length, major topics covered, etc. Highlight classes which provided knowledge or skills in the area of drugs.

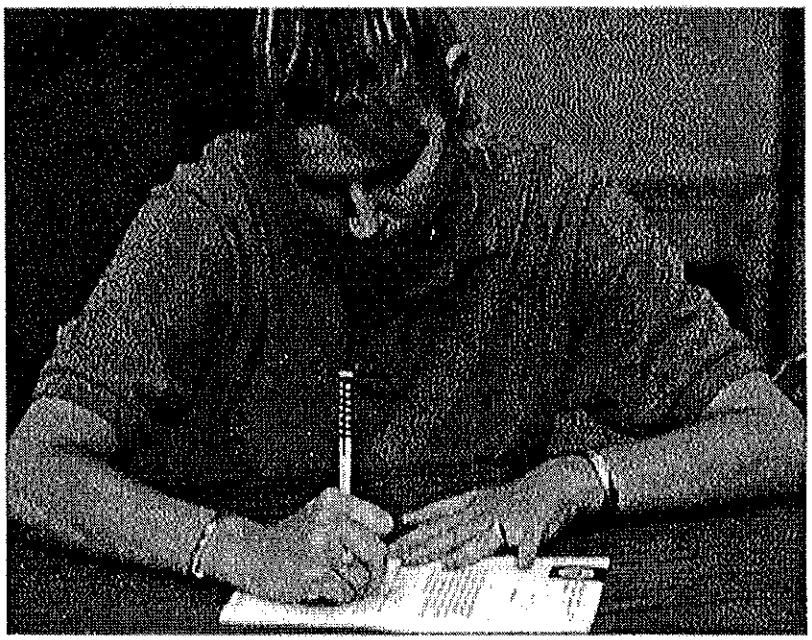
Aides	Lesson Plan	Instructor Notes
	b. Specialized police training or in-service training.	o list dates, length, instructor(s), subject(s) covered, etc. Highlight training which provided knowledge or skills in the area of drugs.
	c. Other specialized training: o military training o lectures and seminars	o list dates, length, instructor(s), subject(s) covered, etc. Highlight training which provided knowledge or skills in the area of drugs.
	3. Experience	o list dates, division, duties, etc., include loans to specialized units.
	a. Job experience - years	
	b. Assignments	o list agencies, dates, assignments, etc.
	c. Prior law enforcement experience	
	d. Other job related experience	o list employer, dates, duties, assignments, etc. which provided experience in the area of drugs.
	e. Drug enforcement/ evaluation experience: o total vehicle stops o total DWI investigations o total DWI arrests o total drug evaluations o total filings o total convictions	Point out that it is important to maintain accurate records of all enforcement activities; documentation of the ratio of stops of investigations and investigations to arrests is essential. Not all stops are investigated and not all investigations result in arrests; demonstrates that officer is fair and impartial and that each case is decided on individual merits.

Aides	Lesson Plan	Instructor Notes
	f. Prior testimony: o municipal court o superior court o number of times qualified as an expert in drug cases o number of times qualified as an expert in other cases	o list date, court, judge, charge, area qualified, etc.
	4. Outside readings and studies	
	a. Drug related texts read b. Departmental training bulletins c. Journals d. Research papers e. Drug related films viewed	o list title(s), author(s), subject(s), etc.
	5. Training or research conducted (if applicable)	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.
	6. Publications (if applicable)	o list all writings that were published, including departmental briefing papers, etc.

Aides	Lesson Plan	Instructor Notes
15 Minutes	D. Guidelines for Resume Preparation and Maintenance 1. List information in chronological order. 2. Review and update resume frequently and record date of review.	Refer students to sample resumes in their manuals and review steps for preparing the resume and keeping it up to date. Review the sample resumes briefly with the students.

Session XXIII

Resumé Preparation and Maintenance



Resumé Preparation and Maintenance

Upon successfully completing this session, the participant will be able to:

- Describe and discuss the purpose of the resumé
- Identify the elements of a drug recognition expert's resumé
- Prepare a basic resumé summarizing his or her relevant training, education, experience and accomplishments to date
- Update and extend the resumé, as his or her relevant achievements continue to expand

Witness

- Generally can testify only to personal knowledge--facts which they observed or witnessed
- Cannot give an opinion

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 his or her special knowledge
- Only the court can determine whether a witness is qualified to testify as an expert

CA Code 405

Only the court can determine whether a witness is qualified to testify as an expert.

Voir Dire:

To seek the truth
(literally, "to see, to say")

Expertise/Qualifications

These are based on:

- Formal Education and training
- Experience
- Outside readings and studies

Resumé Content

- Formal education
- Formal training
- Experience
- Prior testimony
- Outside readings and studies
- Training/research conducted
- Publications

SAMPLE RESUME NUMBER ONE

SHELTON POLICE DEPARTMENT

Traffic Division

The Resume of:

SERGEANT DAVID CARROLL REGAN
Certified Drug Recognition Technician

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	National Highway Traffic Safety Administration **DRE Instructor Training** (Certified as a DRE Instructor on 11/12/XX)
8/XX	Drug Enforcement Administration **Drug Interdiction Seminar**
11/YY	National Highway Traffic Safety Administration **Drug Evaluation and Classification Training: DRE School** (Certified as a DRE on 1/28/XX)
10/YY	National Highway Traffic Safety Administration **Drug Evaluation and Classification Training: PRE School**
3/YY	Southeastern University Institute of Police Technology **Special Conference: Managing DWI Squads**
4/ZZ	International Association of Chiefs of Police **Instructor Training in Horizontal Gaze Nystagmus and Divided Attention Field Sobriety Tests**
10/MM	University of Stanford, Northern Police Institute **Standardized Field Sobriety Testing**
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

Title	Author
Drug and Alcohol Abuse	Marc A. Schuckit, M.D.
A Primer of Drug Action	Jerome Jaffee, Robert Petersen and Ray Hodgson
The Practitioner's Guide to Psychoactive Drugs	Ellen L. Bassuk, M.D. and Stephen C. Schoonover, M.D.
Drug Abuse: A Manual for Law Enforcement Officers	Smith, Kline & French (pub.)
Licit and Illicit Drugs	Edward M. Brecher
Chocolate to Morphine	Andrew Weil, M.D. and Winifred Rosen
Cocaine Addiction	U.S. Department of Health and Human Services
Marijuana Alert	Peggy Mann

SAMPLE RESUME NUMBER TWO

TRUMBULL POLICE DEPARTMENT

The Resume of:

OFFICER ANN MARIE REED
Certified Drug Recognition Technician

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 **Seminar: Packaging and Transport of Illicit Drugs**
10/VV	University of Norwalk, Police Science Institute **Seminar: Suppression of Drug-related Crime**
3/VV	National Highway Traffic Safety Administration **Drug Evaluation and Classification Training: DRE School** (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

Title	Author
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

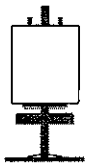
DRUG COMBINATIONS

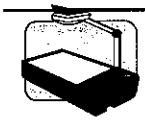
SESSION XXIV DRUG COMBINATIONS

Upon successfully completing this session, the participants will be able to:

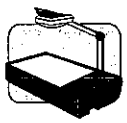
- Explain the prevalence of polydrug use among drug impaired suspects and identify common combinations of drug abused by those suspects.
- Explain the possible effects that combinations of drugs can produce on the major indicators of drug impairment, and define the terms "Null", "Overlapping", "Additive" and "Antagonistic" as they relate to polydrug effects.
- Identify the specific effects that are most likely to be observed in persons under the influence of particular drug combinations.

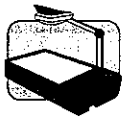
Content Segments		Learning Activities	
A.	The Prevalence of Polydrug Use	o	Instructor Led Presentations
B.	Possible Effects of Drug Combinations	o	Interactive Discussions
C.	Identifying Expected Indicators of Specific Combinations	o	Workbook Exercise
		o	Video Presentations

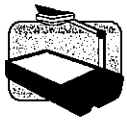
Aides	Lesson Plan	Instructor Notes
  **XXIV-O** (Objectives)  **10 Minutes**	DRUG COMBINATIONS A. The Prevalence of Polydrug Use. 1. Polydrug use means having two or more drugs in your body at the same time. 2. It is actually more common for a DRE to encounter polydrug users than single drug users.	Total Lesson Time: Approximately 110 Minutes Session title on wallchart. Briefly review the objectives, content and learning activities of this session.
 **XXIV-1** ("Prevalence of Polydrug Use")	a. In the Los Angeles Field Study (1985), 72% of the suspects had two or more drugs in them. b. In that study, alcohol was often found in combination with one or more other drugs. c. But even if we discount alcohol, nearly half (45%) of the Field Study suspects had two or more other drugs in them. d. During Certification Training in New York City in early 1989, two-thirds (67%) of the suspects evaluated had two or more drugs **other than alcohol** in their urine.	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.

Aides	Lesson Plan	Instructor Notes
 **XXIV-2** ("Common Combina-tions")	3. Common combinations of drugs.	
	a. Cocaine and Cannabis. b. Cocaine and Heroin. c. PCP and Cannabis.	Point out that virtually any possible drug combinations may be encountered by the DRE.
	4. Many of the suspects you examine will be exhibiting the effects of two or more drugs acting together.	Solicit students' comments and questions about the prevalence of polydrug use.
 **65 Minutes**	B. Possible Effects of Drug Combinations. 1. Let us examine the possible ways in which two drugs might interact.	
		NOTE: AT THIS TIME DRAW THE FOLLOWING MATRIX ON THE CHALKBOARD:

	Possible Effects of Drug Number 1	Possible Effects of Drug Number 2
Pupil Size	normal dilated constricted	normal dilated constricted

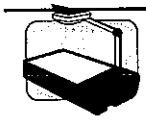
	2. Our specific example will focus on pupil size; there are four situations that could occur.	
 **XXIV-3** ("Neither Affects")	a. Situation #1: Neither drug affects pupil size.	

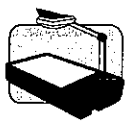
Aides	Lesson Plan	Instructor Notes
	o drug #1 leaves pupil size in the normal range. o drug #2 also leaves pupil normal. o the combination also will leave pupil size normal.	Point out a general principle: If neither drug affects a Major indicator, the combination of those two drugs also will not affect that indicator.
 **XXIV-4** ("Null Effect")	b. Situation #1 is called the **Null Effect.**	Clarification of "Null Effect": The combination of no action plus **no action equals no action**.
	c. Specific examples of the **Null Effect:** o Pupil Size: Neither PCP nor Valium affects pupil size; the combination of PCP and Valium will not affect pupil size. o Body Temp: Neither Alcohol nor Marijuana usually affects body temperature; the combination of Alcohol and Marijuana usually leaves body temperature normal. o HGN: Neither Cocaine nor Heroin will induce Nystagmus; the combination of Cocaine and Heroin also will not induce Nystagmus.	

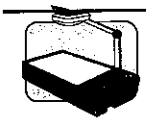
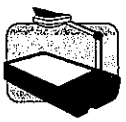
Aides	Lesson Plan	Instructor Notes
		Ask students to suggest a specific combination of drugs that will exhibit the Null Effect on Horizontal Gaze Nystagmus. Solicit students' questions about the Null Effect. Redirect the students' attention to our example of pupil size: point to the matrix on the chalkboard or flipchart.
 **XXIV-5** ("One affects, one doesn't")	d. Situation #2: one drug affects pupil size, but the other does not. o one possibility: drug #1 **dilates** pupils, drug #2 leaves pupil size alone. o another possibility: drug #2 **constricts** pupils, drug #1 leaves pupil size alone.	
 **XXIV-6** ("Overlapping Effect")	e. Situation #2 is called the **Overlapping Effect**. o One example: PCP doesn't affect pupil size, but Cocaine dilates pupils; a suspect who has taken a combination of PCP and Cocaine will usually exhibit dilated pupils.	Clarification of "overlapping Effect": **action plus no action equals action**.

Aides	Lesson Plan	Instructor Notes
	o Another example: Valium won't affect pupil size, but heroin will constrict pupils; a suspect under the combined influence of Valium and Heroin usually will have constricted pupils.	
	f. Other examples of the "Overlapping Effect":	Ask a student to give an example of a specific combination of drugs that will produce an "Overlapping Effect" on Horizontal Gaze Nystagmus.
	o Alcohol will exhibit HGN, but Marijuana will not affect HGN; a person under the combined influence of alcohol and Marijuana will usually exhibit HGN.	
	o Xanax will not affect temperature, but Demerol will lower temperature; a suspect impaired by a combination of Xanax and Demerol usually will have a lower temperature.	Ask a student to give an example of a specific combination of drugs that will produce an "Overlapping Effect" on body temperature.
 **XXIV-7** ("they affect in the same way")	g. Situation #3: The two drugs affect pupil size in the same way.	Redirect the students' attention to the example of pupil size. Point to the matrix on the chalkboard.

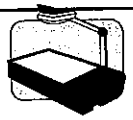
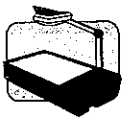
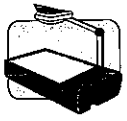
Aides	Lesson Plan	Instructor Notes
	o One possibility: both drugs **dilate** the pupils.	Example: Both Methamphetamine and LSD will dilate the pupils. Therefore, a person under the combined influence of Methamphetamine and LSD will have dilated pupils.
	o Another possibility: both drugs **constrict** the pupils.	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.
 **XXIV-8** ("Additive Effect")	h. Situation #3 is called the **Additive Effect**.	Clarification of the "Additive Effect": **action plus the same action reinforces the action.**
	o One example: a Stimulant plus an Hallucinogen will produce an additive effect on pupil size.	Ask a student to give an example of a drug combination that will produce an additive effect on Nystagmus.
	o Example: a CNS Depressant plus PCP will produce an additive effect on HGN.	Ask a student to give an example of a drug combination that will produce an additive effect on blood pressure.
	o Example: PCP plus Cannabis will produce an additive effect on blood pressure.	Redirect students' attention to our example of pupil size; point to the matrix on the chalkboard.

Aides	Lesson Plan	Instructor Notes
 **XXIV-9** ("They produce opposite effects")	i. Situation #4: The two drugs affect pupil size in exactly opposite ways. o Either drug #1 constricts the pupils while drug #2 dilates them. o Or, drug #1 dilates the pupils while drug #2 constricts them.	Ask students for an example of a drug combination in which one drug dilates while the other constricts.
 **XXIV-10** ("Antagonistic Effect")	j. Situation #4 is called the **Antagonistic Effect**.	Clarification of "Antagonistic Effect": **action versus opposite action: can't predict the outcome.**
	k. When two drugs produce an "Antagonistic Effect", they tend to try to cancel each other out. 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. o possibility #2: the Heroin might be exerting the stronger 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.	Example: When a suspect takes a "speedball" (Heroin plus Cocaine), the two drugs try to cancel out their effects on pupil size.

Aides	Lesson Plan	Instructor Notes
	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.	
	o With an "Antagonistic Effect", we just can't predict what we will see.	Solicit students' questions about the Null, Overlapping, Additive and Antagonistic Effects.
 **XXIV-11** ("Effects of Drug Combinations")	3. To summarize, when two or more drugs are taken together, they tend to produce a combination of Null Effects, Overlapping Effects, Additive Effects and Antagonistic Effects.	
 **XXIV-12**	4. A specific Example: Consider a person who is under the influence of a combination of Cannabis and a CNS Stimulant.	Display **only the title** of **XXIV-12** ("Cannabis and a Stimulant in Combination"); you will reveal this visual one line at a time. Ask students: "Will you see HGN with this particular combination?"
	a. Neither Cannabis nor a Stimulant induces HGN.	Reveal the first line of the Visual.
	o This is a case of **no action plus no action equals no action**.	Point out that the combination of Cannabis and Stimulant produces a Null Effect on HGN.
	o We will not see HGN with this combination	Ask students: "Will we see Vertical Nystagmus?"

Aides	Lesson Plan	Instructor Notes
	b. Neither Cannabis nor a stimulant produces Vertical Nystagmus.	Reveal the second line of the Visual.
	o This is another Null Effect.	
	o We won't see Vertical Nystagmus.	Ask students: "Will we see a Lack of Convergence?"
	c. Cannabis produces Lack of Convergence; a stimulant does not.	Reveal the third line of the Visual.
	o This is a case of **action plus no action equals action**.	Point out that the combination of Cannabis and Stimulant produces an Overlapping Effect on Lack of Convergence.
	o We will see Lack of Convergence with this combination.	Ask students: "What will we see when we examine pupil size?"
	d. Stimulants dilate pupils; Cannabis either dilates pupils or leaves them alone.	Reveal the fourth line of the Visual.
	o This may be a case of **action plus no action equals action**.	Point out that the combination of Cannabis and Stimulant produces either an Additive Effect or an Overlapping Effect on pupil size.
	o Or it may be a case of **action plus same action reinforces action.**	
	o In either case, we should see dilated pupils with this combination.	Ask students: "What should we see when we examine the pupils' reaction to light?"
	e. Stimulants slow the pupils' reaction to light; Cannabis usually doesn't affect the pupils' reaction.	Reveal the fifth line of the Visual.

Aides	Lesson Plan	Instructor Notes
	o Here we have another Overlapping Effect.	
	o We should observe a slowed reaction of the pupils.	Ask students: "What should we see when we measure this person's pulse rate?"
	f. Both Cannabis and Stimulants usually elevate pulse rate.	Reveal the sixth line on the Visual.
	o This is an Additive Effect.	
	o We will see a pulse rate higher than normal.	Ask students: "What should we see when we measure this person's blood pressure?"
	g. Cannabis usually causes blood pressure to be above normal; so does a stimulant.	Reveal the seventh line on the Visual.
	o This is another Additive Effect.	
	o We should see a higher than normal blood pressure.	Ask students: "What can we expect to find when we check this person's temperature?"
	h. Cannabis usually does not affect body temperature. But Stimulants usually elevate temperature.	Reveal the eighth line on the Visual.
	o This is another case of **action plus no action equals action**.	Point out that Cannabis in combination with Stimulant produces an Overlapping Effect on body temperature.
	o We can expect to see an elevated temperature with this combination.	Solicit students' comments and questions about the Cannabis/ Stimulant combination.
		Point out that this particular combination produces no Antagonistic Effects.

Aides	Lesson Plan	Instructor Notes
 XXIV-13	5. Another specific example: Consider a person under the influence of a combination of PCP and Heroin.	Display **only the title** on **XXIV-13** ("PCP and Heroin") Ask students: "What will we see when we examine this person for HGN?"
	a. PCP exhibits HGN, Heroin does not. o This is an Overlapping Effect.	Reveal the first line of the Visual.
	o We can expect to see HGN with this suspect.	Ask Students: Can we expect to see Vertical Nystagmus?
	b. PCP may induce Vertical Nystagmus, especially at high doses; Heroin will not induce Vertical Nystagmus. o This is another Overlapping Effect.	Reveal the second line of the Visual.
	o We may see Vertical Nystagmus in this suspect.	Ask students: "Can we expect to see a Lack of Convergence?"
	c. PCP causes Lack of Convergence; Heroin doesn't. o Another Overlapping Effect.	Reveal the third line of the Visual.
	o We can expect to see Lack of Convergence.	Ask students: "What are we likely to see when we check the size of this suspect's pupils?"
	d. PCP doesn't affect pupil size, but Heroin **constricts** pupils. o This is yet another Overlapping Effect.	Reveal the fourth line of the Visual.

Aides	Lesson Plan	Instructor Notes
	o We can expect to see constricted pupils with this suspect.	Ask students: "What are we likely to observe when we check the reaction of this suspect's pupils to light?"
	e. PCP doesn't affect pupils' reaction to light; but Heroin usually produces "little or none visible" reaction to light.	Reveal the fifth line of the Visual.
	o This, too, is an Overlapping Effect.	Point out that the combination of PCP and Heroin produces Overlapping Effects on all major eye indicators of drug impairment.
	o We can expect "little or none visible" reaction in this suspect's pupils.	Ask students: "What can we expect to find when we check this suspect's pulse rate?"
	f. PCP usually causes pulse rate to be **above normal**; Heroin usually produces a **below normal** pulse rate.	Reveal the sixth line of the Visual.
	o This is our first Antagonistic Effect.	
	o We cannot predict what this suspect's pulse rate will be.	
	o The pulse rate could be above normal, or below normal, or within the normal range.	
	g. This suspect's pulse rate will depend on many factors, including:	
	o How much of each drug was taken.	

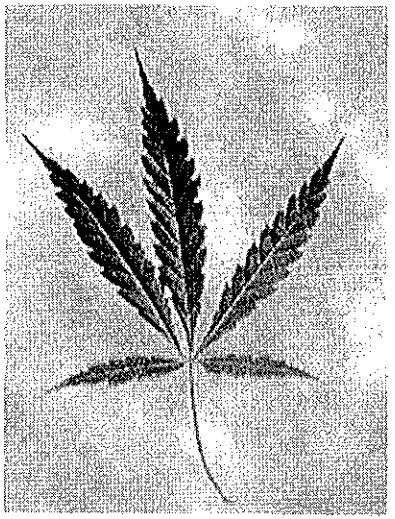
Aides	Lesson Plan	Instructor Notes
	o How when each drug was taken.	
	o How tolerant the suspect is of each drug.	Ask students: "What are we likely to find when we check this suspect's blood pressure?"
	h. PCP usually elevates blood pressure; Heroin usually lowers blood pressure.	Reveal the seventh line of the Visual.
	o This is another Antagonistic Effect.	
	o We can't predict what the blood pressure will be.	
	o It could be above normal, below normal or within the normal range.	Ask students: "What are we likely to find when we check this suspect's temperature?"
	i. PCP usually elevates temperature; Heroin usually lowers it.	Reveal the eighth line of the Visual.
	o This, too, is an Antagonistic Effect.	
	o The temperature could be above normal, or below normal or within the normal range.	Point out that the combination of PCP and Heroin produces Antagonistic Effects on all three vital signs. Solicit students' comments and questions about the combination of Heroin and PCP. <u>Show</u> the video tape of suspects under the influence of specific drug combinations. Point out the Null, Overlapping, Additive and Antagonistic Effects exhibited by those suspects.

Aides	Lesson Plan	Instructor Notes
 **35 Minutes**	C. Identifying Expected Indicators of Specific Combinations.	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.
	1. Cumulative Drug Symptomatology Matrix.	
	a. The Matrix outlines the **expected results** of the drug recognition examination for each category.	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.
	b. We will refer to the Matrix to help us interpret what we are likely to see when we examine drug **combinations**.	
	2. Worksheet Exercises	Assign the students to work in three-member teams.
	a. Worksheet #1: **PCP and Hallucinogen**	Direct the students' attention to the three worksheets in their Student's Manual.
	b. Worksheet #2: **Cannabis and CNS Depressant**	Instruct the teams that they have only 15 minutes to fill out all three worksheets (5 minutes per worksheet).
	c. Worksheet #3: **CNS Depressant and CNS Stimulant**	Solicit students' questions about this assignment.

Aides	Lesson Plan	Instructor Notes
		Tell the teams to start working. Terminate their work after fifteen minutes.
	3. Discussion of Worksheets	For each worksheet, select a team to lead the discussion. Critique and correct the students' analyses of the drug combinations, as appropriate. Solicit students' comments and questions about drug combinations.

Session XXIV

Drug Combinations



Drug Combinations

Upon successfully completing this session, the participants will be able to:

- Explain the prevalence of polydrug use among drug-impaired suspects and identify common combinations of drugs abused by those suspects
- Explain the possible effects that combinations of drugs can produce on the major indicators of drug impairment, and 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

Prevalence of Polydrug Use

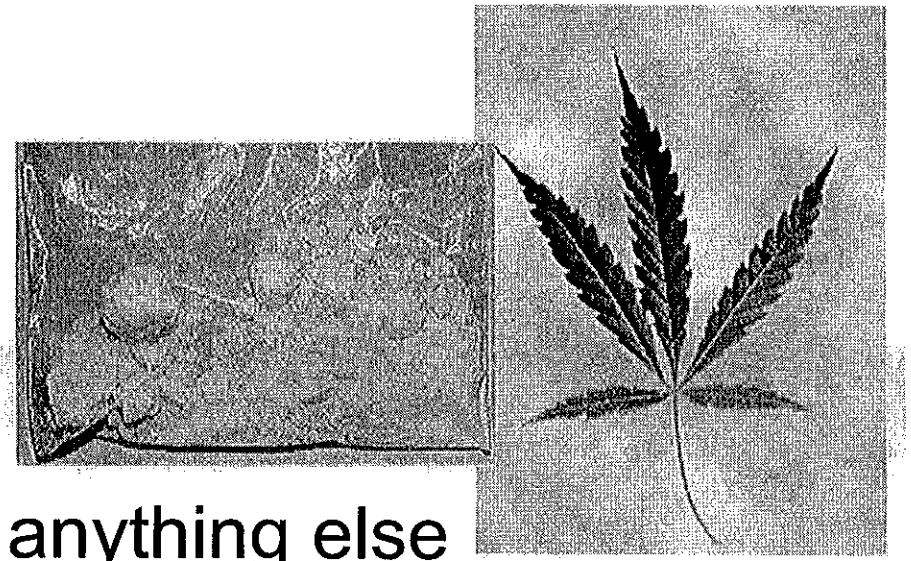
In the Los Angeles Field Validation Study (1985):

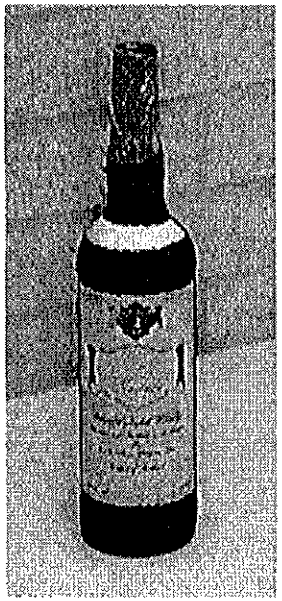
- 72% of suspects had two or more drug categories in them (including alcohol)
- 45% had two or more drugs other than alcohol

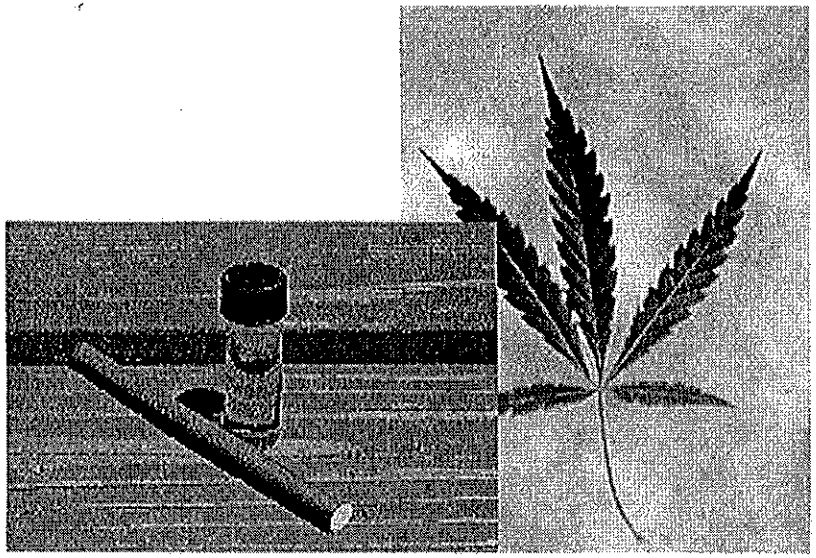
In New York City Certification Training (1989), 67% of suspects had two or more drug categories other than alcohol

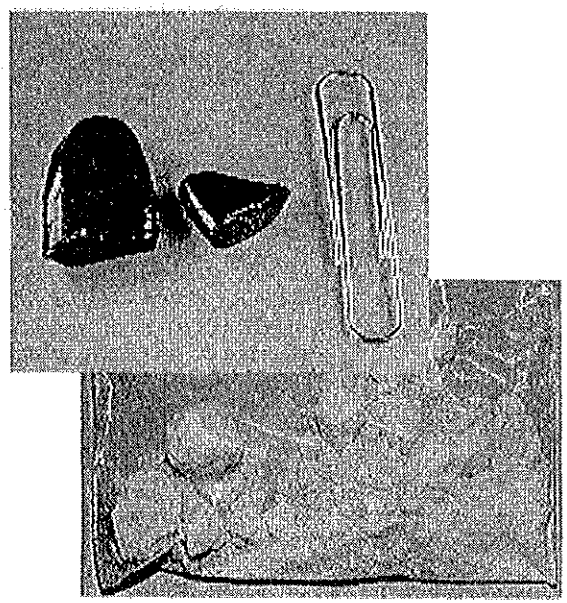
Common Combinations of Drugs

- Cocaine and cannabis
- Cocaine and heroin
- PCP and cannabis
- Alcohol and practically anything else









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

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

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

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

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

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

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

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

The Effects of Drug Combinations

- Null Effects
- Overlapping Effects
- Additive Effects
- Antagonistic Effects

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
Vertical Nystagmus	None	None	Null	None
Lack of Convergence	Present	None	Overlapping	Present
PupilSize	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

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
Vertical Nystagmus	Present	None	Overlapping	Present
Lack of Convergence	Present	None	Overlapping	Present
PupilSize	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

CANNABIS AND STIMULANT IN COMBINATION

IMPAIRMENT INDICATOR	EFFECT DUE TO CANNABIS	EFFECT DUE TO STIMULANT	TYPE OF COMBINED EFFECT	WHAT WILL WE SEE
HORIZONTAL GAZE NYSTAGMUS	NONE	NONE	NULL	NONE
VERTICAL GAZE NYSTAGMUS	NONE	NONE	NULL	NONE
LACK OF CONVERGENCE	PRESENT	NONE	OVERLAPPING	PRESENT
PUPIL SIZE	DILATED OR NORMAL	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

PHENCYCLIDINE AND HEROIN IN COMBINATION

IMPAIRMENT INDICATOR	EFFECT DUE TO PHENCYCLIDINE	EFFECT DUE TO HEROIN	TYPE OF COMBINED EFFECT	WHAT WILL WE SEE
HORIZONTAL GAZE NYSTAGMUS	PRESENT	NONE	OVERLAPPING	PRESENT
VERTICAL GAZE NYSTAGMUS	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

INDICATORS CONSISTENT WITH DRUG CATEGORIES

	DEPRESSANT	STIMULANTS	HALLUCINOGEN	PCP	NARCOTIC	INHALANT	CANNABIS
HORIZONTAL GAZE NYSTAGMUS	PRESENT	NONE	NONE	PRESENT	NONE	PRESENT	NONE
VERTICAL NYSTAGMUS	PRESENT (HIGH DOSE)*	NONE	NONE	PRESENT	NONE	PRESENT (HIGH DOSE)*	NONE
LACK OF CONVERGENCE	PRESENT	NONE	NONE	PRESENT	NONE	PRESENT	PRESENT
PUPIL SIZE	NORMAL (1)	DILATED	DILATED	NORMAL	CONSTRICTED	NORMAL (4)	DILATED (6)
REACTION TO LIGHT	SLOW	SLOW	NORMAL (3)	NORMAL	LITTLE OR NONE VISIBLE	SLOW	NORMAL
PULSE RATE	DOWN (2)	UP	UP	UP	DOWN	UP	UP
BLOOD PRESSURE	DOWN	UP	UP	UP	DOWN	UP/DOWN (5)	UP
BODY TEMPERATURE	NORMAL	UP	UP	UP	DOWN	UP/DOWN/ NORMAL	NORMAL

*high dose for that particular individual

FOOTNOTE:
These indicators are those most consistent with the category, keep in mind that there may be variations due to individual reaction, dose taken and drug interactions.

1. SOMA, Quaaludes usually dilate pupils.
2. Quaaludes and ETOH may elevate.
3. Certain psychedelic amphetamines cause slowing.
4. Normal but may be dilated.
5. Down with anesthetic gases, up with volatile solvents and aerosols.
6. Pupil size possible normal.

MAJOR INDICATORS	CNS DEPRESSANTS	CNS STIMULANTS	HALLUCINOGENS	PCP	NARCOTIC ANALGESICS	INHALANTS	CANNABIS
GENERAL INDICATORS	Uncoordinated Disoriented Sluggish Thick, slurred speech Drunk-like behavior Gait ataxia Drowsiness Droopy eyes Fumbling *Note: With Methaqualone, pulse will be elevated and body tremors will be evident. Alcohol and Quaaludes elevate pulse. Soma and Quaaludes dilate pupils.	Restlessness Body tremors Excited Euphoric Talkative Exaggerated reflexes Anxiety Grinding teeth (bruxism) Redness to nasal area Runny nose Loss of appetite Insomnia Increased alertness Dry mouth Irritability	Dazed appearance Body tremors Synesthesia Hallucinations Paranoia Uncoordinated Nausea Disoriented Difficulty in speech Perspiring Poor perception of time & distance Memory loss Disorientation Flashbacks Note: With LSD, piloerection may be observed (goose bumps, hair standing on end)	Perspiring Warm to the touch Blank stare Very early angle of HGN onset Difficulty in speech Incomplete verbal responses Repetitive speech Increased pain threshold Cyclic behavior Confused agitated Hallucinations Possibly violent & combative Chemical odor "Moon walking"	Droopy eyelids ("ptosis") "On the nod" Drowsiness Depressed reflexes Low, raspy, slow speech Dry mouth Facial itching Euphoria Fresh puncture marks Nausea Track marks Note: Tolerant users exhibit relatively little psychomotor impairment.	Residue of substance around nose & mouth Odor of substance Possible nausea Slurred speech Disorientation Confusion Bloodshot, watery eyes Lack of muscle control Flushed face Non-communicative Intense headaches **Note: Anesthetic gases cause below normal blood pressure; volatile solvents and aerosols cause above normal blood pressure	Marked reddening of conjunctiva Odor of Marijuana Marijuana debris in mouth Body tremors Eyelid tremors Relaxed inhibitions Increased appetite Impaired perception of time & distance Disorientation Possible paranoia
DURATION OF EFFECTS	Barbiturates: 1-16 hours Tranquilizers: 4-8 hours Methaqualone: 4-8 hours	Cocaine: 5-90 minutes Amphetamines: 4-8 hours Methomephetamines: 12 hours	Duration varies widely from one hallucinogen to another.	Onset: 1-5 minutes Peak Effects: 15-30 minutes Exhibits effects up to 4-6 hours	Heroin: 4-6 hours Methadone: Up to 24 hours Others: Vary	6-8 hours for most volatile solvents Anesthetic gases and aerosols - very short duration.	2-3 hours - exhibits effects (Impairment may last up to 24 hours, without awareness of effects.)
USUAL METHODS OF ADMINISTRATION	Oral Injected (occasionally)	Insufflation (snorting) Smoked Injected Oral	Oral Insufflation Smoked Injected Transdermal	Smoked Oral Insufflation Injected Eye drops	Injected Oral Smoked Insufflated	Insufflated (Historically, have been taken orally.)	Smoked Oral
OVERDOSE SIGNS	Shallow breathing Cold, clammy skin Pupils dilated Rapid, weak pulse Coma	Agitation Increased body temperature Hallucinations Convulsions	Long intense "trip"	Long intense "trip"	Slow, shallow breathing Clammy skin Coma Convulsion	Coma	Fatigue Paranoia

000835

WORKSHEET #1

PCP AND HALLUCINOGENS

IMPAIRMENT INDICATOR	EFFECT DUE TO PCP	EFFECT DUE TO HALLUCINOGEN	TYPE OF COMBINED EFFECT*	WHAT WILL WE SEE
HORIZONTAL GAZE NYSTAGMUS				
VERTICAL GAZE NYSTAGMUS				
LACK OF CONV.				
PUPIL SIZE				
REACT LIGHT				
PULSE RATE				
BLOOD PRESSURE				
BODY TEMP				

*Null; Overlapping; Additive; or, Antagonistic

WORKSHEET #2

CANNABIS AND DEPRESSANT

IMPAIRMENT INDICATOR	EFFECT DUE TO CANNABIS	EFFECT DUE TO DEPRESSANT	TYPE OF COMBINED EFFECT*	WHAT WILL WE SEE
HORIZONTAL GAZE NYSTAGMUS				
VERTICAL GAZE NYSTAGMUS				
LACK OF CONV.				
PUPIL SIZE				
REACT LIGHT				
PULSE RATE				
BLOOD PRESSURE				
BODY TEMP				

*Null; Overlapping; Additive; or, Antagonistic

WORKSHEET #3

STIMULANT AND DEPRESSANT

IMPAIRMENT INDICATOR	EFFECT DUE TO STIMULANT	EFFECT DUE TO DEPRESSANT	TYPE OF COMBINED EFFECT*	WHAT WILL WE SEE
HORIZONTAL GAZE NYSTAGMUS				
VERTICAL GAZE NYSTAGMAS				
LACK OF CONV.				
PUPIL SIZE				
REACT LIGHT				
PULSE RATE				
BLOOD PRESSURE				
BODY TEMP				

*Null; Overlapping; Additive; or, Antagonistic

Forty-Five Minutes

SESSION XXV

PRACTICE: TEST INTERPRETATION

SESSION XXV PRACTICE: TEST INTERPRETATION

Upon successfully completing this session, the participant will be able to:

- Analyze the results of a complete Drug Evaluation and Classification Examination and identify the category or categories of drugs affecting the individual examined.
- Articulate the bases for the drug category identification.

Content Segments	Learning Activities
A. Interpretation Demonstrations	o Instructor Led Demonstrations
B. Interpretation Practice	o Small Group Practice
	o Participant Led Presentations

Aides	Lesson Plan	Instructor Notes
  **XXV-O** (Objectives)  **20 Minutes**	PRACTICE: TEST INTERPRETATION	Total Lesson Time: Approximately 45 Minutes Point out the "Test Interpretation" wall chart. Briefly review the objectives, content and activities of this session.
	A. Interpretation Demonstrations	
	1. Case #1: "Subject Knight"	Direct students to review the "Subject Knight" exemplar in Section XXV of their manual.
	a. Preliminary Examination.	Review the results of the Preliminary Examination of Subject Knight. Ask 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.
	b. Eye Examinations.	Review the results of the Eye Examinations of Subject Knight. Ask students to discuss the category or categories of drugs that would produce these eye examination results.
	c. Psychophysical Tests.	Review the results of the Psychophysical Tests of Subject Knight.

Aides	Lesson Plan	Instructor Notes
		Ask students to discuss the category or categories of drugs that would produce these psychophysical test results.
	d. Vital Signs Examinations.	Review the results of the Vital Signs Examinations of Subject Knight. Ask students to discuss the category or categories of drugs that would produce these results.
	e. Dark Room Examinations.	Review the results of the Dark Room Examinations of Subject Knight. Ask students to discuss the category or categories of drugs that would produce these results.
	f. Other evidence.	Review the results of the examinations for injection sites and muscle rigidity, and of the final interview of Subject Knight. Ask students to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.
	g. Opinions of evaluator.	Point out that the evidence indicates that Subject Knight is under the influence of Cannabis. Solicit students' questions concerning this demonstration.
	2. Case #2: "Subject Lopez".	Direct students to review the "Subject Lopez" exemplar.

Aides	Lesson Plan	Instructor Notes
	a. Preliminary Examination.	Review the results of the Preliminary Examination of Subject Lopez. Ask students: "What category or cateories of drugs would produce preliminary examination results consistent with this exemplar?" Probe to draw out the bases for students' responses.
	b. Eye Examinations.	Review the results of the Eye Examinations of Subject Lopez. Ask students to discuss the category or categories of drugs that would produce these eye examination results.
	c. Psychophysical Tests.	Review the results of the Psychophysical Tests of Subject Lopez. Ask students to discuss the category or categories of drugs that would produce these psychophysical test results.
	d. Vital Signs Examinations.	Review the results of the Vital Signs Examinations of Subject Lopez. Ask students to discuss the category or categories of drugs that would produce these results.
	e. Dark room examinations.	Review the results of the Dark Room Examinations of Subject Lopez.

Aides	Lesson Plan	Instructor Notes
		Ask students to discuss the category or categories of drugs that would produce these results.
	f. Other evidence.	Review the results of the examinations for injection sites and muscle tone, and of the final interview of Subject Lopez. Ask students to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.
	g. Opinions of evaluator.	Point out that the evidence indicates that Subject Lopez is under the influence of Inhalants. Solicit students' questions concerning this demonstration.
25 Minutes	B. Interpretation Practice	
	1. Team practice.	Assign students to work in teams of 3 or 4 members. Tell teams that they are to review three exemplars (Subjects Morse, Neal and Oates). Team members are to discuss the evidence among themselves and reach a conclusion concerning the category or categories of drugs, if any. Teams will present their conclusions to the entire class.

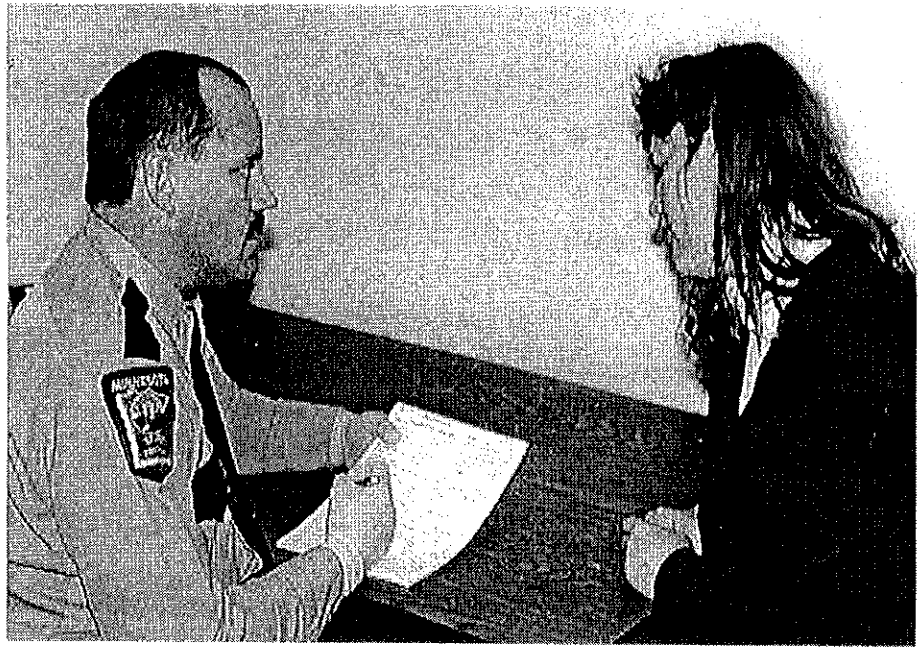
Aides	Lesson Plan	Instructor Notes
	a. Review and discussion of exemplars by teams. b. Feedback of results. o Subject Morse o Subject Neal o Subject Oates 2. Session wrap up.	Allow teams approximately 15 minutes to review the three exemplars and reach their conclusions. Poll the teams to determine their conclusions concerning the category or categories of drugs present in each subject. Offer appropriate comments concerning the teams' performance. Solicit students' comments and questions concerning this practice session.

DRUG CATEGORIES FOR INTERPRETATION PRACTICE

SUBJECT	CATEGORY(IES)
Knight	Cannabis
Lopez	Inhalants
Morse	PCP and Cannabis
Neal	Narcotic Analgesic
Oates	Hallucinogen

Session XXV

Practice: Test Interpretation



Practice: Test Interpretation

Upon successfully completing this session, the participant will be able to:

- Analyze the results of a complete drug evaluation and classification examination and identify the category or categories of drugs affecting the individual examined
- Articulate the bases for the drug category identification

000849

Page 1 of 2

DRUG INFLUENCE EVALUATION

EVALUATOR: RICHARDSON, SANDY
BOOKING NO.: 028
DR.: XXV-1

ARRESTEE'S NAME (LAST, FIRST, MI): KNIGHT, RAYMOND K
AGE: 34 | SEX: M | RACE: W
ARRESTING OFFICER (NAME, SERIAL #, DIV.): MOEN, B 6225 VTD

DATE EXAMINED/TIME/LOCATION: 3-21-96 2330 VALLEY TRF BU
BREATH RESULTS: ☐ Refused Results 0.00 Instrument # 1234
CHEMICAL TEST: ☐ Both Tests Refused ☑ Urine ☐ Blood

MIRANDA WARNING GIVEN: ☑ Yes ☐ No Given by: S. RICHARDSON
What have you eaten today? SOME COOKIES When? FEW HRS AGO
What have you been drinking? How much? TEA N/A Time of last drink? N/A
Time now? When did you last sleep? How long? NO INFA I DON'T REMEMBER YESTERDAY LAST NIGHT
Are you sick or injured? ☐ Yes ☑ No
Are you diabetic or epileptic? ☐ Yes ☑ No
Do you take insulin? ☐ Yes ☑ No
Do you have any physical defects? ☐ Yes ☑ No
Are you under the care of a doctor/dentist? ☐ Yes ☑ No
Are you taking any medication or drugs? ☐ Yes ☑ No

ATTITUDE: COOPERATIVE BUT SLOW TO RESPOND DISINTERESTED
COORDINATION: DISORIENTED UNSTEADY
SPEECH: SLOW
BREATH: STALE ODOR
FACE: NORMAL

CORRECTIVE LENS: ☑ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ☐ Normal ☑ Bloodshot ☐ Watery
Blindness: ☑ None ☐ L Eye ☐ R Eye
Tracking: ☑ Equal ☐ Unequal
PUPIL SIZE: ☑ Equal ☐ Unequal (explain)
HGN Present: ☐ Yes ☑ No
Able to follow stimulus: ☑ Yes ☐ No
Eyelids: ☑ Normal ☐ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 112 / 2335	Lack of Smooth Pursuit	NO	NO
2. 114 / 2347	Max. Deviation	NO	NO
3. 112 / 2357	Angle of Onset	NONE	NONE

Vertical Nystagmus? ☐ Yes ☑ No
Convergence: Right Eye ✓ Left Eye ✓

ONE LEG STAND
LEG TREMORS

BALANCE EYES CLOSED
CIRCULAR SWAY EYELID TREMORS

WALK AND TURN TEST
LOWER BODY TREMORS

Cannot keep balance ✓✓
Starts too soon

	1st Nine	2nd Nine
Stops Walking		
Misses Heal-Toe		
Steps off Line		
Raises Arms	✓✓✓	✓✓
Actual Steps Taken	9	9

L ☑ ☑ Sways while balancing.
☑ ☑ Uses arms to balance.
☐ ☐ Hopping.
☐ ☑ Puts foot down.

INTERNAL CLOCK: 43 Estimated as 30 sec.
Describe Turn: AS INSTRUCTED BUT VERY SLOW
Cannot do Test (explain): N/A
Type of Footwear: SANDALS

○ Right △ Left
Draw lines to spots touched
EYELID TREMORS SWAYING

PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	5.5	7.0	6.0	5.0
Right Eye	5.5	7.0	6.0	5.0

NASAL AREA: CLEAR
ORAL CAVITY: BROWNISH GREEN COATING ON TONGUE

HIPPUS: ☐ Yes ☑ No
REBOUND DILATION: ☐ Yes ☑ No
Reaction to Light: NORMAL

RIGHT ARM
LEFT ARM
ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 140 / 100
TEMP: 98.6°
MUSCLE TONE: ☑ Near Normal ☐ Flaccid ☐ Rigid
Comments:

What medicine or drug have you been using? NOTHING
How much? N/A
Time of use? NO ANSWER
Where were the drugs used? (Location) NO ANSWER

DATE/TIME OF ARREST: 3-21-96 2250
TIME DRE NOTIFIED: 2315
EVAL START TIME: 2330
TIME COMPLETED: 0010 3-22-96

CONTROL #
EXAMINING OFFICER: Sandy Richardson
SERIAL NO: 3822
DIVISION: NHTSA
UNAVAILABLE DATES
REVIEWED BY: PAQUETTE

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Sandy Richardson	ARRESTEE: Raymond K. Knight

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Raymond K. Knight, took place in the DRE room, Valley Traffic Division, LAPD

2. WITNESS: Arresting Officer Sgt. Ron Moen LAPD

3. BREATH TEST: Sgt. Moen administered breath test to Knight, the result was 0.00% and 0.00.

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was contacted by radio and advised to return to Valley Traffic Division to conduct a DRE evaluation. Sgt. Moen stated he had observed the subject driving very slowly (@20 mph) without headlights and impeding traffic.

5. INITIAL OBSERVATIONS: Writer observed the subject seated int he breath testing room. Subject appeared passive, quiet, and seemed uninterested in what was going on around him. However, he was cooperative and responsive when I talked with him.

6. MEDICAL PROBLEMS: None noted or stated

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject swayed approximately 2" in a circular motion, and exhibited eyelid tremors, and estimated 43 seconds as 30 seconds. Walk and Turn: Subject lost his balance during the instructions and raised his arms for balance. One Leg Stand: Subject raised his arms, swayed, and put his foot down. Finger to Nose: Subject swayed, exhibited eyelid tremors, and missed the tip of his nose.

8. CLINICAL INDICATORS: Subject's pulse and blood pressure were above the normal range. His pupils were dilated, there was lack of convergence, and reddening of the conjunctiva.

9. SIGNS of INGESTION: Subject had a brownish - green coloration on his tongue.

10. STATEMENTS: Subject denied using any medication or drugs.

11. OPINION of EVALUATOR: In my opinion Raymond K. Knight is under the influence of and unable to operate a vehicle safely.

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a urine sample.

13. MISCELLANEOUS: Throughout the evaluation subject exhibited eyelid and muscle tremors.

000851

Page 1 of 2 **DRUG INFLUENCE EVALUATION**

EVALUATOR: TOWER, BILL
BOOKING NO.: 029
DR: XXV-2

ARRESTEE'S NAME (LAST, FIRST, MI): LOPEZ, NANCY L | AGE: 19 | SEX: F | RACE: B
ARRESTING OFFICER (NAME, SERIAL #, DIV): TOWER TW 1776 MSP

DATE EXAMINED/TIME/LOCATION: 5-7-96 0200 HOWARD CITY PD
BREATH RESULTS: ☐ Refused; Results 0.00; Instrument # 1234
CHEMICAL TEST: ☐ Urine ☒ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ☒ Yes ☐ No; Given by: TW TOWER
What have you eaten today? PIZZA. When? DON'T REMEMBER
What have you been drinking? COCACOLA. How much? 1. Time of last drink? N/A

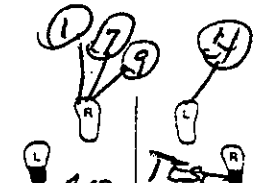
Time now? 9PM. When did you last sleep? LAST NIGHT. How long? ALL NIGHT
Are you sick or injured? ☐ Yes ☒ No
Are you diabetic or epileptic? ☐ Yes ☒ No
Do you take insulin? ☐ Yes ☒ No
Do you have any physical defects? ☐ Yes ☒ No
Are you under the care of a doctor/dentist? ☐ Yes ☒ No
Are you taking any medication or drugs? ☐ Yes ☒ No
ATTITUDE: WITHDRAWN, PASSIVE, DETATCHED
COORDINATION: POOR, STUMBLING
SPEECH: Slow, Slurred, Low
BREATH: CHEMICAL ODOR
FACE: FLUSHED

CORRECTIVE LENS: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ☐ Normal ☒ Bloodshot ☒ Watery
Blindness: ☒ None ☐ L Eye ☐ R Eye
Tracking: ☒ Equal ☐ Unequal
PUPIL SIZE: ☒ Equal ☐ Unequal (explain)
HGN Present: ☒ Yes ☐ No
Able to follow stimulus: ☒ Yes ☐ No
Eyelids: ☒ Normal ☐ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 102, 0210	Lack of Smooth Pursuit	YES	YES
2. 104, 0222	Max. Deviation	YES	YES
3. 104, 0232	Angle of Onset	35°	35°

Vertical Nystagmus? ☒ Yes ☐ No
Convergence: Right Eye → Left Eye ←

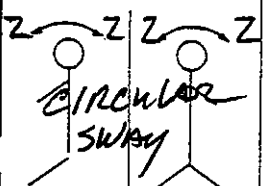
ONE LEG STAND



TEST NEARLY FELL, STOPPED

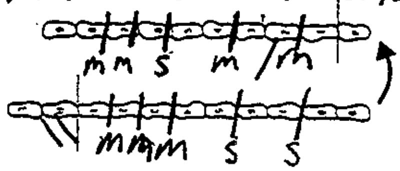
L R
☐ ☐ Sways while balancing.
☐ ☐ Uses arms to balance.
☐ ☐ Hopping.
☐ ☐ Puts foot down.

BALANCE EYES CLOSED



CIRCULAR SWAY

WALK AND TURN TEST: REPEATEDLY REQUESTED INSTRUCTIONS

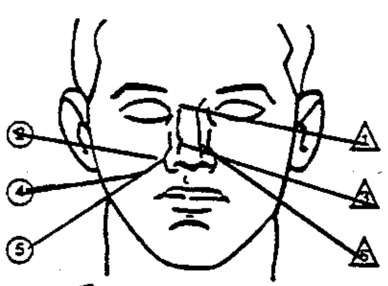


Cannot keep balance: ✓✓
Starts too soon:

	1st Nine	2nd Nine
Stops Walking	✓✓	✓
Misses Heel-Toe	✓✓✓	✓✓✓✓
Steps off Line		✓
Raises Arms	✓✓	✓✓✓
Actual Steps Taken	9	9

INTERNAL CLOCK: 90 Estimated as 30 sec.
Describe Turn: AS INSTRUCTED, VERY SLOW AND STIFF
Cannot do Test (explain): N/A
Type of Footwear: FLAT SHOES

○ Right △ Left
Draw lines to spots touched

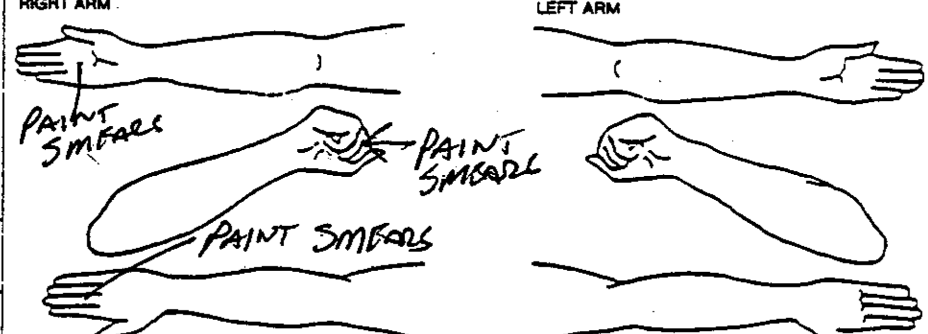


SWAYING

PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	5.0	6.5	6.0	4.5
Right Eye	5.0	6.5	6.0	4.5

NASAL AREA: RUNNY NOSE, PAINT SMEARS ON FACE
ORAL CAVITY: CLEAR
HIPPUS: ☐ Yes ☒ No
REBOUND DILATION: ☐ Yes ☒ No
Reaction to Light: NORMAL

RIGHT ARM LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 142/98 TEMP: 98.8°
MUSCLE TONE: ☒ Near Normal ☐ Flaccid ☐ Rigid
Comments:

What medicine or drug have you been using? NOTHING. How much? NO ANSWER. Time of use?
Where were the drugs used? (Location) NO ANSWER

DATE/TIME OF ARREST: 5-7-96 0130
TIME DRE NOTIFIED: 0130 MY ARREST
EVAL START TIME: 0200
TIME COMPLETED: 0238

CONTROL #:
EXAMINING OFFICER: TW Tower
SERIAL NO: 1776
DIVISION: MSP
UNAVAILABLE DATES:
REVIEWED BY: PAQUETTE

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: F/Sgt. Bill Tower	ARRESTEE: Nancy L. Lopez

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Nancy L. Lopez, took place in the DRE room, Howard County Police Dept.

2. WITNESS: Officer Scott Wichtendahl

3. BREATH TEST: Officer Scott Wichtendahl administered breath test to Lopez, the result was 0.00%.

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was the arresting officer.

5. INITIAL OBSERVATIONS: Writer was at residence when awaken by loud shouts and arguing voices. Through window, writer observed four individuals standing on the front lawn. Three were young males, they were shouting at and pushing each other. The subject, was standing passively several yards away. Upon turning on the outside light and exiting my residence, the three males fled. The subject remained standing on the lawn she appeared dazed and confused. There was an strong chemical odor emanating from her.

6. MEDICAL PROBLEMS: None noted or stated

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject swayed approximately 2" in a circular motion, and estimated 90 seconds as 30 seconds. When asked, " how long she had been instructed to keep her eyes closed." She stared straight ahead for a few seconds and then said, "what? what did you say?" When the question was repeated she slowly shrugged and said, "I don't know?" Walk and Turn: Subject lost her balance during the instructions, stopped walking, raised her arms for balance, and missed heel to toe and stepped off the line. On several occasions she asked,"What do you want me to do next?" One Leg Stand: Subject could not maintain her balance and the test was stopped for her safety. Finger to Nose: Subject missed tip of her nose each time, and kept opening her eyes.

8. CLINICAL INDICATORS: Subject had HGN, Vertical Nystagmus and Lack of Convergence. Her pulse and blood pressure were above the normal range.

9. SIGNS of INGESTION: Subject's breath had a strong chemical odor. She had what appeared to be paint smears on her nostrils, lips and right hand.

10. STATEMENTS: Subject denied using any medication or drugs.

11. OPINION of EVALUATOR: In my opinion Nancy L. Lopez is under the influence of a and unable to operate a vehicle safely.

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a blood sample.

13. MISCELLANEOUS:

000853

Page 1 of 2

DRUG INFLUENCE EVALUATION

EVALUATOR: SPARKS, BOB
BOOKING NO.: 030
DR.: XXV-3

ARRESTEE'S NAME (LAST, FIRST, MI): MORSE, WAYNE M
AGE: 29 | SEX: M | RACE: B
ARRESTING OFFICER (NAME, SERIAL #, DIV.): UNSWORTH, J #1811 PHOENIX PD
DATE EXAMINED/TIME/LOCATION: 8-21-96 2300 PHOENIX PD
BREATH RESULTS: ☐ Refused Results 0.00 Instrument # 1234
CHEMICAL TEST: ☑ Urine ☐ Blood ☐ Both Tests Refused
MIRANDA WARNING GIVEN: ☑ Yes ☐ No Given by: B. SPARKS
What have you eaten today? When? NO RESPONSE
What have you been drinking? How much? NO RESPONSE
Time of last drink? N/A
Time now? NO RESPONSE When did you last sleep? How long? EAT? SOME HOTDOGS
Are you sick or injured? NO BEER DIDN'T DRINK ☐ Yes ☐ No
Are you diabetic or epileptic? NO RESPONSE ☐ Yes ☐ No
Do you take insulin? NO RESPONSE ☐ Yes ☐ No
Do you have any physical defects? DIDN'T DRINK ANYTHING ☐ Yes ☐ No
Are you under the care of a doctor/dentist? NO RESPONSE ☐ Yes ☐ No
Are you taking any medication or drugs? ANSWERED "NO" VERY SLOW ☐ Yes ☑ No
ATTITUDE: NON RESPONSIVE PASSIVE
COORDINATION: VERY POOR STAGGERING - STUMBLING
SPEECH: SLOW DRAWN OUT REPETITIVE SOMETIMES
BREATH: ODOR of MARIJUANA
FACE: SWEATY BLANK STARE
CORRECTIVE LENS: ☑ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ☐ Normal ☑ Bloodshot ☐ Watery
Blindness: ☑ None ☐ L. Eye ☐ R. Eye
Tracking: ☑ Equal ☐ Unequal
PUPIL SIZE: ☑ Equal ☐ Unequal (explain)
HGN Present: ☑ Yes ☐ No
Able to follow stimulus: ☑ Yes ☐ No
Eyelids: ☑ Normal ☐ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 108 : 2307	Lack of Smooth Pursuit	YES	YES
2. 110 : 2318	Max. Deviation	YES	YES
3. 108 : 2329	Angle of Onset	30°	30°

Vertical Nystagmus? ☑ Yes ☐ No
Convergence: Right Eye NEVER Left Eye NEVER

ONE LEG STAND: TEST STOPPED

BALANCE EYES CLOSED: ARMS VERY RIGID

WALK AND TURN TEST: ARMS + LEGS RIGID

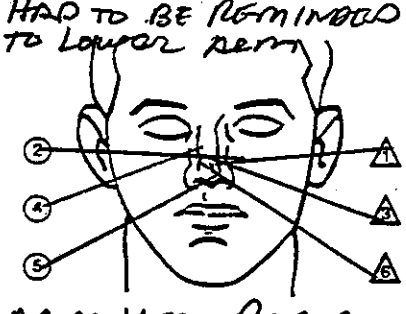
	1st Nine	2nd Nine
Cannot keep balance	VV	
Starts too soon		
Stops Walking	✓	
Misses Heal-Toe	ALL STEPS	
Steps off Line		VVVV
Raises Arms	VVV	VVVV
Actual Steps Taken	9	9

NEVER TOUCHED HEEL TO TOE

	L	R
Sways while balancing.	☐	☐
Uses arms to balance.	☑	☐
Hopping.	☐	☐
Puts foot down.	☑	☑

INTERNAL CLOCK: 55 Estimated as 30 sec.
Describe Turn: DID NOT LEAVE FRONT FOOT STATIONARY
Cannot do Test (explain): N/A
Type of Footwear: RUNNING SHOES

○ Right △ Left
Draw lines to spots touched

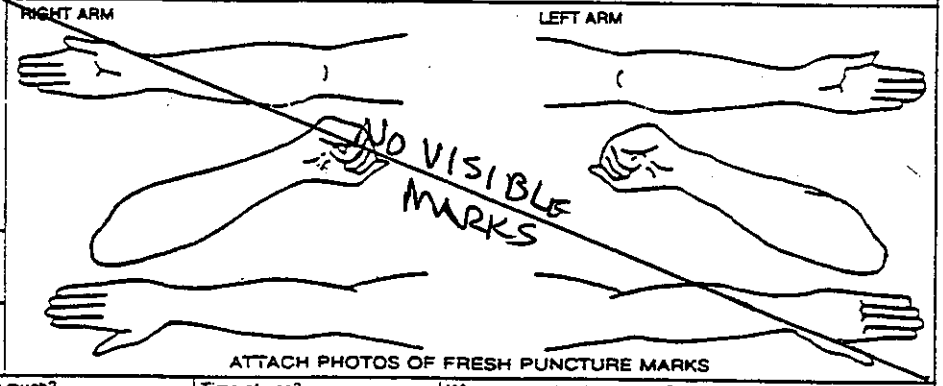


PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	5.5	7.5	6.5	5.0-6.5
Right Eye	5.5	7.5	6.5	5.0-6.5

NASAL AREA: CLEAR
ORAL CAVITY: SMALL BITS OF GREEN LEAFY MATERIAL
HIPPUS: ☐ Yes ☑ No
REBOUND DILATION: ☑ Yes ☐ No
Reaction to Light: NORMAL

BLOOD PRESSURE: 148 / 102 TEMP: 99.8°
MUSCLE TONE: ☐ Near Normal ☐ Flaccid ☑ Rigid
Comments: VERY RIGID

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

What medicine or drug have you been using? How much? NO RESPONSE (BLANK STARE)
Time of use? NO RESPONSE
Where were the drugs used? (Location) NOT TELLING YOU

DATE/TIME OF ARREST: 8-21-96 2240
TIME DRE NOTIFIED: PRESENT AT ARREST
EVAL START TIME: 2300
TIME COMPLETED: 2338

CONTROL #:
EXAMINING OFFICER: B. Sparks
SERIAL NO: 111B
DIVISION: PPD
UNAVAILABLE DATES:
REVIEWED BY: M. GEORGE

DRUG INFLUENCE EVALUATION Page 2 of 2

LOG NO.	DRE: Sgt. Bob Sparks	ARRESTEE: Wayne M. Morse

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Wayne M. Morse, took place in the DRE room, Traffic Office, Phoenix Police Dept.

2. WITNESS: Officer James Unsworth, #1811 PPD

3. BREATH TEST: Writer administered breath test to Morse, the result was 0.00%.

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was present at the time of arrest.

5. INITIAL OBSERVATIONS: Writer was supervising a sobriety check point and Officer Unsworth approach a vehicle and initiate a conversation with the subject. When the subject exited his vehicle, he was unsteady on his feet, and very slow in responding to Officer Unsworth's questions and instructions.

6. MEDICAL PROBLEMS: None noted or stated

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject swayed approximately 3" side to side, and estimated 55 seconds as 30 seconds. Walk and Turn: Subject lost his balance during the instructions, stepped off the line, missed heel to toe, stopped walking, raised his arms for balance, and turned improperly. One Leg Stand: Subject raised his arms, swayed and put his foot down. On the second legs he could not maintain his balance and the test was terminated for his safety. Finger to Nose: Subject missed tip of his nose each time, and kept his finger in contact with the face on every trial.

8. CLINICAL INDICATORS: Subject had HGN, Vertical Nystagmus and Lack of Convergence. His pulse, blood pressure, and temperature were all elevated. His pupils were dilated in near total darkness and exhibited rebound dilation.

9. SIGNS of INGESTION: Subject's breath had an odor of marijuana and there was vegetable material on his teeth.

10. STATEMENTS: Subject denied using any medication or drugs.

11. OPINION of EVALUATOR: In my opinion Wayne M. Morse is under the influence of a and unable to operate a vehicle safely.

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a urine sample.

13. MISCELLANEOUS:

000855

Page 1 of 2

DRUG INFLUENCE EVALUATION

EVALUATOR: WILES, W.
BOOKING NO.: 031
DR.: XXV-4

ARRESTEE'S NAME (LAST, FIRST, MI): NEAL, CHARLES N
AGE: 44 | SEX: M | RACE: W
ARRESTING OFFICER (NAME, SERIAL #, DIV.): MILSTEAD, F, 4443 PPD

DATE EXAMINED/TIME/LOCATION: 10-2-96 / 1930 CENTRAL INTOX
BREATH RESULTS: Refused ☐ Results 0.100 Instrument # 1234
CHEMICAL TEST: ☑ Urine ☐ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: ☑ Yes ☐ No
Given by: F. MILSTEAD
What have you eaten today? When? CORN FLAKES THIS MORNING
What have you been drinking? How much? NOTHING AT ALL
Time of last drink? N/A
Time now? MIDNIGHT
When did you last sleep? How long? I DON'T REMEMBER
Are you sick or injured? ☑ Yes ☐ No FEEL STOMACH SICK
Are you diabetic or epileptic? ☐ Yes ☑ No
Do you take insulin? ☐ Yes ☑ No
Do you have any physical defects? ☐ Yes ☑ No
Are you under the care of a doctor/dentist? ☐ Yes ☑ No
Are you taking any medication or drugs? ☑ Yes ☐ No I'M PRETTY CLEAN
ATTITUDE: COOPERATIVE BUT SLOW TO RESPOND
COORDINATION: POOR STUMBLING
SPEECH: SLOW LOW RASPY
BREATH: NORMAL
FACE: APPEARS DROWSY
CORRECTIVE LENS: ☑ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft
Eyes: ☑ Normal ☐ Bloodshot ☐ Watery
Blindness: ☑ None ☐ L. Eye ☐ R. Eye
Tracking: ☑ Equal ☐ Unequal
PUPIL SIZE: ☑ Equal ☐ Unequal (explain) VERY SMALL
HGN Present: ☐ Yes ☑ No
Able to follow stimulus: ☑ Yes ☐ No
Eyelids: ☐ Normal ☑ Droopy VERY

PULSE & TIME	HGN	Left Eye	Right Eye
1. 54 / 1935	Lack of Smooth Pursuit	NO	NO
2. 60 / 1950	Max. Deviation	NO	NO
3. 56 / 2005	Angle of Onset	NONE	NONE

Vertical Nystagmus? ☐ Yes ☑ No
Convergence: Right Eye ✓ Left Eye ✓

ONE LEG STAND: TEST STOPPED ON BOTH ATTEMPTS

BALANCE EYES CLOSED

WALK AND TURN TEST

Cannot keep balance: ✓✓
Starts too soon:

	1st Nine	2nd Nine
Stops Walking	✓✓	✓✓
Misses Heal-Toe	✓	✓✓
Steps off Line		
Raises Arms	✓✓	✓✓✓
Actual Steps Taken	9	9

L R
☐ ☐ Sways while balancing.
☑ ☑ Uses arms to balance.
☐ ☐ Hopping.
☑ ☑ Puts foot down.

INTERNAL CLOCK: 58 Estimated as 30 sec.
Describe Turn: LOST BALANCE STAGGERED TO THE RIGHT
Cannot do Test (explain): N/A
Type of Footwear: WORK BOOTS

○ Right △ Left
Draw lines to spots touched

MOVED ARMS VERY SLOWLY

PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	1.5	1.5	1.5	1.5
Right Eye	1.5	1.5	1.5	1.5

NASAL AREA: CLEAR
ORAL CAVITY: CLEAR
HIPPUS: ☐ Yes ☑ No
REBOUND DILATION: ☐ Yes ☑ No
Reaction to Light: LITTLE OR NONE VISIBLE

RIGHT ARM: SCAR

LEFT ARM: SCAR, SCABS, SCAR, PUNCTURE WOUNDS OOZING FLUID

ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 110 / 60 TEMP: 97.5°
MUSCLE TONE: ☐ Near Normal ☑ Flaccid ☐ Rigid
Comments: NECK RUBBERY

What medicine or drug have you been using? I'M CLEAN NOW
How much? I'M NOT USING NOW
Time of use? HONEST I'M CLEAN
Where were the drugs used? (Location) I'M CLEAR

DATE/TIME OF ARREST: 10-2-96 1915
TIME DRE NOTIFIED: 1915
EVAL START TIME: 1930
TIME COMPLETED: 2010

CONTROL #:
EXAMINING OFFICER: [signature]
SERIAL NO: 422B
DIVISION: NRB
UNAVAILABLE DATES:
REVIEWED BY: Pryor M

DRUG INFLUENCE EVALUATION		Page 2 of 2
LOG NO.	DRE: Sgt. William Niles	ARRESTEE: Charles N. Neal

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of Charles N. Neal, took place in the holding area NRB

2. WITNESS: Arresting Officer Frank Milstead #4443 PPD

3. BREATH TEST: Officer Milstead administered breath test to Neal, the result was 0.00%.

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was assisting members of the Phoenix Police Department conduct a drug surveillance at Compton Terrace, prior to a 'Graceful Chickens' concert. Officer Milstead had received information, that there was a very drunk individual seated near the entrance to Compton Terrace. The subject appeared very sleepy and was very unsteady while walking, even while being supported.

5. INITIAL OBSERVATIONS: Writer observed subject seated in a chair his head was flopped down against his chest and he appeared to be sleeping. As he walked, he was very unsteady unsteady and stumbling. His pupils were constricted and his voice was low, slow, and raspy.

6. MEDICAL PROBLEMS: Subject indicated some nausea.

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject swayed approximately 1" side to side, 2" front to back, and estimated 58 seconds as 30 seconds. Walk and Turn: Subject 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: Subject was unable to perform test, and it was terminated for his safety. Finger to Nose: Subject missed tip of his nose each time, His movements were very slow, and his head was leaning forward towards his chest.

8. CLINICAL INDICATORS: Subject had constricted pupils. His pulse, blood pressure and body temperature were below the normal range.

9. SIGNS of INGESTION: Subject had several old track marks on both arms, and fresh puncture wounds on his left hand. All three of these were oozing clear fluid.

10. STATEMENTS: Subject made several statements about being "clean" and "not using now." He repeatedly answered "not sick" to questions concerning the use of medication. He also failed to respond to a couple of the questions

11. OPINION of EVALUATOR: In my opinion Charles N. Neal is under the influence of a and unable to operate a vehicle safely.

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a urine sample.

13. MISCELLANEOUS:

000857

Page 1 of 2

DRUG INFLUENCE EVALUATION

EVALUATOR: STEVE TOLAND

BOOKING NO.: 032 | DR.: XXV-5

ARRESTEE'S NAME (LAST, FIRST, MI): OATES, JOHN F | AGE: 46 | SEX: M | RACE: W

ARRESTING OFFICER (NAME, SERIAL #, DIV.): GREEN, W #4196 MPD

DATE EXAMINED/TIME/LOCATION: 11-5-96 2100 MPD

BREATH RESULTS: ☐ Refused Results 0.00 Instrument # 1234

CHEMICAL TEST: ☐ Both Tests Refused ☒ Urine ☐ Blood

MIRANDA WARNING GIVEN: ☒ Yes ☐ No Given by SGT TOLAND

What have you eaten today? MILKSHAKE When? NOON

What have you been drinking? How much? NOTHING I DONT DRINK Time of last drink? N/A

Time now? MIDNIGHT When did you last sleep? How long? TODAY 2HRS

Are you sick or injured? I FEEL JUST FINE ☐ Yes ☒ No

Are you diabetic or epileptic? ☐ Yes ☒ No

Do you take insulin? ☐ Yes ☒ No

Do you have any physical defects? ☐ Yes ☒ No

Are you under the care of a doctor/dentist? ☐ Yes ☒ No

Are you taking any medication or drugs? ☐ Yes ☒ No

ATTITUDE: RAPID EMOTIONAL CHANGES LAUGHING TO CRYING

COORDINATION: VERY POOR STUMBLING

SPEECH: MUMBLED, INCOHERENT, SHOUTING

BREATH: NORMAL

FACE: FLUSHED SWEATY

CORRECTIVE LENS: ☒ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft

Eyes: BUG EYED STARE ☐ Normal ☐ Bloodshot ☐ Watery

Blindness: ☒ None ☐ L. Eye ☐ R. Eye

Tracking: ☒ Equal ☐ Unequal

PUPIL SIZE: ☒ Equal ☐ Unequal (explain)

HGN Present: ☐ Yes ☒ No

Able to follow stimulus: ☒ Yes ☐ No

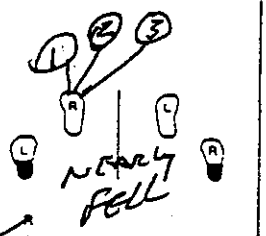
Eyelids: WIDE OPEN ☐ Normal ☐ Droopy

PULSE & TIME	HGN	Left Eye	Right Eye
1. 116 / 2110	Lack of Smooth Pursuit	NO	NO
2. 108 / 2130	Max. Deviation	NO	NO
3. 112 / 2145	Angle of Onset	NONE	NONE

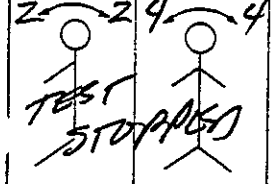
Vertical Nystagmus? ☐ Yes ☒ No

Convergence: Right Eye ← Left Eye →

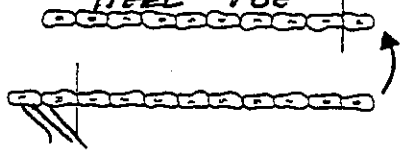
ONE LEG STAND: TEST STOPPED



BALANCE EYES CLOSED



WALK AND TURN TEST: TEST STOPPED COULD NOT STAND HEEL-TOE



	1st Nine	2nd Nine
Cannot keep balance	VV	
Starts too soon		
Stops Walking		
Misses Heel-Toe		
Steps off Line		
Raises Arms		
Actual Steps Taken		

L R
☐ ☐ Sways while balancing.
☐ ☐ Uses arms to balance.
☐ ☐ Hopping.
☐ ☐ Puts foot down.

INTERNAL CLOCK: N/A Estimated as 30 sec.

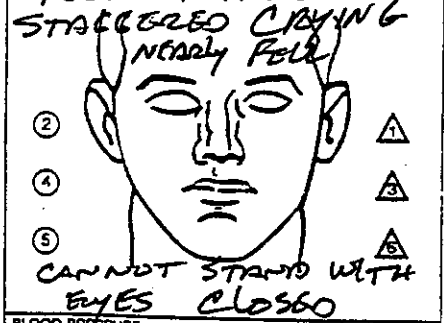
Describe Turn: N/A

Cannot do Test (explain): LOST BALANCE 3 TIMES NEARLY FELL

Type of Footwear: WAFERS

○ Right △ Left

Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	6.5	8.5	8.0	6.0
Right Eye	6.5	8.5	8.0	6.0

NASAL AREA: CLEAR

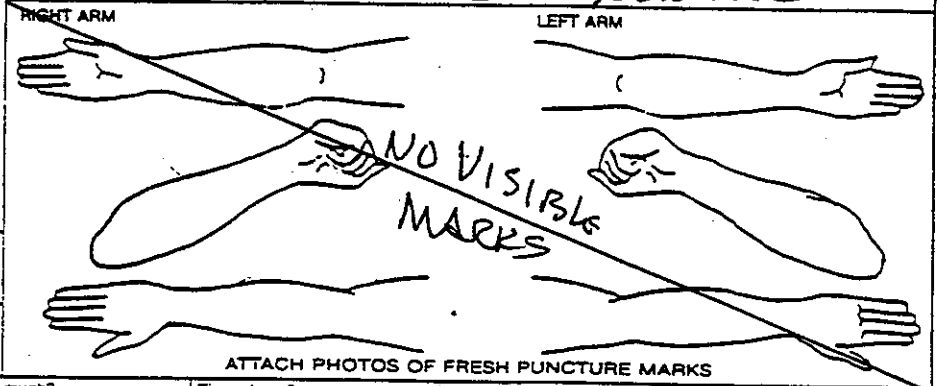
ORAL CAVITY: CLEAR

HIPPUS: ☐ Yes ☒ No

REBOUND DILATION: ☐ Yes ☒ No

Reaction to Light: NORMAL

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 156 / 102 TEMP: 99.8°

MUSCLE TONE: ☒ Near Normal ☐ Flaccid ☐ Rigid

Comments:

What medicine or drug have you been using? LAUGHING UNCONTROLLED How much? NO RESPONSE Time of use? LAUGHING Where were the drugs used? (Location) LAUGHING

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED
11-5-96 2050 HRS	2055	2100	2150

CONTROL #	EXAMINING OFFICER	SERIAL NO	DIVISION	UNAVAILABLE DATES	REVIEWED BY
	Steve Toland	1775	MPD		Taylor M

DRUG INFLUENCE EVALUATION Page 2 of 2

LOG NO.	DRE: Sgt. Steve Toland	ARRESTEE: John F. Oates

1. LOCATION 2. WITNESS 3. BREATH TEST 4. NOTIFICATION / INTERVIEW ARRESTING OFCR.
5. INITIAL OBSERVATIONS 6. MEDICAL PROBLEMS 7. PSYCHOPHYSICAL 8. CLINICAL INDICATORS
9. SIGNS OF INGESTION 10. SUSPECTS STATEMENTS 11. OPINION 12. TOXICOLOGY SAMPLE 13. MISC.

1. LOCATION: Examination of John F. Oates, took place in the DRE room, Mesa P.D. Hdqtrs

2. WITNESS: Arresting Officer William Green #4196 MPD

3. BREATH TEST: Officer Green administered breath test to Oates, the result was 0.00%.

4. NOTIFICATION / INTERVIEW of ARRESTING OFFICER: Writer was contacted by radio and advised to return to Hdqtrs to conduct a DRE evaluation. Officer Green informed me that the subject had nearly been involved in a head on accident.

5. INITIAL OBSERVATIONS: Writer observed subject seated in the breath test room at Hdqtrs. He was talking to himself and laughing uncontrolably.

6. MEDICAL PROBLEMS: None noted or stated

7. PSYCHOPHYSICAL TESTS: Romberg Balance: Subject swayed approximately 2" front to back, and 4" side to . side. The test was terminated for the subjects safety. Walk and Turn: Subject was unable to complete, test terminated stopped for the subjects safety. One Leg Stand: Subject was unable to complete, test was terminated for the subjects safety. Finger to Nose: Subject was unable to complete.

8. CLINICAL INDICATORS: Subject's pupils were dilated , and his pulse, blood pressure and temperature were above the normal range.

9. SIGNS of INGESTION: None noted

10. STATEMENTS: Subject stated he had not used any drugs since the 60's

11. OPINION of EVALUATOR: In my opinion John F. Oates is under the influence of a and unable to operate a vehicle safely.

12. TOXICOLOGICAL SAMPLE: Subject agreed to provide a urine sample.

13. MISCELLANEOUS:

Fifty Minutes

SESSION XXVI

PREPARING THE NARRATIVE REPORT

SESSION XXVI PREPARING THE NARRATIVE REPORT

Upon successfully completing this session, the participants will be able to:

- Discuss the essential elements of the Drug Evaluation report.
- Prepare a clear and concise narrative description of the results of the Drug Evaluation.

Content Segments

A. Purpose of the Narrative Report

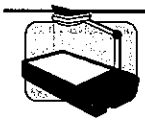
B. Drug Evaluation Report Format

C. Sample Report

Learning Activities

- Instructor Led Presentations
- Interactive Discussion

Aides	Lesson Plan	Instructor Notes
  **XXVI-O** (Objectives)  **10 Minutes**	PREPARING THE NARRATIVE REPORT	Total Lesson Time: Approximately 50 Minutes Session title on wallchart. Briefly review session objectives, content and learning activities.
	A. Purpose of the Narrative Report	
	1. Successful prosecution depends on how clearly, completely and convincingly the DRE presents their observations, measurements and conclusions.	
	2. A well written, clear and convincing drug evaluation report increases the likelihood that the suspect will be convicted.	
	a. Prosecutor is more likely to press the charge if the evidence is organized, clearly documented and compelling.	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.
	b. Defense is less likely to contest the charge when the report is descriptive, detailed and complete.	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.

Aides	Lesson Plan	Instructor Notes
 **XXVI-1** ("Sample Drug Influence Evaluation Face Sheet")	3. The standard Drug Influence Evaluation Face Sheet is <u>part</u> of your drug evaluation report; but it is <u>not</u> the entire report.	
	a. The Face Sheet contains some very important information.	Point out some of the key information on the sample Face Sheet. Examples: o Suspect's pulse rate was below normal on the last two measurements. o Suspect had some evidence of Nystagmus, but no onset angle was found. o Suspect's eyes failed to converge. o Suspect's pupils were constricted.
	b. But the Face Sheet does not contain <u>all</u> of the important information that is available concerning this suspect.	Ask students to suggest some important information that might be available that wouldn't ordinarily appear on the Face Sheet. Examples: o Information obtained during the interview of the arresting officer.

Aides	Lesson Plan	Instructor Notes
		o Elaborate or lengthy statements made by the suspect. o Paraphernalia found in suspect's possession.
	4. Most importantly, the standard Drug Influence Evaluation Face Sheet is a Technical Document. a. Trained DREs know how to complete and read the Face Sheet. b. But many prosecutors won't know how to read it. c. And most judges won't know how to read it. d. And almost no jurors will know how to read it.	
	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. 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. b. It would be a shame to waste that special ability by submitting an inadequate written report.	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.

Aides	Lesson Plan	Instructor Notes
	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:	
	Lack of Convergence a. A dot should be made where the pupil is and draw an arrow to indicate the movement and where the pupil stops.	Show the students an example. Remind them that in their student manuals is a complete description of the correct way to mark their evaluations.
	Romberg a. The first figure indicates the sway from front to back and should be estimated in inches from center. b. The second figure indicates the sway from side to side and is estimated in inches from center.	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.
	Walk and Turn a. The first two categories, cannot keep balance and starts too soon, are observed during the instruction stage. o On the lines indicate the number of times each cue is observed. b. Indicate by a check the number of times the suspect stops, misses heel to toe, steps off line or raises arms.	Demonstrate how each cue is to be documented using flipcharts or chalkboard

Aides	Lesson Plan	Instructor Notes
	c. Record the actual number of steps taken. d. If the suspect stops walking, indicate where with a vertical slash mark and an "S" under that mark. 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. f. If the suspect misses heel-to-toe, indicate with a vertical slash mark and an "M" under that mark.	
	One Leg Stand a. Indicate above the feet the number they were counting when they put their foot down. b. Check marks should be made to indicate the number of times the suspect swayed, used arms, hopped or put foot down. c. Indicate how far the subject counted in 30 seconds in the top area of the box above the foot raised.	Demonstrate how each cue is to be documented using flip charts or chalk board.
	Finger to Nose a. A line should be drawn to the appropriate triangle or circle to indicate where the suspect touched their nose.	Demonstrate how each cue is to be documented using a flip chart or chalk board

Aides	Lesson Plan	Instructor Notes
		Instructor's Note: Suggestion: If the DRE draws the line from the place where the suspect touches to the triangle it enables them to draw a straighter line. Solicit students' comments and questions about the Purpose of the Narrative Report.
20 Minutes	B. Drug Evaluation Report Form	
XXVI-2A ("First Seven Items")	1. The typical drug evaluation report contains 13 major items. 2. First item: the Location (i.e., where the evaluation was conducted). 3. Second item: Witnesses. a. List the person who served as the evaluator and the recorder with the complete agency name spelled out. b. Other officers who helped to conduct the evaluation. c. Others who observed the evaluation. 4. Third item: The Breath Alcohol Test. a. Indicate BrAC. b. Who administered the breath alcohol test.	Include any instructors who witnessed the evaluation

Aides	Lesson Plan	Instructor Notes

c. Time the test was administered.

5. Fourth item: The Notification and Interview of the Arresting Officer.

   a. When were you first notified of the request for a drug evaluation?

   b. Summarize the information you were given at that time.

   c. Document any information provided by the arresting officer.

   d. Summary of your interview with the arresting officer and other witnesses.

6. Fifth item: Initial Observation of the Suspect.

   a. Where you first saw the suspect.

   b. Noteworthy aspects of your initial observations.

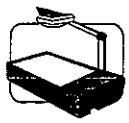
   c. Findings of the Preliminary Examination of the Suspect.

7. Sixth item: Medical Problems and Treatment.

   a. Your observations of any apparent injury or illness affecting the suspect.

   b. Suspect's statements of injury or illness.

Aides	Lesson Plan	Instructor Notes
	c. Summary of any medical treatment provided to the suspect. 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 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 he suspect's pulse rate, blood pressure and temperature. c. Document if there were any body, leg or eyelid tremors present.	



XXVI-2B

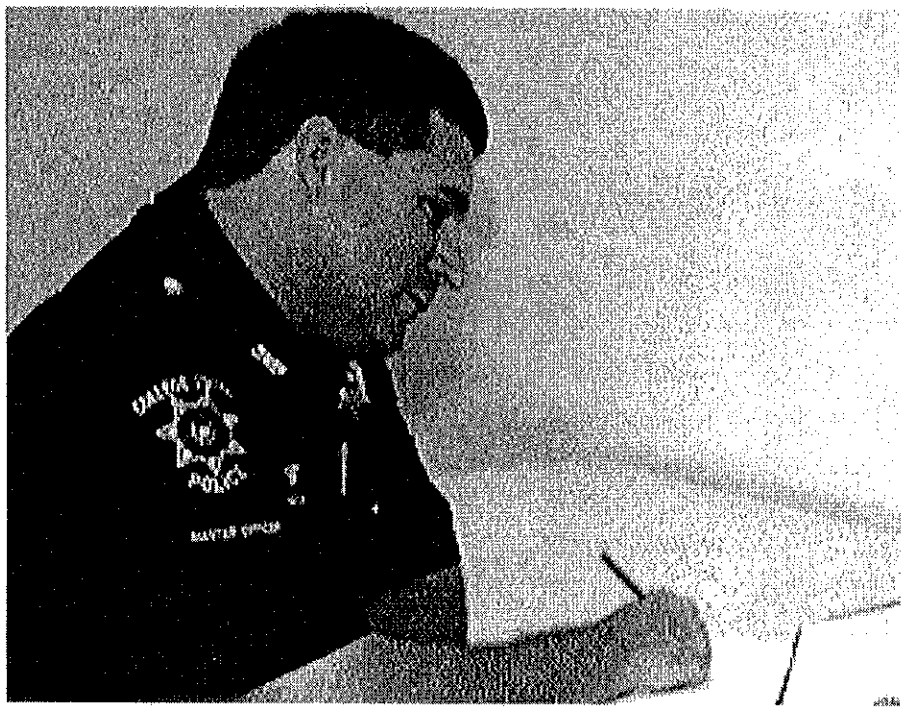
Aides	Lesson Plan	Instructor Notes
	10. Ninth item: Signs of Ingestion. a. Results of examinations of oral and nasal cavities. b. Results of examinations for injection marks. c. Odors detected on suspect's breath, hands, clothing, etc. d. Physical debris of drugs or drug paraphernalia found on suspect's person.	
	11. Tenth item: Suspect's Statements. a. "Miranda" waiver and responses.	Remind students to contact their local DA's office for information on when to give Miranda during the evaluation.
	b. Volunteered or spontaneous statements. c. Statements made as a result of your interview. 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.	
	12. Eleventh item: DRE's Opinion. a. State the category or categories of drugs that you believe is/are affecting the suspect.	Note: Anytime you have a positive BrAC reading, you must list alcohol as part of the opinion.

Aides	Lesson Plan	Instructor Notes
	b. State your opinion concerning the suspect's ability to operate a motor vehicle safely, if applicable to this case.	
	13. Twelfth item: Toxicologic Sample.	Note: Show students a copy of a toxicology request form that they will be using.
	a. State the type of sample (urine, blood, etc.) obtained from the suspect.	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.
	b. State who drew the sample or observed the collection of the sample.	
	c. State where the sample was taken and to whom it was given.	
	d. If the suspect refused to provide a sample, state that fact.	
	14. Thirteenth item: Miscellaneous.	
	a. Any other pertinent information such as, drugs or drug paraphernalia found in the suspect's possession, or possibly which hand the suspect uses.	
 **20 Minutes**	C. Sample Report	Direct the students' attention to the Sample Drug Evaluation Report (Richardson) in Section XXVI of their Student Manual. A copy of this report is found at the end of these lesson plans, for your reference.

Aides	Lesson Plan	Instructor Notes
		Briefly review all thirteen items of the report with the students. Solicit their comments and questions about the report.

Session XXVI

Preparing the Narrative Report



Preparing the Narrative Report

Upon successfully completing this session, the participants will be able to:

- Discuss the essential elements of the drug evaluation report
- Prepare a clear and concise narrative description of the results of the drug evaluation

Sample Drug Influence Evaluation Face Sheet

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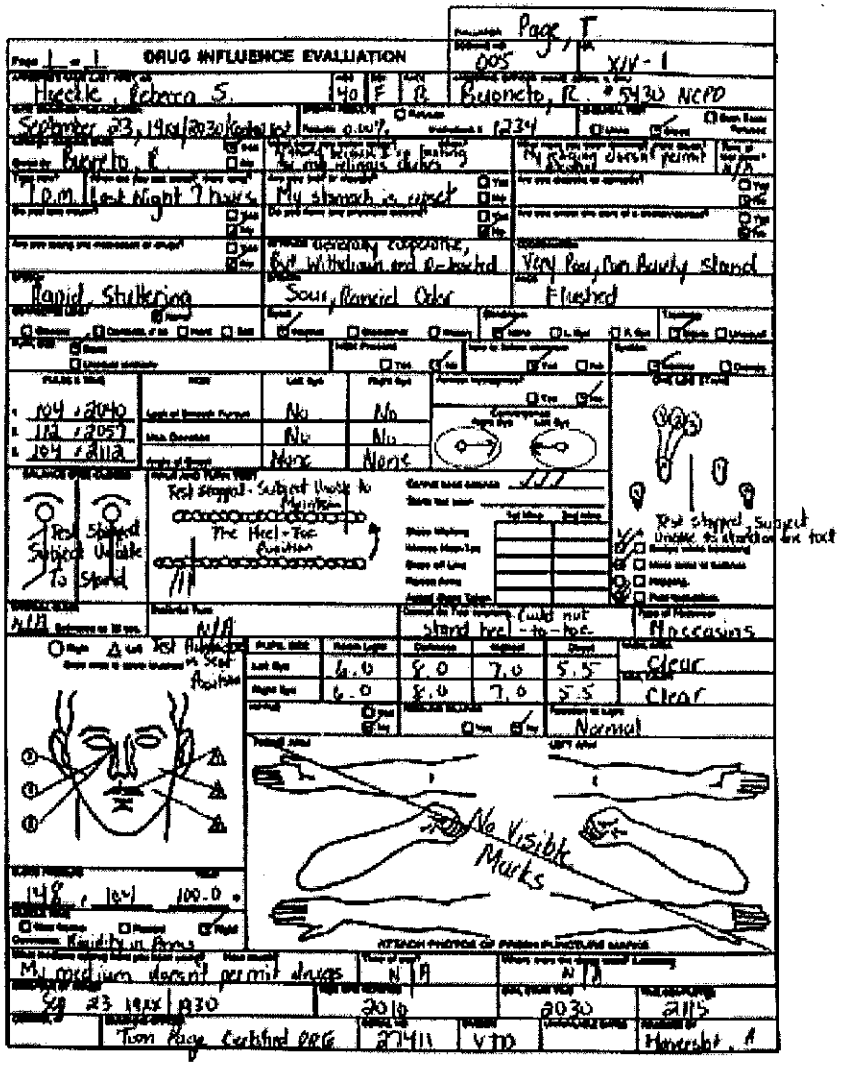


Items on the Typical Drug Evaluation Report

1. The location
2. Witnesses
3. The breath alcohol test
4. Notification and interview of arresting officer
5. Initial observations of the suspect
6. Medical problems and treatment
7. Psychophysical indicators of impairment

Items on the Typical Drug Evaluation Report (continued)

8. Clinical indicators of impairment
9. Signs of ingestion
10. Suspect's statements
11. DRE officer's opinion
12. Toxicological sample
13. Miscellaneous

DRUG INFLUENCE EVALUATION NARRATIVE

1. LOCATION: Evaluation conducted in DRE room of Jail Division, Parker Center.

2. WITNESSES: Sgt. Tom Page, Los Angeles Police Department, Evaluator. Officer Jim Brown, Los Angeles Police Department, Recorder. Derald Gautier, Denver, Colorado Police Department, Witness.

3. BREATH ALCOHOL TEST: Officer Clark John obtained a .00% BrAC from Richardson at 2140 hrs.

4. THE NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER: At approximately 2145 hours Officer John requested that I conduct a DRE evaluation on suspect Richardson. Richardson had been arrested by John for DUI. Impairment was not consistent with .00% BrAC obtained from Richardson. Officer John stated he stopped Richardson after observing him commit numerous Traffic Violations. John stated that Richardson appeared sleepy, "on the nod", and that his voice was low in volume, raspy in tone and slow in tempo. Richardson failed to perform psychomotor tasks of the SFST as demonstrated.

5. INITIAL OBSERVATION OF SUSPECT: I first observed Richardson in the DRE room at approximately 2200 hrs. Richardson walked very slowly, staggered and stumbled without falling. As he stood while John removed his handcuffs, Richardson swayed constantly and his head nodded forward. I advised Richardson of his Miranda Rights which he waived. Richardson responded to all questions in a slow, raspy, low voice. Eyelids were droopy. Pupils appeared constricted. First pulse was 60 BPM.

6. MEDICAL PROBLEMS AND TREATMENT: Suspect claimed no illness or injury. No evidence of injury or illness observed.

7. PSYCHOPHYSICAL: Richardson exhibited impairment throughout all portions of the psychophysical exams. Romberg-swayed 3 inches side to side and slowed internal clock at 52 seconds, his head dropped forward during the test. Walk and Turn- lost balance during instructions, staggered, raised arms throughout the test, failed to touch heel to toe and turned improperly nearly falling. One Leg Stand- counted very slowly to 12 (left) and 15 (right),swayed 3 inches side to side throughout the test, raised arms even with shoulders during the test and put his foot down a total of 7 times. Finger to Nose- Richardson responded to commands very slowly, used the wrong hand twice and did not correctly touch the tip of his nose on any of the 6 attempts.

8. CLINICAL INDICATORS: EYES: Lack of smooth pursuit was observed in both eyes. No angle of onset or Vertical Nystagmus was seen. Lack of Convergence was present. Richardson's pupils were constricted below normal range in all light levels with no visible reaction to direct light observed. Ptosis (droopy eyelids) was evident. VITAL SIGNS: Richardson's pulse was below the normal range at 60, 58 and 58 BPM. Systolic Blood Pressure was below the normal range at 114/78. Body temperature was within normal range.

9. SIGNS OF INGESTION: Three fresh puncture sites were found on Richardson's left forearm. (photo attached).

10. SUSPECT'S STATEMENTS: Richardson denied any drug usage. He states that he is right handed, and the puncture sites found were from thorns scratching him while gardening earlier in the day.

11. DRE'S OPINION: In my opinion, Richardson is under the influence of a Narcotic Analgesic and is unable to safely operate a vehicle.

12. TOXICOLOGICAL SAMPLE: A urine sample was obtained from Richardson at 2334 hours. Page and I witnessed elimination by the suspect. I sealed the sample and placed it in property for crime lab analysis.

13. MISCELLANEOUS: Three syringes with needles were found by Officer John in Richardsons' vehicle.

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:

- Administer selected portions of the battery of examinations that constitute the Drug Evaluation and Classification Process.
- Articulate the examination procedures.
- Document the results of the evaluations.

Content Segments	Learning Activities
A. Procedures for This Session	o Participants' Hands On Practice
B. Hands On Practice	o Instructor Led Coaching
C. Session Wrap Up	o Participant Led Coaching

Aides	Lesson Plan	Instructor Notes
  **XXVII-O** (Objectives)  **15 Minutes**	PRACTICE: TEST ADMINISTRATION	Total Lesson Time: Approximately 90 Minutes Point out "Practice Session" wall chart. Briefly review the objectives, content and activities of this session.
	A. Procedures for This Session	
	1. Participants will work in two or three member teams.	NOTE: 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. Make team assignments.
	a. At any given time, one member of the team will be engaged in conducting and recording examinations of another member.	
	b. The third member of the team will help coach and critique the student who is conducting the examinations.	Emphasize that students can help each other learn by pointing out errors of omission or commission.
	c. Students will take turns serving as test administrator, test subject and coach.	
	2. For this practice session, each student will conduct a complete Drug Evaluation and Classification Examination.	Instruct students to review the Standardized Drug Evaluation and Classification Form in their student's manuals.

Aides	Lesson Plan	Instructor Notes
	a. Begin with the Preliminary Examination. o Ask all of the prescribed questions. o Conduct the initial check of the eyes. o Check the pulse for the first time.	Point out that the student who is "coaching" should simultaneously take the subject's pulse along with the test administrator.
	b. Conduct the tests of Horizontal Gaze Nystagmus, Vertical Nystagmus and Lack of Convergence.	Point out 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 must be used for this check. A template is provided.
	c. Administer the four divided attention psychophysical tests. o Walk and Turn test o One Leg Stand test o Romberg Balance test o Finger to Nose test	Point out that it will not be necessary for the student (subject) actually to perform these tests (except for Finger to Nose). It will suffice for the student (administrator) simply to give the test instructions accurately and completely.
	d. Check the pulse for the second time.	
	e. Check the vital signs. o Blood Pressure o Temperature o Check the pulse for the third time.	

Aides	Lesson Plan	Instructor Notes
	f. Conduct the dark room examinations.	Point out that, for this practice session, these examinations will not actually be given in the dark.
	g. Check for muscle rigidity.	
	h. Examine the student (subject's) neck and arms for signs of injection.	Solicit students' questions concerning procedures for this practice session.
 **60 Minutes**	B. Hands On Practice	Instruct students to begin their practice. Monitor the teams, and offer encouragement and constructive criticism, as appropriate. Make sure each student serves as the test administrator for at least one complete drug evaluation and classification examination.
 **15 Minutes**	C. Session Wrap Up	Offer appropriate comments and observations about the students' performance. Solicit students' comments concerning this practice session.

45°

Session XXVII

Practice: Test Administration

Practice: Test Administration

Upon successfully completing this session, the participants will be able to:

- Administer selected portions of the battery of examinations that constitute the drug evaluation and classification process
- Articulate the examination procedures
- Document the results of the evaluations

One Hour and Thirty Minutes

SESSION XXVIII

CASE PREPARATION AND TESTIMONY

SESSION XXVIII CASE PREPARATION AND TESTIMONY

Upon successfully completing this session, the participant 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 Evaluation and Classification examinations.
- 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

Aides	Lesson Plan	Instructor Notes
  **XVIII-O** (Objectives)  **10 Minutes**	CASE PREPARATION AND TESTIMONY A. Guidelines for Case Preparation 1. Preparation a. Preparation to present your case in court begins during your initial investigation. o The quality of your investigation and documentation will ultimately determine your ability to accurately present information during trial. b. When you receive the trial notice you should: o Review all records and reports associated with the case. o Review all evidence and your conclusion. o Review notes with arresting officer. o Review any weak areas. o Clarify or resolve any discrepancies.	Total Session Time: Approximately 90 Minutes Session title on wallchart. Overview session objectives, content segments and learning activities. Point out: That it is especially important to take complete and accurate notes of your investigation and observations. Complete documentation of this information is essential. Schedule a pre trial conference with the prosecutor.

Aides	Lesson Plan	Instructor Notes
	o Review questions the prosecutors will be asking. o Review tactics the prosecutors expects the defense to use. o Review your resume and credentials.	
	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.	Note: It is very important to meet with prosecutors that have never been exposed to the DRE 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 (see Phoenix Prosecutors Training Manual).
	3. Contact the DRE Agency Coordinator to discuss any new findings regarding drug categories.	
45 Minutes	B. Guidelines for Direct Testimony 1. Direct testimony	
	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.	
	b. Qualifications will be established during Voir Dire:	Point out that officer's resume is invaluable in establishing credibility.

Aides	Lesson Plan	Instructor Notes
	o When testifying, relate <u>training and experience</u> to the type of arrest being tried (e.g. DWI, PCP, Cocaine, etc.)	Highlight fact that you were <u>selected</u> to attend specialized DRE training, not just assigned randomly.
	o Being qualified as an expert in the past does not automatically qualify you as an expert in particular court or case.	Point out that officers should document all previous cases where they were qualified as an expert.
	o If possible, do not allow defense to stipulate that you are an expert.	Point out that if your credentials are good you should always try to get your specific qualifications in front of the jury.
	o Document and record all evaluations conducted. Establish ratio of evaluations that resulted in a finding that subject was <u>not</u> under the influence.	Point out that if evaluation is properly conducted officers will be able to determine source of impairment accurately. It is essential to demonstrate to the jury that you are fair and impartial, and that you look at each case individually.
	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.	Point out that this is critical in establishing credibility.
	o Ability to answer specific questions with confidence, skill and exactness will bolster professional image in the eyes of judge and/or jury.	Point out that minor details are important.

Aides	Lesson Plan	Instructor Notes
	2. New Scientific Principle o The scientific principles are unfamiliar to the jury or judge. o Your task is to establish that your hard work through training will be acceptable in the court. o The landmark case "Frye vs. U.S." 293F 1013 (D.C. Cir. 1923). 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.	Point out that they aren't really new just not within the common realm of knowledge of the average person. Point out 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.
	2. General guidelines. a. Basic job is to prove that suspect was under the influence of a drug or some combination of drugs. b. Don't be afraid to say "I don't know". c. Avoid contact with the defense attorney if possible.	Keep this in mind at all times. Point out that 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.

Aides	Lesson Plan	Instructor Notes
	d. Don't be upset if prosecutor and defense attorney appear friendly to each other.	Remind students that both sides have a specific role to play in the case at bar, but that does not preclude a personal or professional relationship.
	e. Jury focuses on an officer's demeanor more than content of testimony.	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.
	f. Do <u>not</u> bring manuals or articles into court for reference.	Review materials before court to become familiar with contents.
	g. Explain technical terms in layman's language.	For example, Nystagmus means an involuntary jerking of the eyeballs. Horizontal Gaze Nystagmus is the inability of the eyes to maintain visual fixation as they are turned to the side.
	h. Pay attention to what evidence or testimony can be and is excluded.	Point out that if officer testifies on subject matter that was excluded, it could result in a mistrial.
	i. When describing suspect's performance on SFST's, explicitly describe exactly what the suspect did or neglected to do: <u>don't</u> use the terms "pass" or "fail."	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. Results of suspect's performance are describable evidence. Be sure to emphasize that <u>all</u> evidence is taken into account before forming an opinion.

Aides	Lesson Plan	Instructor Notes
	j. If defense attorney asks a "why" question, take the opportunity to explain in great detail if appropriate.	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.** Note: See attachment for typical defense questions.
 **45 Minutes**	C. Typical Defense Tactics	
	1. The defense relies on several factors to "impeach" or discredit your testimony.	Point out that the defense attorney's job is to try to create a "reasonable doubt". Don't take it personally.
	a. By impeaching your credibility:	
	o inconsistencies	Arresting officer's and examining officer's testimony must be complimentary. Any differences <u>must</u> be explained. Get your facts straight and stick to them.
	o comparison with past testimony	Try to get copies of transcripts of previous trials to review your strong/ weak points. If possible, review your testimony with the prosecutor.
	o testimony that is at odds with other established experts	Do your homework...review the literature. Explain any differences if possible.
	o lack of recall	Try to be prepared, but don't be afraid to say "I don't know". Be honest.
	2. By exposing the court to alternative conditions which account for your observations.	

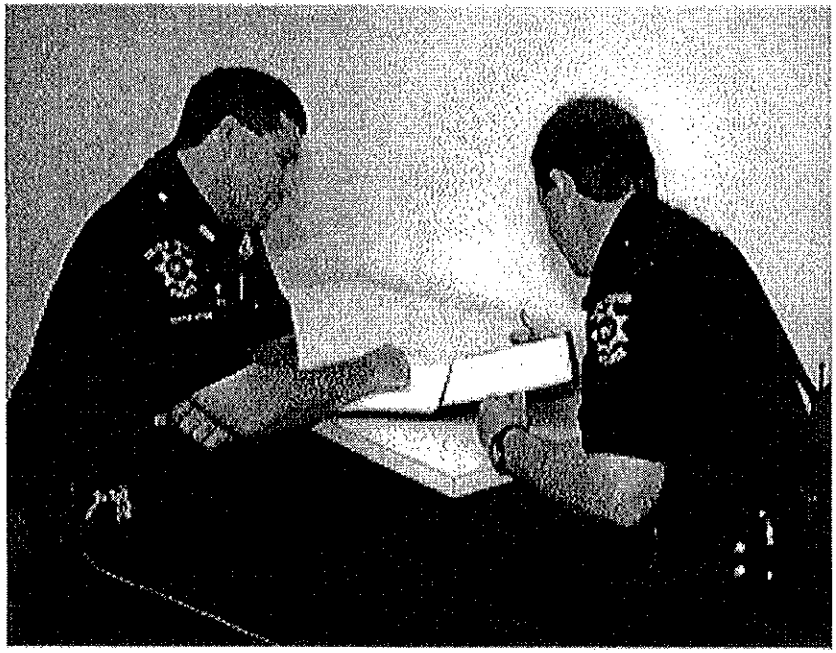
Aides	Lesson Plan	Instructor Notes
	o another drug, o alcohol, o sickness, o injury, o other	
	3. Defense will challenge your credentials...a bona fide expert has both formal training resulting in a high degree of knowledge and experience in applying that knowledge, resulting in a skill.	Point out that if the defense can discredit your training and/or experience your testimony will have little "weight" with the jury.
	a. By directly deprecating formal training and experience.	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 formal training which lessens the value of his field experience and increases likelihood that he is mistaken in his conclusion.
	b. By demonstrating the officer lacks depth of knowledge in the drug field by contrasting his or her knowledge with the defense expert's knowledge.	
	c. By demonstrating that the officer incorrectly performed part of the evaluation, resulting in an erroneous conclusion.	Point out that the evaluation should be performed "by the book" each and every time it is conducted.
	4. Role of defense expert.	
	a. To impeach credibility of the arresting officer and/or the prosecution expert.	My expert v. your expert. Usually they are 180 degrees apart in their opinions.

Aides	Lesson Plan	Instructor Notes
	b. To present alternative conditions and states that could have produced the same or similar symptoms.	
	5. Typical defense questions.	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.
	a. Pupillary examination in a drug case: o Where the examination took place. o How dark was the examining room. o The size or power of the flashlight. o Where the defendant was placed in relation-ship to the examiner. o Where the flashlight was directed during the examination. o Where the defendant was looking during the examination. o How many times each pupil was tested.	
	b. Describe the difference between a fresh puncture site; up to 10 hours old; a 24 hour old site; a 36 hour old site; and, a 48 hour old site.	Point out that the maximum is about 10 hours. Solicit students' comments and questions concerning case preparation and testimony.
	c. Are there any physical illnesses or conditions that manifest the same signs as heroin intoxication, and describe a few.	

Aides	Lesson Plan	Instructor Notes
	d. How long does an occasional heroin user remain under the influence of the drug after injection?	Point out that the list of possible answers is almost interminable. SUGGESTED ROLE PLAY TO DISCUSS THE FOLLOWING QUESTIONS. What is a DRE? What is involved in the training program? How do you properly identify the categories or category? How do you explain the opinion? What are the components of an evaluation? Tell the students to open their Manuals to the end of Session XXVIII, and find the "Self-Test for Review". Point out that it is very similar in content and format to the Knowledge Examination they will take on the last day of this school. Also point out that the answers to the "Self-Test" appear in the Manual, on the pages immediately following the test. Emphasize that the students do not have to "take" this "Self-Test": the decision is strictly up to them. But point out that they may find it to be a useful study aid to prepare for the final examination.

Session XXVIII

Case Preparation and Testimony



Case Preparation and Testimony

Upon successfully completing this session, the participant will be able to:

- Conduct a thorough pre-trial review of all evidence and prepare for testimony
- Provide clear, accurate and descriptive direct testimony concerning drug evaluation and classification examinations
- Respond effectively and appropriately to cross-examination in drug evaluation and classification cases

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 to see.)

   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. **Numorphan** is an example of ....

A. a Synthetic Opiate
B. an Analog of Phencyclidine
C. a Natural Alkaloid of Opium
D. an Opium Derivative
E. a non-Amphetamine-based Stimulant

7. Which of the following ordinarily <u>will</u> induce Horizontal Gaze Nystagmus? (Circle <u>all</u> that usually enhance 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 <u>know</u> 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. Phencyclidine
    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. Biphetamine
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. Metopon
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. Metopon
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 5.5mm in near-total darkness and 3.5mm 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. PCP, or an analog of PCP, alone
D. a combination of PCP (or an analog) 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 enhance 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, **Synthetic Opiate**.

7. Correct answers are B and C.
Valium is a CNS Depressant, which of course induces nystagmus. The combination of Cocaine and Xanax gives us a Stimulant and a Depressant (Xanax), which enhances Nystagmus via an Overlapping Effect. None of the other drugs mentioned enhance 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 <u>can't keep balance</u> (which means the suspect breaks away from the heel-to-toe stance) and <u>starts too soon</u>. The other six clues pertain to the Walking Stage of the test. They include:

- <u>misses heel-to-toe</u>
- <u>raises arms</u>
- <u>steps off line</u>
- <u>stops walking</u>
- <u>turns improperly</u>
- <u>takes the wrong number of steps</u>

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 Biphetamine 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 Hycodan 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, Phencyclidine and Cannabis have **some** sympathomimetic characteristics, but they are not considered to be fully sympathomimetic, and not to the degree of the Stimulants and Hallucinogens. Xanax and Metopon aren't even close to being sympathomimetic. Xanax (a Depressant) and Metopon (a Narcotic) are better described as wholly or partially **parasympathomimetic**.

27. Correct answer is C, **Phencyclidine or an analog.**
PCP, by itself, can account for all of the observations listed. PCP enhances 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 PCP 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 enhances Nystagmus, so the Null Effect will also **produce no nystagmus**
(D) False: Marijuana produces 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**

ATTACHMENT A

DRE DEFENSE CROSS EXAMINATION QUESTIONS

The following are representative of questions the defense may use to challenge the Drug Recognition 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? 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 nor 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 an ersatz 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 Stimulants dilate the pupil, do you? You don't know how alcohol supposedly causes Nystagmus, do you? You don't know how Stimulants supposedly elevate the heart rate, do you?

Guessing Game

This tactic attacks the DRE opinion as a subjective guess, a belief, rather than objective. And 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?

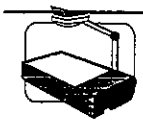
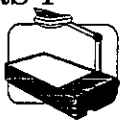
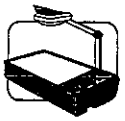
Sgt. Tom Page, LAPD and DDA Linda Condron, Santa Clara County

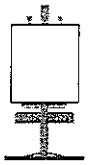
Two Hours and Thirty Minutes

REVIEW OF THE DRE SCHOOL

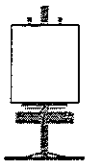
REVIEW SESSION

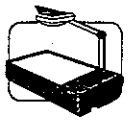
The principal purpose of the Review Session is to help students prepare for the final written examination. The following questions and exercises can be posed to the class to cover all of the information that will be elicited on the final exam. Try to involve all of the students actively in these questions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

Aides	Lesson Plan	Instructor Notes
 RS-1	1. HOW DO WE DEFINE THE TERM "DRUG" FOR DRE PURPOSES?	Key Points to Emphasize: o any substance
 RS-2		o that impairs the ability to operate a vehicle
 RS-3	2. BASIC DRUG STATISTICS:	
	a. What percentage of DWI arrests involve drugs other than alcohol?	LAPD Estimate: 10-20%
	b. What drug other than alcohol was found most frequently in the Los Angeles Field Validation Study?	Answer: PCP
	c. What does "polydrug use" mean?	Ingesting two or more distinct drug categories on the same occasion.
 RS-4	d. How common was polydrug use in the field validation study?	More than 70% of the suspects had two or more drug categories in them.
	e. How good were the DREs in the Field Validation Study?	o Nearly 80% of the time when the DRTs said a particular category of drugs was present, that category was found in the suspect's blood. o In more than 90% of the suspects, the DREs correctly identified at least one of the categories that were present.
 RS-5	f. 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.

Aides	Lesson Plan	Instructor Notes
	3. REVIEW OF SYMPTOMATOLOGY	SOLICIT STUDENTS' QUESTIONS ABOUT DRUG STATISTICS Prepare a "symptomatology matrix" on the chalkboard:

CATEGORY	HGN	VERT	CONV	PULSE	BP	TEMP	PUPILS	REACT
CNS DEP								
CNS STIM								
HALLUCS								
PCP								
NARCOTS								
INHALS								
CANNABS								





RS-6

Ask students to "fill in" the matrix by stating how each category will affect these major indicators of impairment.

Write students' responses on the chalkboard.

a. Name six different CNS Depressants.

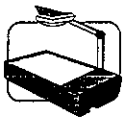
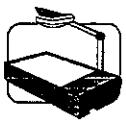
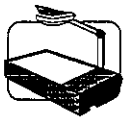
b. Name four different CNS Stimulants.

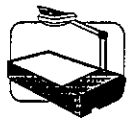
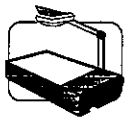
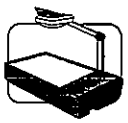
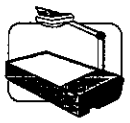
c. Name two naturally-occurring Hallucinogens.

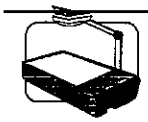
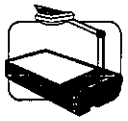
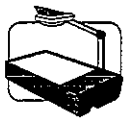
d. Name four different synthetic Hallucinogens.

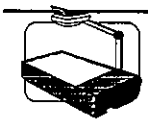
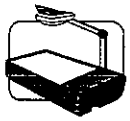
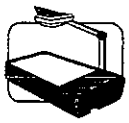
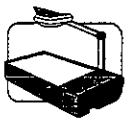
e. Name a major analog of PCP.

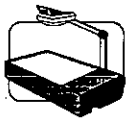
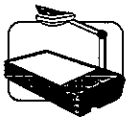
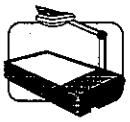
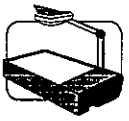
f. Name the three sub-categories of Inhalants.

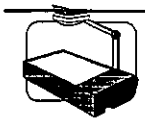
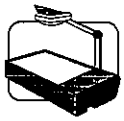
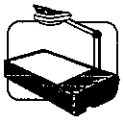
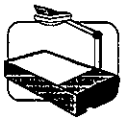
Aides	Lesson Plan	Instructor Notes
	g. What is the active ingredient in Cannabis?	
		SOLICIT STUDENTS' QUESTIONS ABOUT DRUG CATEGORIES & SYMPTOMATOLOGY.
 RS-7	4. REVIEW OF VITAL SIGNS	
	a. Pulse Rate	
	(1) Define "Pulse".	Contraction and expansion of an artery, generated by the pumping action of the heart.
	(2) True or false: Pulse rate is measured in units of "millimeters of mercury".	FALSE: pulse rate is measured in "beats per minute".
 RS-8	(3) Name three different pulse points, and indicate where they are located.	Make sure that students point out the Radial, Brachial and Carotid pulse points.
	(4) What is the "normal" range of adult human pulse rate, for DRE purposes?	60-90 beats per minute.
 RS-9	b. Blood Pressure	
	(1) Define "Blood Pressure".	The force that the circulating blood exerts on the walls of the arteries.
	(2) Name the instrument used to measure blood pressure.	SPHYGMOMANOMETER: Ask a student to spell this, and write the correct spelling on the chalkboard.

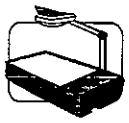
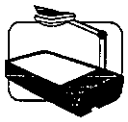
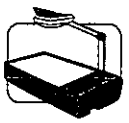
Aides	Lesson Plan	Instructor Notes
	(3) When does blood pressure reach its highest value? What is the highest value called?	The <u>systolic</u> pressure is reached when the heart contracts and pushes blood into the arteries.
 RS-10	(4) When does blood pressure reach its lowest value? What is the lowest value called?	The <u>diastolic</u> pressure is reached when the heart is fully expanded.
	(5) What is the "normal" range of adult human blood pressure, for DRE purposes?	Systolic: 120-140 Diastolic: 70-90
 RS-11	(6) What does "Hg" stand for?	Chemical symbol for mercury ("Hydrargyrum", latin word for "Mercury"). Blood pressure is measured in millimeters of mercury.
		SOLICIT STUDENTS' QUESTIONS ABOUT VITAL SIGNS.
 RS-12	5. REVIEW OF THE EYE EXAMINATIONS	
	a. Horizontal Gaze Nystagmus	
	(1) What are the three validated clues of impairment that have been established for HGN?	o Lack of Smooth Pursuit o Distinct Jerking at Maximum o Onset Within 45 Degrees
 RS-13	(2) What formula expresses the approximate statistical relationship between BAC and onset angle?	BAC = 50 - Angle
	(3) What categories of drugs usually will produce HGN?	o CNS Depressants o PCP o Inhalants

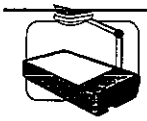
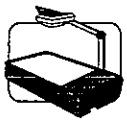
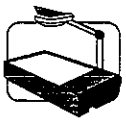
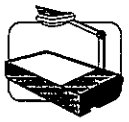
Aides	Lesson Plan	Instructor Notes
 RS-14	b. Vertical Nystagmus	
	(1) True or False: any drug that produces HGN may also produce <u>vertical</u> nystagmus.	TRUE: All drugs that produce horizontal nystagmus will produce vertical nystagmus, if the dose is large enough.
	(2) What category of drugs produces vertical nystagmus but <u>not</u> horizontal gaze nystagmus?	NO DRUG PRODUCES VERTICAL NYSTAGMUS BUT NOT HGN.
 RS-15	c. Lack of Convergence	
	(1) True or false: any drug that produces nystagmus will also usually cause the eyes to be unable to converge.	TRUE: CNS Depressants, PCP and Inhalants usually cause the eyes to be unable to converge.
	(2) What category of drugs usually causes lack of convergence but does <u>not</u> produce nystagmus?	CANNABIS usually causes lack of convergence, but doesn't produce nystagmus.
		SOLICIT STUDENTS' QUESTIONS ABOUT THE EYE EXAMINATIONS.
 RS-16	6. REVIEW OF THE DARKROOM EXAMINATIONS	
	a. What are the four lighting conditions under which we must estimate the size of the suspect's pupils?	o Room Light o Near Total Darkness o Indirect Light o Direct Light
	b. How long should we wait in the Darkroom before beginning to check the suspect's pupils?	At least 90 seconds.

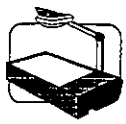
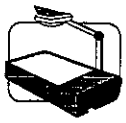
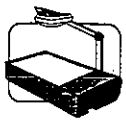
Aides	Lesson Plan	Instructor Notes
 RS-17	c. Name the instrument that we use to estimate the size of the suspect's pupils.	The PUPILLOMETER.
	d. What do the numbers on the Pupillometer refer to?	The <u>diameters</u> of the black circles.
	e. In what <u>units of measurement</u> are those number given?	The circles' diameters are given in millimeters.
 RS-18	f. For DRE purposes, what is the "normal" range of the size of an adult human's pupil?	The diameter of the pupil normally ranges from about 3.0mm to about 6.5mm.
	g. What does the term "MIOSIS" mean?	"Miosis" means an abnormally small or constricted pupil, i.e., a pupil with a diameter smaller than 3.0mm.
 RS-19	h. What does the term "MYDRIASIS" mean?	"Mydriasis" means an abnormally large or dilated pupil, i.e., a pupil with a diameter larger than 6.5mm.
	i. What category of drugs usually causes Miosis, or constricted pupils?	Narcotic Analgesics usually cause pupils to be constricted below the normal range.
 RS-20	j. What categories usually cause Mydriasis, or dilated pupils?	CNS Stimulants and Hallucinogens usually cause pupils to be dilated above the normal range. Cannabis also may cause dilation. Some inhalants will also cause dilation.
	k. What is unique about the drug "Methaqualone" and SOMA?	Methaqualone and Soma is a CNS Depressant that causes dilation.
		SOLICIT STUDENTS' QUESTIONS ABOUT THE DARKROOM EXAMS.

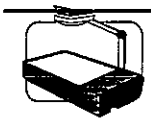
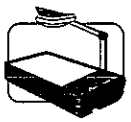
Aides	Lesson Plan	Instructor Notes
	7. REVIEW OF THE DIVIDED ATTENTION TESTS	
 RS-21	a. Name the four Divided Attention Tests administered during the DRE Examination.	o Romberg Balance o Walk and Turn o One Leg Stand o Finger to Nose
 RS-22	b. Why is the Romberg Balance always the first test administered?	(1) For Standardization. (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.
 RS-23	c. Four validated clues of impairment have been established for the One Leg Stand Test; name them.	o Swaying o Raising the arms o Hopping o Putting the foot down
 RS-24	d. How many times is One Leg Stand administered during the DRE Examination?	Twice.
	e. Which foot must the suspect <u>stand on</u> the first time he or she performs One Leg Stand?	The Left.
 RS-25	f. How many validated clues of impairment have been established for the Walk and Turn test? Name them.	Eight validated clues. o Losing balance during the instructions o Starting to walk too soon o Raising arms while walking o Stepping off the line o Missing heel to toe o Stopping while walking o Wrong number of steps o Turning improperly

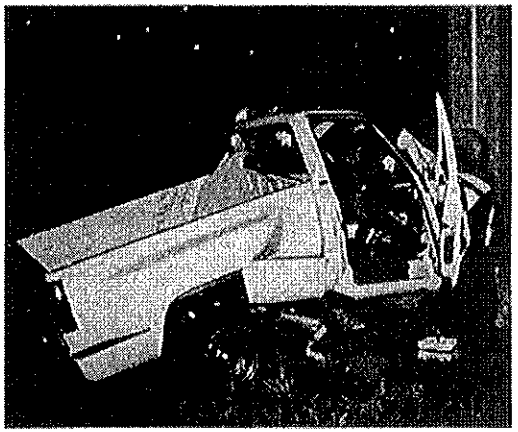
Aides	Lesson Plan	Instructor Notes
 RS-26	g. In what sequence is the suspect instructed to touch the index fingers to the nose on the Finger to Nose test?	Left, Right, Left, Right, Right, Left.
		SOLICIT STUDENTS' QUESTIONS ABOUT THE DIVIDED ATTENTION TESTS.
 RS-27	8. GENERAL REVIEW QUESTIONS	
	a. What is the medical or technical term for "droopy eyelids"?	PTOSIS.
	b. What does "Piloerection" mean? What drug often causes piloerection?	"Piloerection" means "Hair Standing Up", or "Goose Bumps". It is often caused by LSD.
	c. What is the medical or technical term for Heroin?	Diacetyl Morphine.
 RS-28	d. 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.
 RS-29	e. 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.

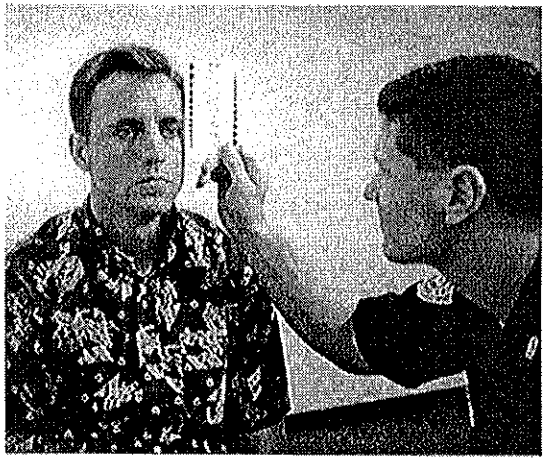
Aides	Lesson Plan	Instructor Notes
		"Rebound Dilation" refers to pulsating pupils that steadily grow larger on each "rebound"; it is sometimes observed in persons impaired by Cannabis.
 RS-30	f. What is the drug "Percobarb"?	It is a combination of the natural opiate Percodan with a barbiturate. Percobarb thus is a polydrug, a combination of a Narcotic Analgesic and a CNS Depressant.
	g. What does "Bruxism" mean?	Grinding the teeth.
 RS-31	h. What does the number denoting the size of an hypodermic needle refer to?	The inside diameter of the needle.
	i. What does "Synesthesia" mean?	A mixing of senses, i.e., hearing colors or seeing odors.
	j. What is "Sinsemilla"?	A variety of marijuana with a high concentration of THC.
 RS-32	k. What are the twelve major components of the DRE Examination?	List students' responses on the chalkboard. o the breath alcohol test o interview of arresting officer o Preliminary Examination o Examinations of the eyes o Divided Attention Tests o Vital Signs Examinations o Dark Room Examinations o Examination for Muscle Tone o Examination for injection sites o Suspect's Statements o Opinions of the Evaluator o The Toxicological Exam Ask students to describe each component briefly, and to clarify the kinds of information each component supplies.

Aides	Lesson Plan	Instructor Notes
 **RS-33**	9. REVIEW OF PHYSIOLOGY	
	a. Name the ten major body systems.	List students' responses on the chalkboard. o **M**uscular System o **U**rinary System o **R**espirator System o **D**igestive System o **E**ndocrine System o **R**eproductive System o **S**keletal System o **I**ntegumentary System o **N**ervous System o **C**irculatory System
 **RS-34**	b. What is the distinction between the "Smooth" muscles and the "Striated" muscles?	We consciously control the Striated; we don't consciously control the Smooth.
	c. What do we call the chemicals that are produced by the Endocrine System?	Hormones.
	d. What is a neuron?	A nerve cell.
 **RS-35**	e. What do we call the space between two nerve cells?	The synapse, or synaptic gap.
	f. What do we call the chemicals that pass from one nerve cell to the next?	Neurotransmitters.
	g. What do we call the part of a nerve cell that sends out the neurotransmitter?	The axon.
 **RS-36**	h. What do we call the part of a nerve cell that receives the neurotransmitter?	The dendrite.

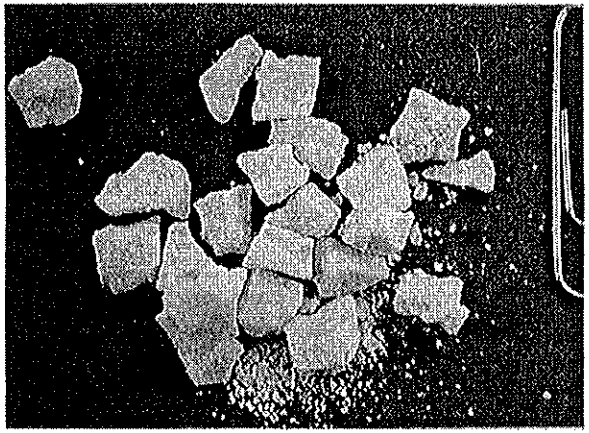
Aides	Lesson Plan	Instructor Notes
	i. What do the Sensory Nerves do?	Carry messages to the brain, from the sense organs, pain sensors, etc.
	j. What do the Motor Nerves do?	Carry messages from the brain, to the muscles, etc.
 RS-37	k. Name the two sub-divisions of Motor Nerves.	Voluntary (control striated muscles) and Autonomic (control smooth muscles).
	l. Name the two sub-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).
 RS-38	m. 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.).
	n. 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.).
 RS-39	o. Which two categories of drugs can most appropriately be called sympathomimetic?	CNS Stimulants and Hallucinogens.
	p. Which category can most appropriately be call parasympathomimetic?	Narcotic Analgesics. Clarification: Cannabis, PCP 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.

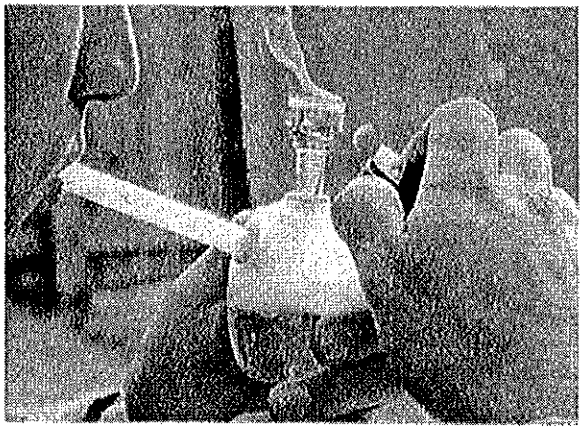
Aides	Lesson Plan	Instructor Notes
 RS-40	q. What is an artery?	Strong, elastic blood vessel that carries blood from the heart to the body's tissues and organs.
	r. What is a vein?	Blood vessel that carries blood back to the heart from the tissues and organs.
 RS-41	s. What is the Pulmonary Artery, and 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.
	t. 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.
		SOLICIT STUDENTS' QUESTIONS ABOUT PHYSIOLOGY.
		SOLICIT ANY ADDITIONAL QUESTIONS THAT THE STUDENTS MIGHT HAVE.
		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.
		THANK THE STUDENTS FOR ATTENDING THE OPTIONAL REVIEW SESSION.





Review of the DRE School





How do we define the term "drug" for DRE purposes?

- Definition must include:
  - Any substance
  - that impairs the ability to operate a vehicle

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 two or more distinct drug categories on the same occasion

Basic Drug Statistics

- How common was polydrug use in the 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 DRTs 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

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

Review of Symptomatology

- Name six different CNS Depressants
- Name four different CNS Stimulants.
- Name two naturally-occurring Hallucinogens.
- Name four different synthetic Hallucinogens.
- Name a major analog of PCP.
- Name the three sub-categories of Inhalants.
- What is the active ingredient in Cannabis?

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"

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

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

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

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

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 Nystagmus at Maximum Deviation
    * Angle of Onset of Nystagmus Prior to 45 Degrees

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 - angle
  - What categories of drugs usually will produce HGN?
    * CNS Depressants
    * PCP
    * Inhalants

Review of the Eye Examinations

- Vertical Nystagmus
  - True or False: Any drug that produces HGN may also produce vertical nystagmus.
    * TRUE: All drugs that produce horizontal nystagmus will produce vertical nystagmus, if the dose is large enough
  - What category of drugs produces vertical nystagmus but not horizontal gaze nystagmus?
    * NO drug produces vertical nystagmus but not HGN

Review of the Eye Examinations

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

Review of the Darkroom Examinations

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

Review of the Darkroom Examinations

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

Review of the Darkroom Examinations

- For DRE purposes, what is the "normal" range of the size of an adult human's pupil?
  - The diameter of the pupil normally ranges from about 3.0mm to about 6.5mm
- What does the term "MIOSIS" mean?
  - "Miosis" means an abnormally small or constricted pupil, i.e., a pupil with a diameter smaller than 3.0mm

Review of the Darkroom Examinations

- What does the term "MYDRIASIS" mean?
  - "Mydriasis" means an abnormally large or dilated pupil, i.e., a pupil with a diameter larger than 6.5mm
- What category of drugs usually causes Miosis, or constricted pupils?
  - Narcotic Analgesics usually cause pupils to be constricted below the normal range

Review of the Darkroom Examinations

- What categories usually cause Mydriasis, or dilated pupils?
  - CNS Stimulants and Hallucinogens usually cause pupils to be dilated above the normal range. Cannabis also may cause dilation. Some inhalants will also cause dilation.
- What is unique about the drug "Methaqualone" and SOMA?
  - Methaqualone and Soma is a CNS Depressant that causes dilation

Review of the Divided Attention Tests

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

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 30 seconds

Review of the Divided Attention Tests

- Four validated clues of impairment have been established for the One Leg Stand Test; name them.
  - Swaying
  - Raising the arms
  - Hopping
  - Putting the foot down

Review of the Divided Attention Tests

000951

- How many times is One Leg Stand administered during the DRE Examination?
  - Twice
- Which foot must the suspect stand on the first time he or she performs One Leg Stand?
  - The Left

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
    - Losing balance during the instructions
    - Starting to walk too soon
    - Raising arms while walking
    - Stepping off the line
    - Missing heel to toe
    - Stopping while walking
    - Wrong number of steps
    - Turning improperly

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

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

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

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" refers to pulsating pupils that steadily grow larger on each "rebound"; it is sometimes observed in persons impaired by Cannabis

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

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 odors
- What is "Sinsemilla"?
  - A variety of marijuana with a high concentration of THC

General Review Questions

What are the twelve major components of the DRE Examination?

- The breath alcohol test
- Interview of arresting officer
- Preliminary Examination
- Examinations of the eyes
- Divided Attention Tests
- Vital Signs Examinations
- Dark Room Examinations
- Examination for Muscle Tone
- Examination for injection sites
- Suspect's Statements
- Opinions of the Evaluator
- The Toxicological Exam

Review of Physiology

Name the ten major body systems.

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

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

Review of Physiology

- What do we call the space between two nerve cells?
  - The 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

Review of Physiology

- What do we call the part of a nerve cell that receives the neurotransmitter?
  - The 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.

Review of Physiology

- Name the two sub-divisions of Motor Nerves.
  - Voluntary (control striated muscles) and Autonomic (control smooth muscles)
- Name the two sub-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)

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.)

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, PCP, 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.

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

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.

Four Hours

SESSION XXIX

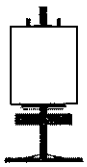
CLASSIFYING A SUSPECT (ROLE PLAY)

SESSION XXIX CLASSIFYING A SUSPECT (ROLE PLAY)

Upon successfully completing this session, the participants will be able to:

- Compile a complete, clear and accurate report documenting the conduct and results of a Drug Evaluation and Classification Examination.

Content Segments	Learning Activities
A. Scenarios: Simulated Examinations	o Interviewing Practice
B. Report Preparation Practice	o Note taking Practice
C. Report Review and Critique	o Small Group Work session
	o Instructor led Presentations
	o Participant led Presentations
	o Participant led Critiques

Aides	Lesson Plan	Instructor Notes
  **XXIX-O** (Objectives)  **120 Minutes (Approxi-mately)**	CLASSIFYING A SUSPECT (ROLE PLAY) A. Scenarios: Simulated Examinations 1. Team assignments 2. Procedures a. Each team will examine as many as possible of the "role players", until the time scheduled for this segment elapses. b. Each examination will be carried out <u>fully</u>: nothing will be omitted <u>except</u> for the breath alcohol test.	Total Lesson Time: Approximately 240 Minutes Session title on wallchart. Briefly review the objectives, content and activities of this session. <u>Assign</u> the students to teams of 3-4 members. <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. <u>Explain</u> procedures to the students. <u>Solicit</u> students' questions concerning the procedures.

Aides	Lesson Plan	Instructor Notes
	c. At certain points in the examination, the "role player" will inform the team what to record.	Example: The "role players" will instruct the teams concerning the evidence to be recorded from the horizontal gaze nystagmus test.
	d. All data will be recorded on the standard Drug Evaluation Form.	
	e. Some "role players" will be simulating the signs and symptoms of exactly one category of drugs.	Clarification: "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.
	f. Some "role players" may be simulating the signs and symptoms of two or more categories in combination.	"Role Player Bravo" might be simulating someone who is under the influence of both PCP and Marijuana.
	g. It is possible that one or more "role players" may be simulating persons who are not under the influence of any drugs.	
	h. At the completion of each examination, the team will discuss the evidence obtained and reach a consensus concerning the category or categories of drugs present.	
	i. Subsequently, each team will be assigned the responsibility of preparing and presenting a complete narrative report on one "role player".	

Aides	Lesson Plan	Instructor Notes
	j. All students will participate in critiquing the reports.	Verify that all teams understand the procedures. Make sure that teams have sufficient copies of the Drug Evaluation Form.
	3. Drug Evaluation and Classification practice.	Assign a "role player" to each team. Example: "Alpha" to team #1 "Bravo" to team #2 "Charlie" to team #3, etc. 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. Make sure that each team member fully participates, and conducts some portion of the evaluation of each "role player". 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 later).
● **60 Minutes**	B. Report Preparation Practice	
	1. Team assignments	Instruct each team to prepare a report based on the third "role player" evaluated by the team. Verify that each team understands who is to be the subject of the report.

Aides	Lesson Plan	Instructor Notes
	2. Group writing exercise	Note: team members may divide the report writing work among themselves in any way they see fit.
60 Minutes	C. Report Review and Critique	
	1. Report presentation	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.
	2. Report critique	Solicit questions and comments from students concerning the report they have heard. Inquire whether other teams that evaluated this same "role player" reached a different conclusion about the drug category or categories. In turn, present and critique the other teams' reports. 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

SUBJECT	DRUG CATEGORY
Alpha	Drug-Free
Bravo	Cannabis
Charlie	PCP
Delta	Narcotic Analgesic
Echo	Narcotic Analgesic and CNS Depressant
Foxtrot	Cannabis
Golf	CNS Stimulant
Hotel	PCP and Cannabis
India	Inhalant
Juliet	Alcohol Only (BAC = 0.07%)
Kilo	Narcotic Analgesic and Alcohol (BAC = 0.05%)
Lima	CNS Stimulant and Alcohol (BAC = 0.03%)

Session XXIX

Classifying a Suspect (Role Play)

Classifying a Suspect (Role Play)

Upon successfully completing this session, the participant will be able to:

- Compile a complete, clear and accurate report documenting the conduct and results of a drug evaluation and classification examination

000978

DRUG INFLUENCE EVALUATION

PAGE _____ OF _____
DR NUMBER: XXIX -1
EVALUATOR:
CONTROL #:
BOOKING #:

ARRESTEE'S NAME (Last, First, MI)	AGE	SEX	RACE	ARRESTING OFFICER (Name, Badge, District)
ALPHA				

DATE EXAMINED/TIME/LOCATION

BREATH RESULTS: ☐ Refused RESULTS 0.00% Instrument # 1234

CHEMICAL TEST ☐ Urine ☐ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: Given by: ☐ Yes ☐ No

What have you eaten today? When? "NOTHING YET TODAY"

What have you been drinking? How much? "JUST COFFEE"

Time of last drink? N/A

Time now?

When did you last sleep? How long? "I HAVEN'T SLEPT IN 2 DAYS"

Are you sick or injured? "NO - JUST VERY TIRED" ☐ Yes ☐ No

Are you diabetic or epileptic? ☐ Yes ☒ No

Do you take insulin? ☐ Yes ☒ No

Do you have any physical defects? ☐ Yes ☒ No

Are you under the care of a doctor/dentist? ☐ Yes ☒ No

Are you taking any medication or drugs? ☐ Yes ☒ No

ATTITUDE: PASSIVE, COOPERATIVE

COORDINATION: SLOW, SOMEWHAT SLOPPY

SPEECH: NORMAL

BREATH: NORMAL

FACE: FLUSHED

CORRECTIVE LENS: ☐ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft

General Appearance: ☐ Normal ☒ Bloodshot ☐ Watery

Blindness: ☒ None ☐ R. Eye ☐ L. Eye

Tracking: ☒ Equal ☐ Unequal

PUPIL SIZE: ☒ Equal ☐ Unequal (explain)

HGN Present: ☐ Yes ☒ No

Able to follow stimulus: ☒ Yes ☐ No

Eyelids: ☐ Normal ☒ Droopy

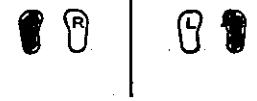
PULSE & TIME
1. 80 /
2. 76 /
3. 76 /

HGN LACK OF Smooth Pursuit	Right Eye	Left Eye
Max. Deviation	NO	NO
Angle of Onset	NONE	NONE

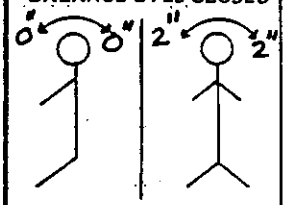
Vertical Nystagmus? ☐ Yes ☒ No

Convergence: Right Eye ✓ Left Eye ✓

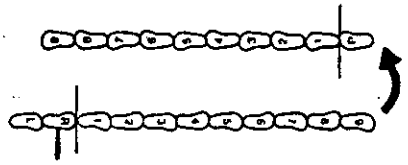
ONE LEG STAND:



BALANCE EYES CLOSED



WALK AND TURN TEST



Cannot keep balance ✓

Starts too soon

	1st Nine	2nd Nine
Stops Walking		
Misses Heel-Toe		
Steps off Line		
Raises Arms	✓	✓
Actual Steps Taken	9	9

L	R	
☑	☑	Sways while balancing.
☑	☐	Uses arms to balance.
☐	☐	Hopping.
☐	☐	Puts foot down.

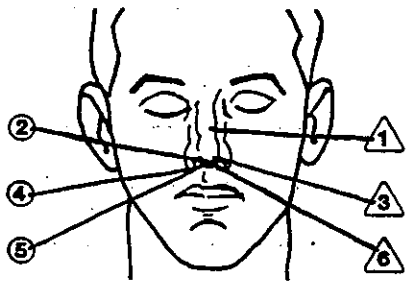
INTERNAL CLOCK: 27 Estimated as 30 sec.

Describe Turn: PROPER BUT SLOW

Cannot do Test (explain): N/A

Type of Footwear

○ Right △ Left
Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	4.5	6.5	5.5	3.0
Right Eye	4.5	6.5	5.5	3.0

NASAL AREA: CLEAR

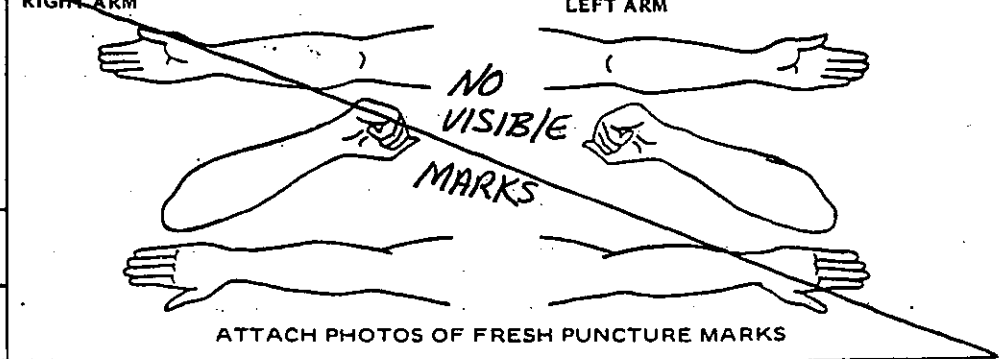
ORAL CAVITY: CLEAR

HIPPUS ☐ Yes ☒ No

REBOUND DILATION ☐ Yes ☒ No

Reaction to Light: NEAR NORMAL

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 128 / 84

TEMP: 98.7 °

MUSCLE RIGIDITY: ☒ Normal ☐ Flacid ☐ Rigid

Comments:

What medicine or drug have you been using? How much? "NOTHING - I JUST NEED SOME SLEEP"

Time of use? N/A

Where were the drugs used? (Location) N/A

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED

OFFICER'S SIGNATURE	DISTRICT	ID NUMBER	REVIEWED BY

DISTRIBUTION: Department Records; Prosecutor; District/Officer; DUI Enforcement, HPB

DPS 802 - 04002 2/88

NARRATIVE: DR NUMBER XXIX - 1

SUBJECT APPEARED TO BE VERY TIRED.

000980

DRUG INFLUENCE EVALUATION

PAGE _____ OF _____
DR NUMBER: XXIX-2
EVALUATOR:
CONTROL #:
BOOKING #:

ARRESTEE'S NAME (Last, First, MI)	AGE	SEX	RACE	ARRESTING OFFICER (Name, Badge, District)
BRAVO				

DATE EXAMINED/TIME/LOCATION

BREATH RESULTS: ☐ Refused RESULTS 0.00% Instrument # 1234

CHEMICAL TEST ☐ Urine ☐ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: Given by: ☐ Yes ☐ No

What have you eaten today? When? "A SANDWICH" "2 HRS AGO"

What have you been drinking? How much? "NOTHING AT ALL" Time of last drink? N/A

Time now? When did you last sleep? How long? "LAST NIGHT - 8 HRS"

Are you sick or injured? ☐ Yes ☒ No

Are you diabetic or epileptic? ☐ Yes ☒ No

Do you take insulin? ☐ Yes ☒ No

Do you have any physical defects? ☐ Yes ☒ No

Are you under the care of a doctor/dentist? ☐ Yes ☒ No

Are you taking any medication or drugs? ☐ Yes ☒ No

ATTITUDE: CAREFREE, COOPERATIVE

COORDINATION: FAIR

SPEECH: NORMAL

BREATH: NORMAL

FACE: NORMAL

CORRECTIVE LENS: ☐ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft

General Appearance: ☐ Normal ☒ Bloodshot ☐ Watery VERY BLOODSHOT

Blindness: ☒ None ☐ R. Eye ☐ L. Eye

Tracking: ☒ Equal ☐ Unequal

PUPIL SIZE: ☒ Equal ☐ Unequal (explain)

HGN Present: ☐ Yes ☒ No

Able to follow stimulus: ☒ Yes ☐ No

Eyelids: ☒ Normal ☐ Droopy

PULSE & TIME	HGN LACK OF Smooth Pursuit	Right Eye	Left Eye
1. 120 /			
2. 112 /	Max. Deviation	NO	NO
3. 118 /	Angle of Onset	NONE	NONE

Vertical Nystagmus? ☐ Yes ☒ No

Convergence: Right Eye OK Left Eye OK

ONE LEG STAND: NO CLUES OBSERVED.

SUBJECTED COUNTED VERY FAST

L R
☐ ☐ Sways while balancing.
☐ ☐ Uses arms to balance.
☐ ☐ Hopping.
☐ ☐ Puts foot down.

BALANCE EYES CLOSED: SUBJECT OPENED EYES AT 10 SECONDS AND SAID "TIME'S UP"

WALK AND TURN TEST

Cannot keep balance _____
Starts too soon ✓

	1st Nine	2nd Nine
Stops Walking		
Misses Heel-Toe		
Steps off Line	✓	
Raises Arms		
Actual Steps Taken	9	11

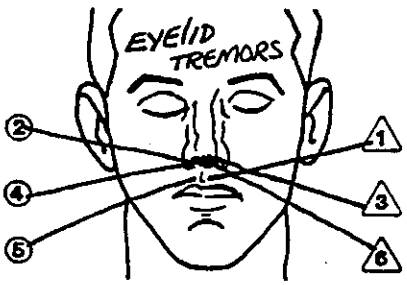
INTERNAL CLOCK: 16 Estimated as 30 sec.

Describe Turn: PROPER

Cannot do Test (explain): N/A

Type of Footwear

○ Right △ Left
Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	5.0	7.0	6.0	4.5
Right Eye	5.0	7.0	6.0	4.5

NASAL AREA: CLEAR

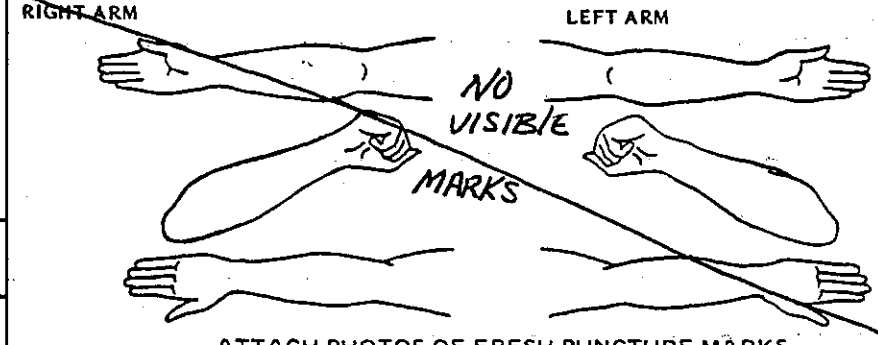
ORAL CAVITY: (SEE NARRATIVE)

HIPPUS ☐ Yes ☒ No

REBOUND DILATION ☐ Yes ☒ No

Reaction to Light: NEAR NORMAL

RIGHT ARM LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 168 / 100 TEMP 98.6 °

MUSCLE RIGIDITY: ☒ Normal ☐ Flacid ☐ Rigid
Comments:

What medicine or drug have you been using? How much? "NOTHING - NO HARD STUFF AT ALL"

Time of use? "DIDN'T USE"

Where were the drugs used? (Location) "NOTHING TODAY, OFFICER"

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED

OFFICER'S SIGNATURE	DISTRICT	ID NUMBER	REVIEWED BY

DISTRIBUTION: Department Records; Prosecutor; District/Officer; DUI Enforcement, HPB

DPS 802 - 04002 2/88

NARRATIVE: DR NUMBER XXIX-2

CHECK OF SUBJECT'S MOUTH REVEALED SMALL BITS OF DEBRIS (DARK GREEN/BROWN VEGETABLE MATTER) BETWEEN LOWER FRONT TEETH.

000982

DRUG INFLUENCE EVALUATION

PAGE _____ OF _____
DR NUMBER: XXIX -3
EVALUATOR:
CONTROL #:
BOOKING #:

ARRESTEE'S NAME (Last, First, MI)	AGE	SEX	RACE	ARRESTING OFFICER (Name, Badge, District)
CHARLIE				

DATE EXAMINED/TIME/LOCATION

BREATH RESULTS: ☐ Refused RESULTS 0.00% Instrument # 1234

CHEMICAL TEST ☐ Urine ☐ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: Given by: ☐ Yes ☐ No

What have you eaten today? When? "EAT TODAY? ... (PAUSE) ... NO"

What have you been drinking? How much? "DRINK? NO"

Time of last drink? N/A

Time now? When did you last sleep? How long? "THIS MORNING - 4 HRS"

Are you sick or injured? "I'M VERY HOT" ☐ Yes ☐ No

Are you diabetic or epileptic? ☐ Yes ☒ No

Do you take insulin? ☐ Yes ☒ No

Do you have any physical defects? ☐ Yes ☒ No

Are you under the care of a doctor/dentist? ☐ Yes ☒ No

Are you taking any medication or drugs? ☐ Yes ☒ No

ATTITUDE: DETACHED — SLOW TO RESPOND

COORDINATION: VERY SLOPPY AND UNSTEADY

SPEECH: SLOW AND DELIBERATE

BREATH: NORMAL

FACE: BLANK STARE. PERSPIRING HEAVILY

CORRECTIVE LENS: ☐ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft

General Appearance: ☒ Normal ☐ Bloodshot ☐ Watery

Blindness: ☒ None ☐ R. Eye ☐ L. Eye

Tracking: ☒ Equal ☐ Unequal

PUPIL SIZE: ☒ Equal ☐ Unequal (explain)

HGN Present: ☒ Yes ☐ No

Able to follow stimulus: ☒ Yes ☐ No

Eyelids: ☒ Normal ☐ Droopy

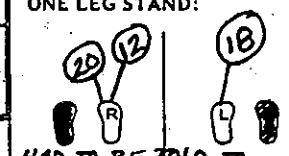
PULSE & TIME
1. 104 /
2. 108 /
3. 108 /

HGN LACK OF Smooth Pursuit	Right Eye	Left Eye
Max. Deviation	YES	YES
Angle of Onset	YES	YES
	IMMEDIATE	IMMEDIATE

Vertical Nystagmus? ☒ Yes ☐ No

Convergence: Right Eye ☒ Left Eye ☒

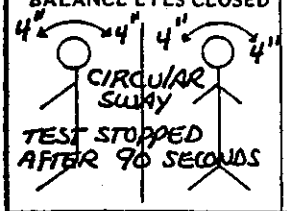
ONE LEG STAND:



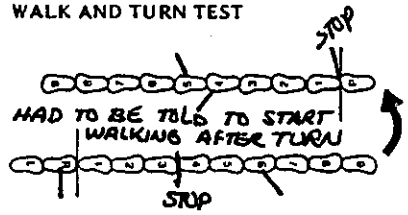
HAD TO BE TOLD TO COUNT OUT LOUD, THEN SIMPLY REPEATED "ONE THOUSAND"

L R
☐ ☒ Sways while balancing.
☒ ☒ Uses arms to balance.
☐ ☐ Hopping.
☒ ☒ Puts foot down.

BALANCE EYES CLOSED



WALK AND TURN TEST



Cannot keep balance ✓

Starts too soon _____

	1st Nine	2nd Nine
Stops Walking	✓	✓
Misses Heel-Toe		
Steps off Line	✓	✓✓
Raises Arms		
Actual Steps Taken	9	9

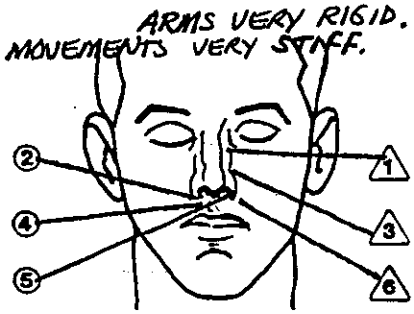
INTERNAL CLOCK: 90 Estimated as 30 sec.

Describe Turn: DID NOT LEAVE FRONT FOOT ON LINE

Cannot do Test (explain): N/A

Type of Footwear

○ Right △ Left
Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	4.0	6.5	5.5	3.5
Right Eye	4.0	6.5	5.5	3.5

NASAL AREA: CLEAR

ORAL CAVITY: CLEAR

HIPPUS ☐ Yes ☒ No

REBOUND DILATION ☐ Yes ☒ No

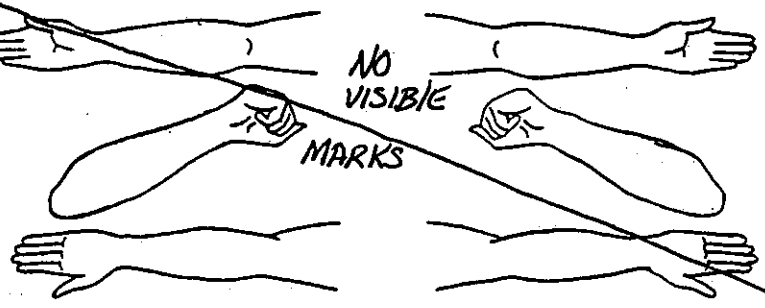
Reaction to Light: NEAR NORMAL

BLOOD PRESSURE: 170 / 98

TEMP: 100.6 °

MUSCLE RIGIDITY: ☐ Normal ☐ Flaccid ☒ Rigid
Comments: ARMS VERY RIGID

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

What medicine or drug have you been using? How much? "USING --- (PAUSE) --- NOTHING"

Time of use? N/A

Where were the drugs used? (Location) N/A

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED

OFFICER'S SIGNATURE	DISTRICT	ID NUMBER	REVIEWED BY

DISTRIBUTION: Department Records; Prosecutor; District/Officer; DUI Enforcement, HPB

DPS 802 - 04002 2/88

NARRATIVE:

DR NUMBER XXIX.-3

SUBJECT DELAYED FOR SEVERAL SECONDS PRIOR TO RESPONDING TO MOST QUESTIONS.

SUBJECT STATED IT WAS VERY HOT SEVERAL TIMES DURING THE EXAMINATION. SUBJECT PERSPIRED HEAVILY DURING THE EXAMINATION

000984

DRUG INFLUENCE EVALUATION

PAGE _____ OF _____
DR NUMBER: XXIX -4
EVALUATOR:
CONTROL #:
BOOKING #:

ARRESTEE'S NAME (Last, First, MI): DELTA | AGE | SEX | RACE | ARRESTING OFFICER (Name, Badge, District)

DATE EXAMINED/TIME/LOCATION | BREATH RESULTS: ☐ Refused RESULTS 0.00% Instrument # 1234 | CHEMICAL TEST ☐ Urine ☐ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: Given by: ☐ Yes ☐ No

What have you eaten today? When? "I DIDN'T EAT TODAY"

What have you been drinking? How much? "NOTHING-NO BOOZE"

Time of last drink? N/A

Time now? | When did you last sleep? How long? "I DON'T REMEMBER"

Are you sick or injured? ☐ Yes ☒ No

Are you diabetic or epileptic ? ☐ Yes ☒ No

Do you take insulin ? ☐ Yes ☒ No

Do you have any physical defects? ☐ Yes ☒ No

Are you under the care of a doctor/dentist? ☐ Yes ☒ No

Are you taking any medication or drugs? "I'M CLEAN" ☐ Yes ☐ No

ATTITUDE: DETACHED, SLEEPY, PASSIVE

COORDINATION: VERY SLOPPY. RUBBER-LEGGED

SPEECH: LOW, MUMBLED

BREATH: NORMAL

FACE: NORMAL

CORRECTIVE LENS: ☐ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft

General Appearance: ☒ Normal ☐ Bloodshot ☐ Watery

Blindness: ☒ None ☐ R. Eye ☐ L. Eye

Tracking: ☒ Equal ☐ Unequal

PUPIL SIZE: ☒ Equal ☐ Unequal (explain)

HGN Present: ☐ Yes ☒ No

Able to follow stimulus: ☒ Yes ☐ No

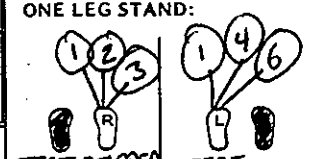
Eyelids: ☐ Normal ☒ Droopy

PULSE & TIME	HGN	Right Eye	Left Eye
1. 52 /	Lack of Smooth Pursuit	No	No
2. 56 /	Max. Deviation	No	No
3. 52 /	Angle of Onset	NONE	NONE

Vertical Nystagmus? ☐ Yes ☒ No

Convergence: Right Eye ☒ Left Eye ☒

ONE LEG STAND:

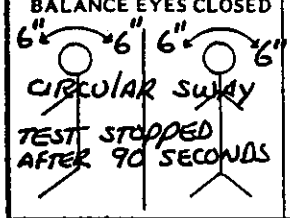


TEST STOPPED AFTER 3 SECONDS

TEST STOPPED AFTER 6 SECONDS

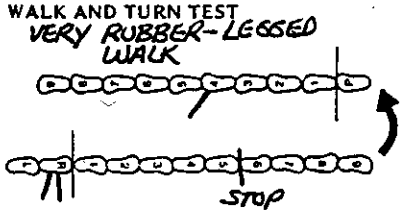
☐ R ☐ L Sways while balancing.
☐ R ☒ L Uses arms to balance.
☐ R ☐ L Hopping.
☒ R ☒ L Puts foot down.

BALANCE EYES CLOSED



TEST STOPPED AFTER 90 SECONDS

WALK AND TURN TEST



Cannot keep balance ✓

Starts too soon _____

	1st Nine	2nd Nine
Stops Walking	✓	
Misses Heel-Toe		
Steps off Line		✓
Raises Arms	✓✓	✓✓
Actual Steps Taken	9	9

INTERNAL CLOCK: 90 Estimated as 30 sec.

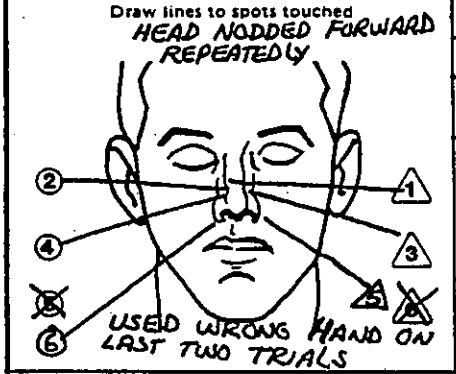
Describe Turn: DID NOT LEAVE FRONT FOOT ON LINE, STAGGERED TO RIGHT

Cannot do Test (explain): N/A

Type of Footwear

○ Right △ Left

Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	2.0	2.5	2.5	2.0
Right Eye	2.0	2.5	2.5	2.0

NASAL AREA: CLEAR

ORAL CAVITY: CLEAR

HIPPUS ☐ Yes ☒ No

REBOUND DILATION ☐ Yes ☒ No

Reaction to Light: VERY SLOW

BLOOD PRESSURE: 108 / 60

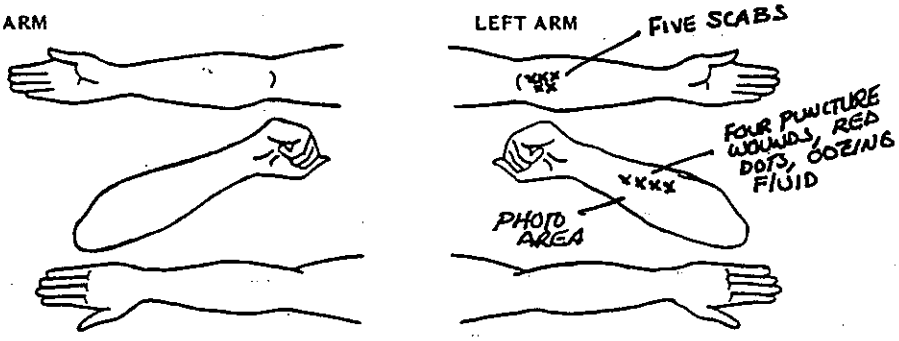
TEMP: 97.0 °

MUSCLE RIGIDITY: ☐ Normal ☒ Flacid ☐ Rigid

Comments: ARMS VERY LOOSE, FLACID

RIGHT ARM

LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

What medicine or drug have you been using? How much? "PLEASE, HONEST, I'M CLEAN"

Time of use? "NO, HONEST"

Where were the drugs used? (Location) "PLEASE, I'M REALLY CLEAN"

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED

OFFICER'S SIGNATURE	DISTRICT	ID NUMBER	REVIEWED BY

DISTRIBUTION: Department Records; Prosecutor; District/Officer; DUI Enforcement, HPB

DPS 802 - 04002 2/88

NARRATIVE:

DR NUMBER XXIX-4

SUBJECT'S EYELIDS DROOPED CONSTANTLY. SUBJECT'S HEAD REPEATEDLY NODDED FORWARD. AT TIMES, SUBJECT APPEARED TO BE ASLEEP, BUT ALWAYS RESPONDED TO QUESTIONS.

SUBJECT RUBBED THE FACE AND LICKED THE LIPS FREQUENTLY.

000986

DRUG INFLUENCE EVALUATION

PAGE _____ OF _____
DR NUMBER: XXIX - 5
EVALUATOR:
CONTROL #:
BOOKING #:

ARRESTEE'S NAME (Last, First, MI)	AGE	SEX	RACE	ARRESTING OFFICER (Name, Badge, District)
ECHO				

DATE EXAMINED/TIME/LOCATION

BREATH RESULTS: ☐ Refused RESULTS 0.00% Instrument # 1234

CHEMICAL TEST ☐ Urine ☐ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: Given by: ☐ Yes ☐ No

What have you eaten today? When? "NOTHING"

What have you been drinking? How much? "JUST WATER"

Time of last drink? N/A

Time now? When did you last sleep? How long? "LAST NIGHT - 2 HOURS"

Are you sick or injured? ☐ Yes ☒ No

Are you diabetic or epileptic? "NOT ANY MORE" ☐ Yes ☐ No

Do you take insulin? "NOT ANY MORE - I USED TO" ☐ Yes ☐ No

Do you have any physical defects? ☐ Yes ☒ No

Are you under the care of a doctor/dentist? ☐ Yes ☒ No

Are you taking any medication or drugs? "NOT ANY MORE" ☐ Yes ☐ No

ATTITUDE PASSIVE, GENERALLY COOPERATIVE

COORDINATION STAGGERING. GREAT DIFFICULTY IN MAINTAINING BALANCE

SPEECH LOW, MUMBLED, SLURRED AT TIMES

BREATH NORMAL ODOR, SLOW, SHALLOW BREATHING

FACE NORMAL

CORRECTIVE LENS: ☐ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft

General Appearance: ☐ Normal ☐ Bloodshot ☒ Watery

Blindness: ☒ None ☐ R. Eye ☐ L. Eye

Tracking: ☒ Equal ☐ Unequal

PUPIL SIZE: ☒ Equal ☐ Unequal (explain)

HGN Present: ☒ Yes ☐ No

Able to follow stimulus: ☒ Yes ☐ No

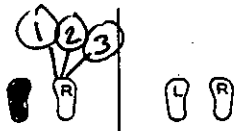
Eyelids: ☐ Normal ☒ Droopy

PULSE & TIME	HGN	Right Eye	Left Eye
1. 44 /	LACK OF Smooth Pursuit	YES	YES
2. 48 /	Max. Deviation	YES	YES
3. 48 /	Angle of Onset	40°	40°

Vertical Nystagmus? ☐ Yes ☒ No

Convergence: Right Eye (OK) Left Eye (OK)

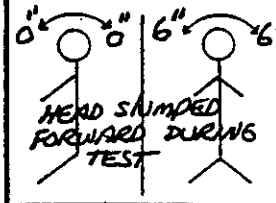
ONE LEG STAND:



TEST STOPPED — SUBJECT CANNOT STAND ON ONE FOOT

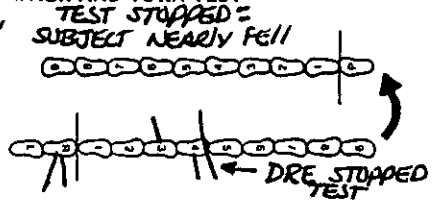
L R
☒ ☐ Sways while balancing.
☐ ☐ Uses arms to balance.
☐ ☐ Hopping.
LW ☐ Puts foot down.

BALANCE EYES CLOSED



WALK AND TURN TEST

TEST STOPPED = SUBJECT NEARLY FELL



Cannot keep balance ✓✓

Starts too soon

	1st Nine	2nd Nine
Stops Walking		
Misses Heel-Toe	✓	
Steps off Line	✓✓	
Raises Arms		
Actual Steps Taken	TEST STOPPED	

INTERNAL CLOCK: 70 Estimated as 30 sec.

Describe Turn N/A

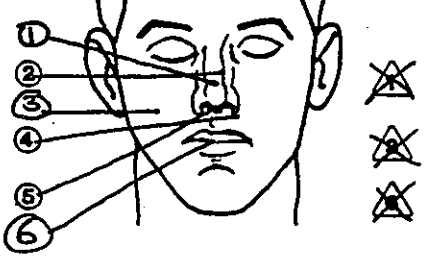
Cannot do Test (explain) SUBJECT STAGGERED AND STUMBLED BADLY

Type of Footwear

○ Right △ Left

Draw lines to spots touched

HEAD NODDED FORWARD, SUBJECT NEVER USED THE LEFT HAND.



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	2.0	2.5	2.0	2.0
Right Eye	2.0	2.5	2.0	2.0

NASAL AREA CLEAR

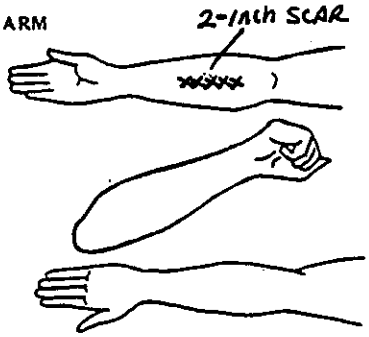
ORAL CAVITY CLEAR

HIPPUS ☐ Yes ☒ No

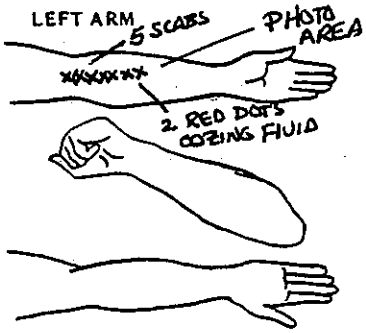
REBOUND DILATION ☐ Yes ☒ No

Reaction to Light: NO VISIBLE REACTION

RIGHT ARM



LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 104 / 58 TEMP 97.2°

MUSCLE RIGIDITY: ☐ Normal ☒ Flacid ☐ Rigid

Comments: ARMS VERY LOOSE

What medicine or drug have you been using? "I STOPPED TWO YEARS AGO" How much?

Time of use? "I DIDN'T USE"

Where were the drugs used? (Location) "I HAVEN'T USED ANY"

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED

OFFICER'S SIGNATURE	DISTRICT	ID NUMBER	REVIEWED BY

DISTRIBUTION: Department Records; Prosecutor; District/Officer; DUI Enforcement, HPB

DPS 802 - 04002 2/88

NARRATIVE:

DR NUMBER XXIX-5

SUBJECT APPEARED VERY DROWSY. THE EYELIDS DROOPED CONSTANTLY, AND THE HEAD NODDED FORWARD FREQUENTLY.

000988

DRUG INFLUENCE EVALUATION

PAGE _____ OF _____
DR NUMBER: XXIX -6
EVALUATOR:
CONTROL #:
BOOKING #:

ARRESTEE'S NAME (Last, First, MI)	AGE	SEX	RACE	ARRESTING OFFICER (Name, Badge, District)
FOXTROT				

DATE EXAMINED/TIME/LOCATION

BREATH RESULTS: ☐ Refused RESULTS 0.00% Instrument # 1234

CHEMICAL TEST ☐ Urine ☐ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: Given by: ☐ Yes ☐ No

What have you eaten today? "NOTHING" When? N/A

What have you been drinking? How much? "NOTHING"

Time of last drink? N/A

Time now?

When did you last sleep? How long? "LAST NIGHT – 2 HOURS"

Are you sick or injured? ☐ Yes ☒ No

Are you diabetic or epileptic ? ☐ Yes ☒ No

Do you take insulin ? ☐ Yes ☒ No

Do you have any physical defects? ☐ Yes ☒ No

Are you under the care of a doctor/dentist? ☐ Yes ☒ No

Are you taking any medication or drugs? ☐ Yes ☒ No

ATTITUDE: COOPERATIVE

COORDINATION: FAIR

SPEECH: NORMAL

BREATH: NORMAL

FACE: NORMAL

CORRECTIVE LENS: ☐ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft

General Appearance: ☐ Normal ☒ Bloodshot ☐ Watery

Blindness: ☒ None ☐ R. Eye ☐ L. Eye

Tracking: ☒ Equal ☐ Unequal

PUPIL SIZE: ☒ Equal ☐ Unequal (explain)

HGN Present: ☐ Yes ☒ No

Able to follow stimulus: ☒ Yes ☐ No

Eyelids: ☒ Normal ☐ Droopy

PULSE & TIME	HGN	Right Eye	Left Eye
1. 116 /	LACK OF Smooth Pursuit	NO	NO
2. 124 /	Max. Deviation	NO	NO
3. 124 /	Angle of Onset	NONE	NONE

Vertical Nystagmus? ☐ Yes ☒ No

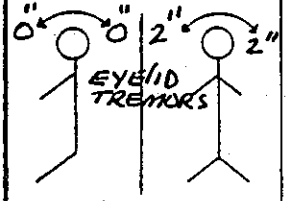
Convergence: Right Eye (O2) Left Eye (O)

ONE LEG STAND: TREMORS VISIBLE IN THE ELEVATED LEG

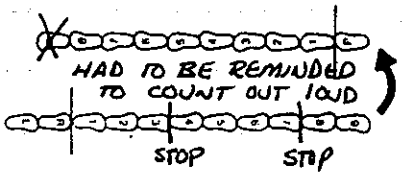
HAD TO BE REMINDED TO COUNT OUT LOUD.

L R
☒ ☒ Sways while balancing.
☐ ☐ Uses arms to balance.
☐ ☐ Hopping.
☐ ☐ Puts foot down.

BALANCE EYES CLOSED



WALK AND TURN TEST



Cannot keep balance _____
Starts too soon _____

	1st Nine	2nd Nine
Stops Walking	✓✓	
Misses Heel-Toe		
Steps off Line		
Raises Arms		
Actual Steps Taken	9	8

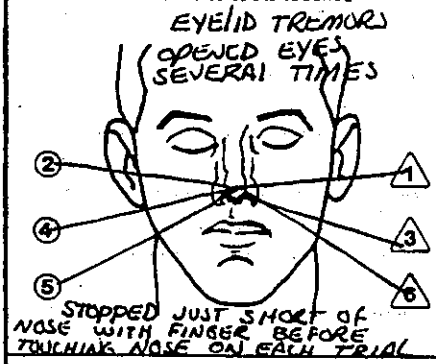
INTERNAL CLOCK: 15 Estimated as 30 sec.

Describe Turn: ABRUPT SWIVEL, NO SMALL STEPS

Cannot do Test (explain): N/A

Type of Footwear

○ Right △ Left
Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	5.0	6.0	5.5	4.0
Right Eye	5.0	6.0	5.5	4.0

NASAL AREA: CLEAR

ORAL CAVITY: CLEAR

HIPPUS ☐ Yes ☒ No

REBOUND DILATION ☐ Yes ☒ No

Reaction to Light: SLOW

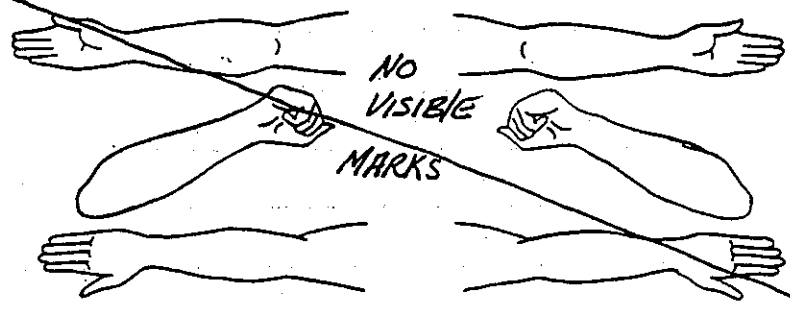
BLOOD PRESSURE: 160 / 98

TEMP: 98.6°

MUSCLE RIGIDITY: ☒ Normal ☐ Flaccid ☐ Rigid

Comments:

RIGHT ARM LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

What medicine or drug have you been using? "NONE" How much? N/A Time of use? N/A Where were the drugs used? (Location) N/A

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED

OFFICER'S SIGNATURE	DISTRICT	ID NUMBER	REVIEWED BY

DISTRIBUTION: Department Records; Prosecutor; District/Officer; DUI Enforcement, HPB

DPS 802 - 04002 2/88

NARRATIVE:

DR NUMBER XXIX-6

SUBJECT'S EYELIDS EXHIBITED NOTICEABLE TREMORS DURING RHOMBERG BALANCE TEST AND FINGER-TO-NOSE TEST.

000990

DRUG INFLUENCE EVALUATION

PAGE _____ OF _____
DR NUMBER: XXIX - 7
EVALUATOR:
CONTROL #:
BOOKING #:

ARRESTEE'S NAME (Last, First, MI)	AGE	SEX	RACE	ARRESTING OFFICER (Name, Badge, District)
GOLF				

DATE EXAMINED/TIME/LOCATION

BREATH RESULTS: ☐ Refused RESULTS 0.00% Instrument # 1234

CHEMICAL TEST ☐ Urine ☐ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: Given by: ☐ Yes ☐ No

What have you eaten today? When? "SOME COOKIES" "ONE HR. AGO"

What have you been drinking? How much? "I DON'T DO BOOZE"

Time of last drink? N/A

Time now? When did you last sleep? How long? "YESTERDAY" "5 HRS"

Are you sick or injured? ☐ Yes ☐ No "NO - AM I UNDER ARREST?"

Are you diabetic or epileptic? ☐ Yes ☐ No "NO - WHY ARE YOU DOING THIS?"

Do you take insulin? ☐ Yes ☐ No "NO - WHY WAS I STOPPED?"

Do you have any physical defects? ☐ Yes ☐ No "NO - NO - NO - NO - NO"

Are you under the care of a doctor/dentist? ☐ Yes ☐ No "NO - NO - NO - NO"

Are you taking any medication or drugs? ☐ Yes ☐ No "NO - NO - ... WHAT?" "NO!"

ATTITUDE: ANXIOUS AND UPSET. NERVOUS

COORDINATION: FAIR BUT JITTERY

SPEECH: VERY RAPID "STUMBLING" OVER WORDS

BREATH: NORMAL

FACE: NORMAL

CORRECTIVE LENSES: ☐ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft

General Appearance: ☒ Normal ☐ Bloodshot ☐ Watery

Blindness: ☒ None ☐ R. Eye ☐ L. Eye

Tracking: ☒ Equal ☐ Unequal

PUPIL SIZE: ☒ Equal ☐ Unequal (explain)

HGN Present: ☐ Yes ☒ No

Able to follow stimulus: ☒ Yes ☐ No

Eyelids: EYES WIDE OPEN ☒ Normal ☐ Droopy

PULSE & TIME
1. 100 /
2. 96 /
3. 96 /

HGN LACK OF Smooth Pursuit	Right Eye	Left Eye
Max. Deviation	NO	NO
Angle of Onset	NO	NO
	NONE	NONE

Vertical Nystagmus? ☐ Yes ☒ No

Convergence: Right Eye → Left Eye ←

ONE LEG STAND: COUNTED VERY QUICKLY VERBALLY "STUMBLED" OVER SEVERAL NUMBERS

BALANCE EYES CLOSED: VERY SLIGHT CIRCULAR SWAY

WALK AND TURN TEST: WALKED VERY QUICKLY; HAD TO BE REMINDED TO COUNT OUT LOUD

Cannot keep balance _____
Starts too soon ✓

	1st Nine	2nd Nine
Stops Walking		
Misses Heel-Toe		
Steps off Line		
Raises Arms	✓	✓
Actual Steps Taken	9	9

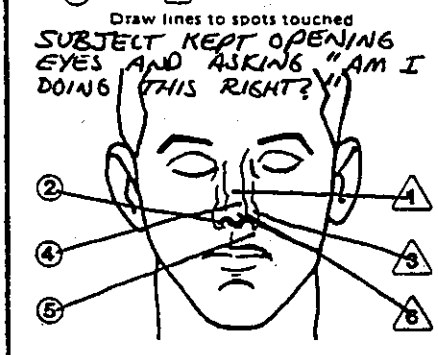
	R	L
Sways while balancing.	☑	☑
Uses arms to balance.	☑	☑
Hopping.	☐	☐
Puts foot down.	☐	☐

INTERNAL CLOCK: 12 Estimated as 30 sec.

Describe Turn: PROPER BUT VERY RAPID

Cannot do Test (explain): N/A

Type of Footwear



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	7.5	8.5	8.0	7.0
Right Eye	7.5	8.5	8.0	7.0

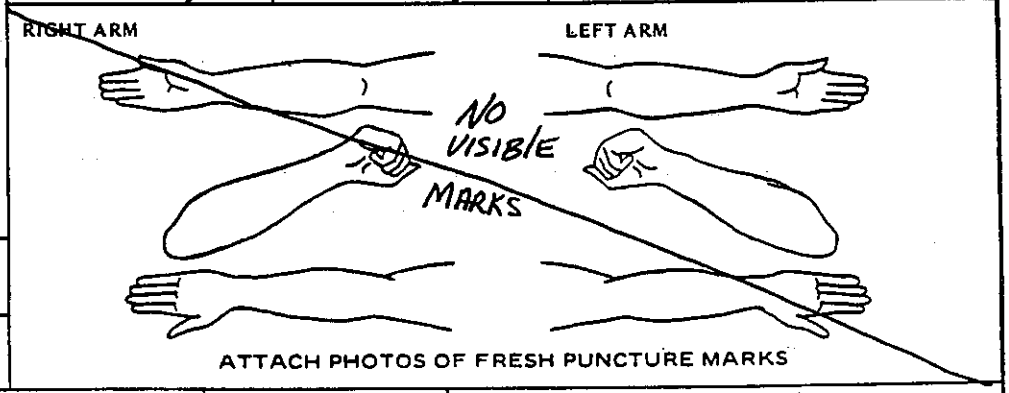
NASAL AREA: REDNESS IN NOSTRILS

ORAL CAVITY: CLEAR

HIPPUS ☐ Yes ☒ No

REBOUND DILATION ☐ Yes ☒ No

Reaction to Light: VERY SLOW



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 170 / 100

TEMP: 99.7 °

MUSCLE RIGIDITY: ☒ Normal ☐ Flacid ☐ Rigid

Comments:

What medicine or drug have you been using? How much? "WHAT? NONE! AM I BEING ARRESTED?"

Time of use? N/A

Where were the drugs used? (Location) N/A

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED

OFFICER'S SIGNATURE	DISTRICT	ID NUMBER	REVIEWED BY

DISTRIBUTION: Department Records; Prosecutor; District/Officer: DUI Enforcement, HPB

DPS 802 - 04002 2/88

NARRATIVE:

DR NUMBER XXIX-7

SUBJECT APPEARED VERY NERVOUS AND JITTERY. KEPT "STUMBLING" VERBALLY OVER WORDS. REPEATEDLY ASKED "AM I BEING ARRESTED?"

DRUG INFLUENCE EVALUATION

PAGE _____ OF _____
DR NUMBER: XXIX - 8
EVALUATOR:
CONTROL #:
BOOKING #:

ARRESTEE'S NAME (Last, First, MI)	AGE	SEX	RACE	ARRESTING OFFICER (Name, Badge, District)
HOTEL				

DATE EXAMINED/TIME/LOCATION

BREATH RESULTS: ☐ Refused RESULTS 0.00% Instrument # 1234

CHEMICAL TEST ☐ Urine ☐ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: Given by: ☐ Yes ☐ No

What have you eaten today? When? "I DON'T REMEMBER"

What have you been drinking? How much? "NOTHING"

Time of last drink? N/A

Time now?

When did you last sleep? How long? "I DON'T REMEMBER"

Are you sick or injured? "I DON'T REMEMBER" ☐ Yes ☐ No

Are you diabetic or epileptic? ☐ Yes ☒ No

Do you take insulin? ☐ Yes ☒ No

Do you have any physical defects? "I DON'T REMEMBER" ☐ Yes ☐ No

Are you under the care of a doctor/dentist? ☐ Yes ☒ No

Are you taking any medication or drugs? "I DON'T REMEMBER" ☐ Yes ☐ No

ATTITUDE: DAZED, SLOW TO RESPOND

COORDINATION: POOR - STAGGERING

SPEECH: SLOW, DELIBERATE

BREATH: NORMAL

FACE: FLUSHED

CORRECTIVE LENS: ☐ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft

General Appearance: VERY BLOODSHOT ☐ Normal ☒ Bloodshot ☐ Watery

Blindness: ☒ None ☐ R. Eye ☐ L. Eye

Tracking: ☒ Equal ☐ Unequal

PUPIL SIZE: ☒ Equal ☐ Unequal (explain)

HGN Present: ☒ Yes ☐ No

Able to follow stimulus: ☒ Yes ☐ No

Eyelids: ☒ Normal ☐ Droopy

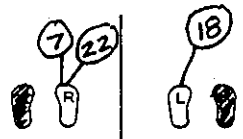
PULSE & TIME
1. 104 /
2. 128 /
3. 126 /

HGN LACK OF Smooth Pursuit	Right Eye	Left Eye
Max. Deviation	YES	YES
Angle of Onset	YES	YES
	IMMEDIATE	IMMEDIATE

Vertical Nystagmus? ☒ Yes ☐ No

Convergence: Right Eye ☒ Left Eye ☒

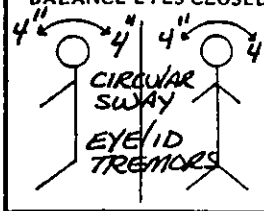
ONE LEG STAND:



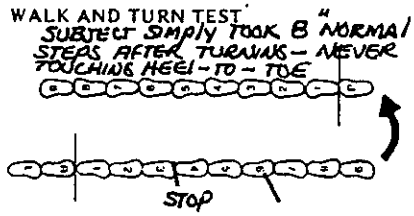
SEVERE TREMORS IN LEGS

☒ Sways while balancing.
☒ Uses arms to balance.
☐ Hopping.
☒ Puts foot down.

BALANCE EYES CLOSED



WALK AND TURN TEST



Cannot keep balance ☐
Starts too soon ☑

	1st Nine	2nd Nine
Stops Walking	☑	
Misses Heel-Toe		All STEPS
Steps off Line	☑	All STEPS
Raises Arms	☑	
Actual Steps Taken	9	8

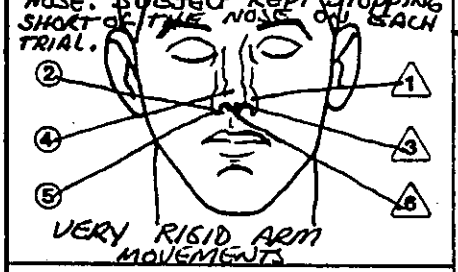
INTERNAL CLOCK: 60 Estimated as 30 sec.

Describe Turn: STAGGERED SEVERAL STEPS TOWARD THE RIGHT

Cannot do Test (explain): N/A

Type of Footwear

○ Right △ Left
Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	4.5	7.0	6.0	4.0
Right Eye	4.5	7.0	6.0	4.0

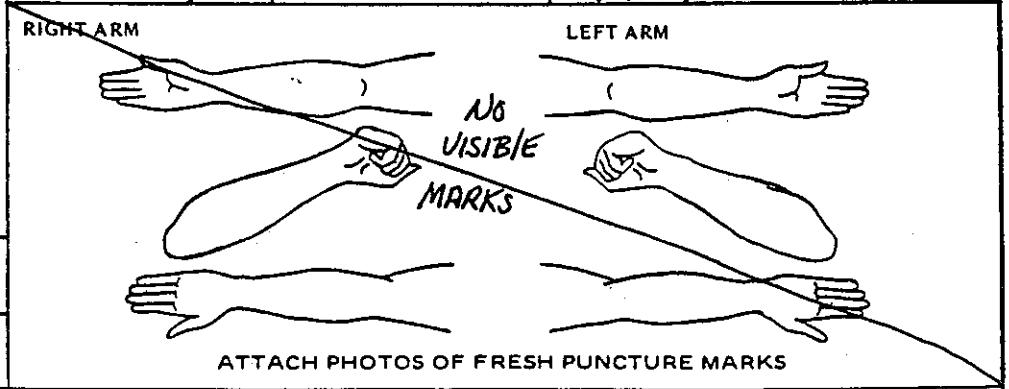
NASAL AREA: CLEAR

ORAL CAVITY: BITS OF GREENISH-BROWN MATERIAL BETWEEN TEETH

HIPPUS ☐ Yes ☒ No

REBOUND DILATION ☐ Yes ☒ No

Reaction to Light: NEAR NORMAL



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 172 / 104

TEMP: 100.4 °

MUSCLE RIGIDITY: ☐ Normal ☐ Flacid ☒ Rigid
Comments: ARMS + HANDS RIGID

What medicine or drug have you been using? "NOTHING" How much? N/A Time of use? N/A Where were the drugs used? (Location) N/A

DATE/TIME OF ARREST

TIME DRE NOTIFIED

EVAL START TIME

TIME COMPLETED

OFFICER'S SIGNATURE

DISTRICT

ID NUMBER

REVIEWED BY

DISTRIBUTION: Department Records; Prosecutor; District/Officer: DUI Enforcement, HPB

DPS 802 - 04002 2/88

000993

NARRATIVE:

DR NUMBER XXIX-8

SUBJECT APPEARED VERY STIFF, RIGID. SUBJECT DELAYED FOR SEVERAL SECONDS BEFORE RESPONDING TO MOST QUESTIONS. SUBJECT'S EYES WERE EXTREMELY RED. SUBJECT EXHIBITED A BLANK STARE THROUGHOUT THE EVALUATION.

000994

DRUG INFLUENCE EVALUATION

PAGE _____ OF _____
DR NUMBER: XXIX-9
EVALUATOR:
CONTROL #:
BOOKING #:

ARRESTEE'S NAME (Last, First, MI)	AGE	SEX	RACE	ARRESTING OFFICER (Name, Badge, District)
INDIA				

DATE EXAMINED/TIME/LOCATION

BREATH RESULTS: ☐ Refused RESULTS 0.00% Instrument # 1234

CHEMICAL TEST ☐ Urine ☐ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: Given by: ☐ Yes ☐ No

What have you eaten today? When? "SOME EGGS" "AT LUNCH"

What have you been drinking? How much? "NOTHING"

Time of last drink? N/A

Time now? When did you last sleep? How long? "THIS MORNING" "2 HRS"

Are you sick or injured? "I FEEL OKAY" ☐ Yes ☐ No

Are you diabetic or epileptic ? ☐ Yes ☒ No

Do you take insulin ? ☐ Yes ☒ No

Do you have any physical defects? ☐ Yes ☒ No

Are you under the care of a doctor/dentist? ☐ Yes ☒ No

Are you taking any medication or drugs? ☐ Yes ☒ No

ATTITUDE: COOPERATIVE BUT CONFUSED

COORDINATION: STUMBLING AND STAGGERING

SPEECH: LOW, MUMBLED SOMETIMES SLURRED

BREATH: NORMAL

FACE: FLUSHED

CORRECTIVE LENS: ☐ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft

General Appearance: ☐ Normal ☒ Bloodshot ☒ Watery

Blindness: ☒ None ☐ R. Eye ☐ L. Eye

Tracking: ☒ Equal ☐ Unequal

PUPIL SIZE: ☒ Equal ☐ Unequal (explain)

HGN Present: ☒ Yes ☐ No

Able to follow stimulus: ☒ Yes ☐ No

Eyelids: ☒ Normal ☐ Droopy

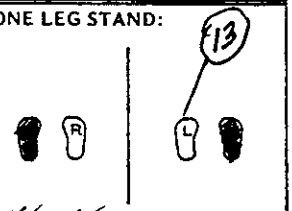
PULSE & TIME
1. 96 /
2. 92 /
3. 94 /

HGN	Right Eye	Left Eye
LACK OF Smooth Pursuit	YES	YES
Max. Deviation	YES	YES
Angle of Onset	30°	30°

Vertical Nystagmus? ☐ Yes ☒ No

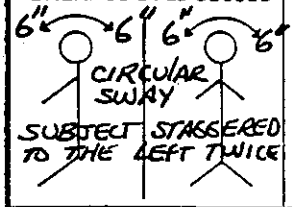
Convergence: Right Eye ☒ Left Eye ☒

ONE LEG STAND: 13

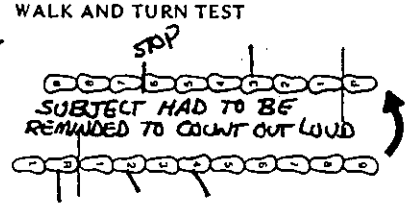


☐ R ☐ Sways while balancing.
☐ ☐ Uses arms to balance.
☐ ☐ Hopping.
☐ ☐ Puts foot down.

BALANCE EYES CLOSED



WALK AND TURN TEST



Cannot keep balance ✓
Starts too soon _____

	1st Nine	2nd Nine
Stops Walking		✓
Misses Heel-Toe		
Steps off Line	✓✓	✓
Raises Arms	✓✓	✓
Actual Steps Taken	9	9

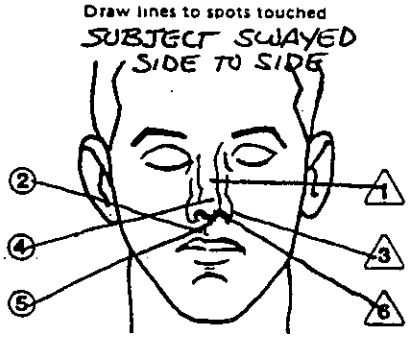
INTERNAL CLOCK: 45 Estimated as 30 sec.

Describe Turn: STAGGERED TWO STEPS TOWARD THE RIGHT

Cannot do Test (explain): N/A

Type of Footwear

○ Right △ Left
Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	4.0	6.5	6.0	3.5
Right Eye	4.0	6.5	6.0	3.5

NASAL AREA: RUNNY NOSE

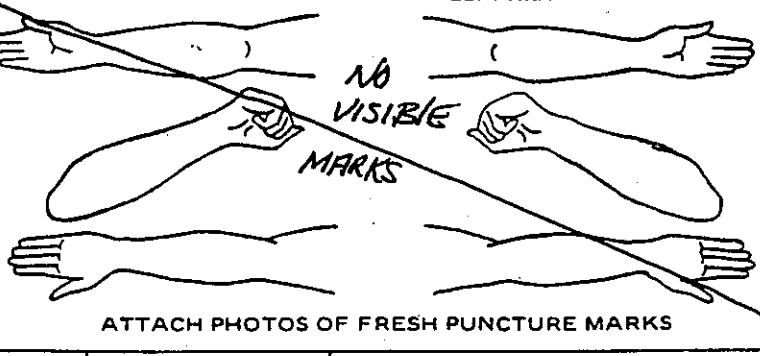
ORAL CAVITY: CLEAR

HIPPUS ☐ Yes ☒ No

REBOUND DILATION ☐ Yes ☒ No

Reaction to Light: NEAR NORMAL

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 148 / 88

TEMP: 98.8 °

MUSCLE RIGIDITY: ☒ Normal ☐ Flacid ☐ Rigid

Comments:

What medicine or drug have you been using? "NOTHING" How much? N/A Time of use? N/A Where were the drugs used? (Location) N/A

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED

OFFICER'S SIGNATURE	DISTRICT	ID NUMBER	REVIEWED BY

DISTRIBUTION: Department Records; Prosecutor; District/Officer; DUI Enforcement, HPB

DPS 802 - 04002 2/88

NARRATIVE:

DR NUMBER XXIX -9

SUBJECT APPEARED DAZED AND CONFUSED.
NEAR THE END OF THE EVALUATION, SUBJECT
COMPLAINED OF NAUSEA.

000996

DRUG INFLUENCE EVALUATION

PAGE _____ OF _____
DR NUMBER: XXIX -10
EVALUATOR:
CONTROL #:
BOOKING #:

ARRESTEE'S NAME (Last, First, MI): JULIET | AGE | SEX | RACE | ARRESTING OFFICER (Name, Badge, District)

DATE EXAMINED/TIME/LOCATION | BREATH RESULTS: ☐ Refused RESULTS 0.07% Instrument # 1234 | CHEMICAL TEST ☐ Urine ☐ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: Given by: ☐ Yes ☐ No | What have you eaten today? When? "SOME CEREAL" "AT BREAKFAST" | What have you been drinking? How much? "ONE BEER" | Time of last drink? 1 HR AGO

Time now? | When did you last sleep? How long? "LAST NIGHT" "5 HRS" | Are you sick or injured? ☐ Yes ☒ No | Are you diabetic or epileptic ? ☐ Yes ☒ No

Do you take insulin ? ☐ Yes ☒ No | Do you have any physical defects? ☐ Yes ☒ No | Are you under the care of a doctor/dentist? ☐ Yes ☒ No

Are you taking any medication or drugs? ☐ Yes ☒ No | ATTITUDE: COOPERATIVE BUT WITHDRAWN | COORDINATION: SLOPPY, UNSTEADY

SPEECH: LOW, MUMBLED | BREATH: ODOR of ALCOHOLIC BEVERAGE | FACE: NORMAL

CORRECTIVE LENS: ☐ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft | General Appearance: MILDLY BLOODSHOT ☐ Normal ☒ Bloodshot ☐ Watery | Blindness: ☒ None ☐ R. Eye ☐ L. Eye | Tracking: ☒ Equal ☐ Unequal

PUPIL SIZE: ☒ Equal ☐ Unequal (explain) | HGN Present: ☒ Yes ☐ No | Able to follow stimulus: ☒ Yes ☐ No | Eyelids: SLIGHTLY ☐ Normal ☒ Droopy

PULSE & TIME	HGN LACK OF Smooth Pursuit	Right Eye	Left Eye
1. 82 /		YES	YES
2. 80 /	Max. Deviation	YES	NO
3. 80 /	Angle of Onset	45°	45°

Vertical Nystagmus? ☐ Yes ☒ No

Convergence: Right Eye ☐ Left Eye ☐

ONE LEG STAND: HAD TO BE REMINDED TO COUNT OUT LOUD

BALANCE EYES CLOSED: 2" 2" 2" 2" CIRCULAR SWAY

WALK AND TURN TEST

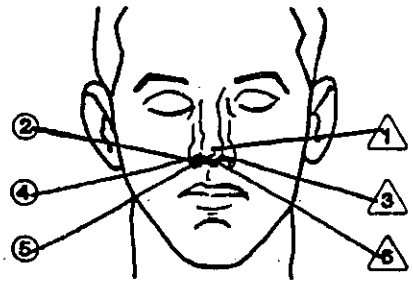
Cannot keep balance _____
Starts too soon _____

	1st Nine	2nd Nine
Stops Walking		
Misses Heel-Toe	✓	
Steps off Line	✓	
Raises Arms		✓
Actual Steps Taken	9	9

L	R	
☐	☐	Sways while balancing.
☒	☒	Uses arms to balance.
☐	☐	Hopping.
☐	☐	Puts foot down.

INTERNAL CLOCK: 38 Estimated as 30 sec. | Describe Turn: PROPER BUT SLOW | Cannot do Test (explain) N/A | Type of Footwear

○ Right △ Left
Draw lines to spots touched

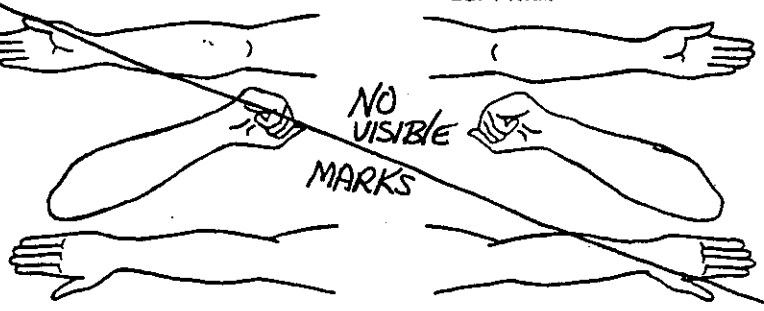


PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	4.5	6.0	5.5	3.5
Right Eye	4.5	6.0	5.5	3.5

NASAL AREA: CLEAR
ORAL CAVITY: CLEAR

HIPPUS ☐ Yes ☒ No | REBOUND DILATION ☐ Yes ☒ No | Reaction to Light: NEAR NORMAL

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 128 / 84 | TEMP 98.7 °

MUSCLE RIGIDITY: ☒ Normal ☐ Flaccid ☐ Rigid
Comments:

What medicine or drug have you been using? "NOTHING" | How much? N/A | Time of use? N/A | Where were the drugs used? (Location) N/A

DATE/TIME OF ARREST | TIME DRE NOTIFIED | EVAL START TIME | TIME COMPLETED

OFFICER'S SIGNATURE | DISTRICT | ID NUMBER | REVIEWED BY

DISTRIBUTION: Department Records; Prosecutor; District/Officer; DUI Enforcement, HPB

DPS 802 - 04002 2/88

NARRATIVE:

DR NUMBER XX1X -10

SUBJECT APPEARED DROWSY AND GAVE OFF A MODERATE ODOR OF ALCOHOLIC BEVERAGE.

000998

DRUG INFLUENCE EVALUATION

PAGE _____ OF _____
DR NUMBER: XXIX -11
EVALUATOR:
CONTROL #:
BOOKING #:

ARRESTEE'S NAME (Last, First, MI)	AGE	SEX	RACE	ARRESTING OFFICER (Name, Badge, District)
KILO				

DATE EXAMINED/TIME/LOCATION

BREATH RESULTS: ☐ Refused RESULTS 0.05% Instrument #1234

CHEMICAL TEST ☐ Urine ☐ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: Given by: ☐ Yes ☐ No

What have you eaten today? When? "NOTHING"

What have you been drinking? How much? "ONE BEER"

Time of last drink? 1 HR AGO

Time now? When did you last sleep? How long? "LAST NIGHT" "4 HRS"

Are you sick or injured? ☐ Yes ☒ No

Are you diabetic or epileptic ? ☐ Yes ☒ No

Do you take insulin ? ☐ Yes ☒ No

Do you have any physical defects? ☐ Yes ☒ No

Are you under the care of a doctor/dentist? ☐ Yes ☒ No

Are you taking any medication or drugs? ☐ Yes ☒ No

ATTITUDE: COOPERATIVE BUT DROWSY

COORDINATION: STUMBLING, STAGGERING

SPEECH: SLOW, LOW AND RASPY

BREATH: ODOR OF ALCOHOLIC BEVERAGE

FACE: NORMAL COLOR. HEAD NODDING. APPEARS DROWSY

CORRECTIVE LENS: ☐ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft

General Appearance: ☒ Normal ☐ Bloodshot ☐ Watery

Blindness: ☒ None ☐ R. Eye ☐ L. Eye

Tracking: ☒ Equal ☐ Unequal

PUPIL SIZE: ☒ Equal ☐ Unequal (explain)

HGN Present: ☒ Yes ☐ No

Able to follow stimulus: ☒ Yes ☐ No

Eyelids: VERY DROOPY ☐ Normal ☒ Droopy

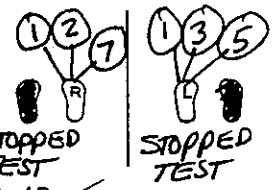
PULSE & TIME
1. 60 /
2. 60 /
3. _____ /

HGN LACK OF Smooth Pursuit	Right Eye	Left Eye
	YES	YES
Max. Deviation	NO	NO
Angle of Onset	45°	45°

Vertical Nystagmus? ☐ Yes ☒ No

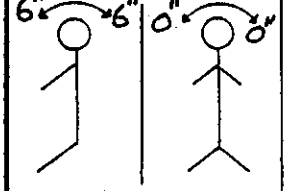
Convergence: Right Eye ✓ Left Eye ✓

ONE LEG STAND:

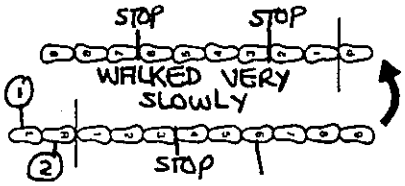


STOPPED TEST STOPPED TEST

BALANCE EYES CLOSED



WALK AND TURN TEST



Cannot keep balance ✓
Starts too soon _____

	1st Nine	2nd Nine
Stops Walking	✓	✓
Misses Heel-Toe	✓	✓
Steps off Line	✓	
Raises Arms	✓	✓
Actual Steps Taken	9	9

L ☑ R ☑ Sways while balancing.
L ☑ R ☑ Uses arms to balance.
☐ ☐ Hopping.
L ☑ R ☑ Puts foot down.

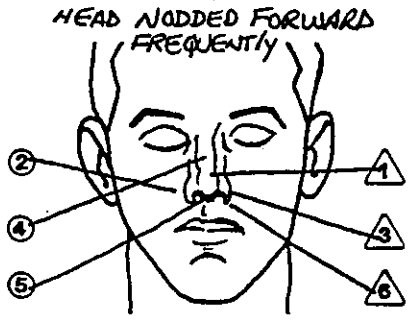
INTERNAL CLOCK: 50 Estimated as 30 sec.

Describe Turn: STAGGERED THREE STEPS TOWARD RIGHT

Cannot do Test (explain): N/A

Type of Footwear

○ Right △ Left
Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	1.5	1.5	1.5	1.5
Right Eye	1.5	1.5	1.5	1.5

NASAL AREA: CLEAR

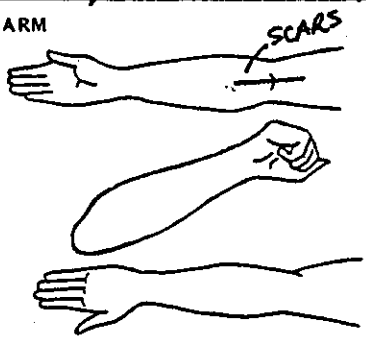
ORAL CAVITY: CLEAR

HIPPUS ☐ Yes ☒ No

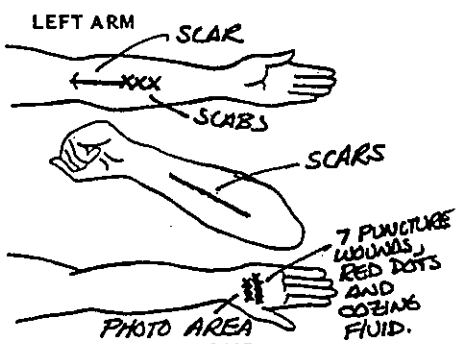
REBOUND DILATION ☐ Yes ☒ No

Reaction to Light: NONE OBSERVABLE

RIGHT ARM



LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 112 / 66 TEMP 97.5°

MUSCLE RIGIDITY: ☐ Normal ☒ Flacid ☐ Rigid
Comments: NECK, ARMS LOOSE

What medicine or drug have you been using? "NOTHING I'M CLEAN" How much? N/A

Time of use? "HONEST, I'M CLEAN"

Where were the drugs used? (Location) N/A

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED

OFFICER'S SIGNATURE	DISTRICT	ID NUMBER	REVIEWED BY

DISTRIBUTION: Department Records; Prosecutor; District/Officer; DUI Enforcement, HPB

DPS 802 - 04002 2/88

NARRATIVE: DR NUMBER XXIX-11

SUBJECT GAVE OFF A MODERATE ODOR OF AN ALCOHOLIC BEVERAGE. SUBJECT SCRATCHED THE ARMS AND FACE FREQUENTLY, AND LICKED THE LIPS REPEATEDLY.

001000

DRUG INFLUENCE EVALUATION

PAGE _____ OF _____
DR NUMBER: XXIX-12
EVALUATOR:
CONTROL #:
BOOKING #:

ARRESTEE'S NAME (Last, First, MI)	AGE	SEX	RACE	ARRESTING OFFICER (Name, Badge, District)
LIMA				

DATE EXAMINED/TIME/LOCATION

BREATH RESULTS: ☐ Refused RESULTS 0.03% Instrument # 1234

CHEMICAL TEST ☐ Urine ☐ Blood ☐ Both Tests Refused

MIRANDA WARNING GIVEN: Given by: ☐ Yes ☐ No

What have you eaten today? When? "SOME TOAST" "ONE HOUR AGO"

What have you been drinking? How much? "A GLASS OF WINE"

Time of last drink? 1 HR AGO

Time now?

When did you last sleep? How long? "YESTERDAY" "5 HRS"

Are you sick or injured? "I FEEL FINE" ☐ Yes ☐ No

Are you diabetic or epileptic? "NO - AM I BEING ARRESTED?" ☐ Yes ☐ No

Do you take insulin? ☐ Yes ☒ No

Do you have any physical defects? ☐ Yes ☒ No

Are you under the care of a doctor/dentist? "OF COURSE NOT" ☐ Yes ☐ No

Are you taking any medication or drugs? "OF COURSE NOT" ☐ Yes ☐ No

ATTITUDE: NERVOUS. ANXIOUS

COORDINATION: JITTERY AND UNSTEADY

SPEECH: VERY RAPID AND REPETITIVE

BREATH: ODOR OF AN ALCOHOLIC BEVERAGE

FACE: NORMAL

CORRECTIVE LENS: ☐ None ☐ Glasses ☐ Contacts, if so ☐ Hard ☐ Soft

General Appearance: ☒ Normal ☐ Bloodshot ☐ Watery

Blindness: ☒ None ☐ R. Eye ☐ L. Eye

Tracking: ☒ Equal ☐ Unequal

PUPIL SIZE: ☒ Equal ☐ Unequal (explain)

HGN Present: SLIGHTLY ☒ Yes ☐ No

Able to follow stimulus: ☒ Yes ☐ No

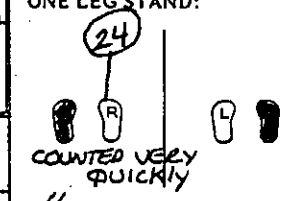
Eyelids: ☒ Normal ☐ Droopy

PULSE & TIME	HGN LACK OF Smooth Pursuit	Right Eye	Left Eye
1. 100 /		YES	YES
2. 104 /	Max. Deviation	NO	NO
3. 104 /	Angle of Onset	NONE	NONE

Vertical Nystagmus? ☐ Yes ☒ No

Convergence: Right Eye ☐→ Left Eye ←☐

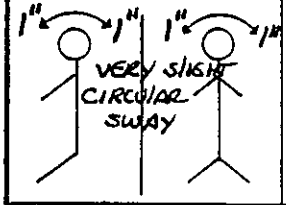
ONE LEG STAND:



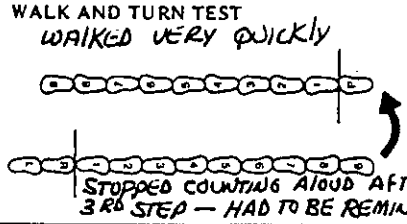
COUNTED VERY QUICKLY

☐ R ☐ Sways while balancing.
☐ ☐ Uses arms to balance.
☐ ☐ Hopping.
☐ ☐ Puts foot down.

BALANCE EYES CLOSED



WALK AND TURN TEST



Cannot keep balance _____
Starts too soon ✓

	1st Nine	2nd Nine
Stops Walking		
Misses Heel-Toe		
Steps off Line		
Raises Arms	✓	✓
Actual Steps Taken	9	9

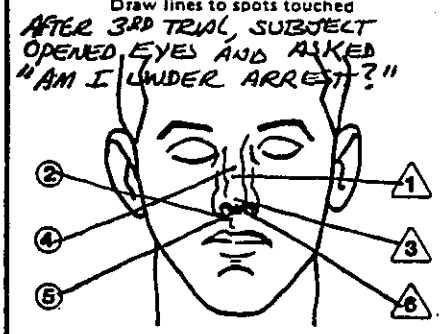
INTERNAL CLOCK: 13 Estimated as 30 sec.

Describe Turn: ABRUPT SWIVEL - NO SMALL STEPS

Cannot do Test, (explain) N/A

Type of Footwear

○ Right △ Left
Draw lines to spots touched



PUPIL SIZE	Room Light	Darkness	Indirect	Direct
Left Eye	7.5	8.5	8.0	7.0
Right Eye	7.5	8.5	8.0	7.0

NASAL AREA: REDNESS IN NOSTRILS

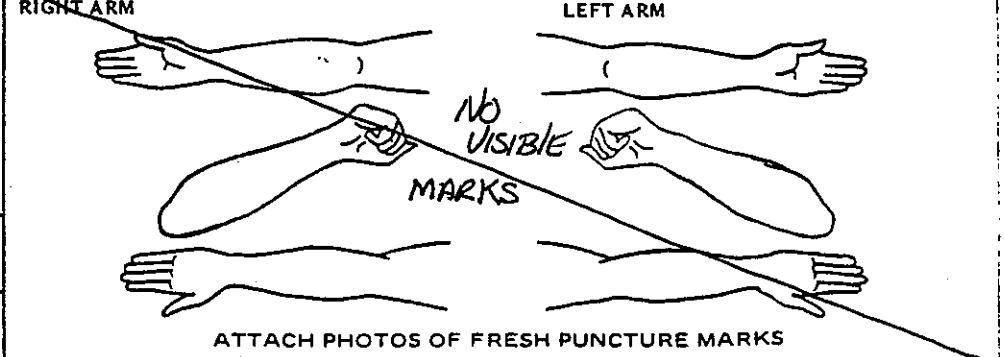
ORAL CAVITY: CLEAR

HIPPUS ☐ Yes ☒ No

REBOUND DILATION ☐ Yes ☒ No

Reaction to Light: VERY SLOW

RIGHT ARM / LEFT ARM



ATTACH PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 170 / 100 TEMP 99.6 °

MUSCLE RIGIDITY: ☒ Normal ☐ Flaccid ☐ Rigid
Comments:

What medicine or drug have you been using? How much? "NOTHING - AM I UNDER ARREST?"

Time of use? N/A

Where were the drugs used? (Location) N/A

DATE/TIME OF ARREST	TIME DRE NOTIFIED	EVAL START TIME	TIME COMPLETED

OFFICER'S SIGNATURE	DISTRICT	ID NUMBER	REVIEWED BY

DISTRIBUTION: Department Records; Prosecutor; District/Officer; DUI Enforcement, HPB

DPS 802 - 04002 2/88

NARRATIVE:

DR NUMBER XXIX-12

SUBJECT GAVE OFF A SLIGHT ODOR OF ALCOHOLIC BEVERAGE. SUBJECT KEPT ASKING "AM I BEING ARRESTED?" SUBJECT OFTEN REPEATED STATEMENTS AND FREQUENTLY "TRIPPED" VERBALLY OVER WORDS.

GUIDELINES FOR ROLE PLAYERS

As a "role player", you have the important task of helping students practice the administration and interpretation of drug evaluation and classification examinations. 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 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 participant will:

- o Demonstrate their mastery of the knowledge the course was intended to help them develop.
- o Summarize the key topics covered.
- o Offer comments and suggestions for improving the course.
- o Receive assignments for Certification Training.

Content Segments

A. Summary

B. Post-Test

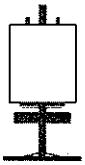
C. Critique

D. Certification Training Assignments and Schedule

E. Closing Remarks

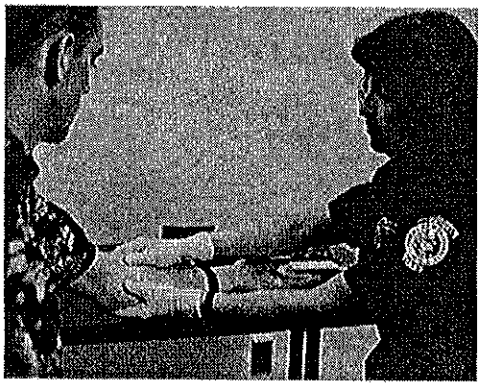
Learning Activities

- o Participant led Presentations
- o Participants' Anonymous Critique of Course
- o Knowledge Examination
- o Instructor led Presentation

Aides	Lesson Plan	Instructor Notes
  **XXX-O** (Objectives)  **15 Minutes**	TRANSITION TO THE CERTIFICATION PHASE OF TRAINING A. Summary 1. The seven categories of drugs. a. CNS Depressants b. CNS Stimulants c. Hallucinogens d. PCP e. Narcotic Analgesics f. Inhalants g. Cannabis 2. The drug evaluation and classification procedure. a. Breath Alcohol Test b. Interview of Arresting Officer c. Preliminary Examination d. Examinations of Eyes e. Divided Attention Tests f. Vital Signs Examinations g. Dark Room Examinations h. Check for Muscle Rigidity i. Inspection for Injection Sites j. Statements and Observations k. Opinions of Evaluator l. Toxicological Examination	Total Lesson Time: Approximately 150 Minutes Session title on wallchart. Briefly review the objectives, content and activities of this session. Ask students to name the seven categories. Make sure all categories are named. 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.

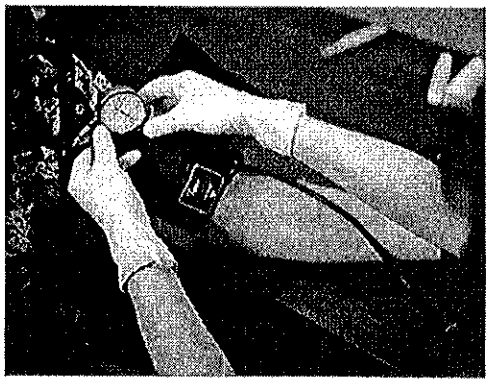
Aides	Lesson Plan	Instructor Notes
	3. Major signs and symptoms.	Instruct students to turn to the symptomatology chart in their manuals. Briefly summarize and review the major signs and symptoms associated with each drug category. Solicit students' questions concerning the major content topics of the course. Inform the students that the final exam in a "closed book" test. Instruct them to put all books and notes away.
 **100 Minutes**	B. Post-Test	
	1. Knowledge examination.	Distribute post-test knowledge examinations. Allow students approximately 80 minutes to complete the knowledge examination. Collect the completed knowledge examination. Grade the knowledge exams.
 **15 Minutes**	C. Critique	Distribute the anonymous critique forms. Collect the completed forms.
 **10 Minutes**	D. Certification Training Assignments and Schedule	

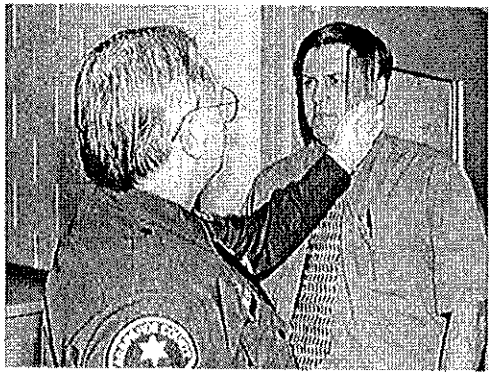
Aides	Lesson Plan	Instructor Notes
	1. Remind students that during certification all evaluations must be supervised by instructors to count towards minimum certification requirements.	Hand out sheets to each student outlining his or her schedule of certification training.
	2. In situations where an instructor is not available to observe a student evaluation, the student should check the local policy governing this. These evaluations do NOT count toward certification requirements. **It is important to remember that the ultimate goal is to remove the impaired driver from the highway.**	Explain logistics and administrative procedures for certification training.
	3. Instructors should take the time to explain the state's requirements for certification and the final knowledge examination.	Note: The minimum national standards for certification are at the back of the instructor manual. (State requirements may be more stringent than the national standards.) Remind students that they must bring their Certification Progress Logs to each night of Certification Training. Also remind them to bring their "Rolling Logs" (last five pages of the Student's Manual) to all Certification Training nights. Solicit students' questions concerning certification training.
 **10 Minutes**	E. Closing Remarks	Brief closing remarks will be offered by appropriate representatives of the department and faculty.



Session XXX

Transition to the Certification Phase of Training





Transition to the Certification Phase of Training

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During this session, the participant will:

- Demonstrate his or her mastery of the knowledge the course was intended to help him or her develop
- Summarize the key topics covered
- Offer comments and suggestions for improving the course
- Receive his or her assignments for Certification Training

Congratulations!

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 National Minimum 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, a 100-question, multiple choice test. 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 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 three 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)

_____

_____

_____

_____

_____

Course Location _____ Date _____

DRE SCHOOL
STUDENT'S CRITIQUE FORM

1. Rating The Various Segments Of The School

On a scale from 1 (="low") to 5 (="high"), please indicate how important each major topic or activity of this school was for you personally.

Drugs In Society and In Vehicle Operation _____

Development and Effectiveness of the DEC Program _____

Overview of the Drug Recognition Expert Procedures _____

Physician's Desk Reference _____

Eye Examinations: Explanation and Demonstrations by Instructors _____

Eye Examinations: Hands-on Practice by Students _____

Vital Signs: Explanations and Demonstrations by Instructors _____

Vital Signs: Hands-on Practice by Students _____

Physiology and Drugs _____

The Alcohol Workshop _____

The **"Practice: Test Interpretation"** Sessions _____

The Sessions on the Individual Drug Categories _____

Overview of Signs and Symptoms _____

Drug Combinations _____

Resume Preparation and Maintenance _____

Preparing the Narrative Report _____

Case Preparation and Testimony _____

The Mid-Course Review Session _____

The Role Play Session (Instructors "simulating" drug impaired subjects) _____

The Quizzes _____

2. Suggestions For Improving The School

If you absolutely had to cut four hours out of this school, what topics or sessions would you reduce or eliminate?

_____

_____

If you could add four hours to the School, how would you recommend that the additional time be spent?

_____

_____

3. Specific Features Of The School

Please circle the appropriate word to indicate your agreement or disagreement with each of the following statements.

1. The DRE School is at least one day too long.

   Agree Disagree Not Sure

2. We spent too much time in hands-on practice.

   Agree Disagree Not Sure

3. Now that I've had the DRE School, I believe that the PRE-School really wasn't needed.

   Agree Disagree Not Sure

4. Some of the instructors didn't seem to be as well prepared as they should have been.

   Agree Disagree Not Sure

5. I do not feel confident about my ability to estimate nystagmus onset angle accurately.

   Agree Disagree Not Sure

6. This School was much harder than I thought it would be.

   Agree Disagree Not Sure

7. We should have spent more time in hands-on practice.

   Agree Disagree Not Sure

8. The instructors seemed to know their material, but some of them didn't get it across very well.

   Agree Disagree Not Sure

9. We spent too much time on the details of each drug category.

   Agree Disagree Not Sure

10. I am not confident that I can measure blood pressure accurately.

    Agree Disagree Not Sure

11. I would have to say that the final examination was hard, but fair.

    Agree Disagree Not Sure

12. Some of the instructors "threw the bull" a bit too much.

    Agree Disagree Not Sure

13. Now that I've had the DRE School, I am more convinced than ever that the PRE-School is very important.

    Agree Disagree Not Sure

14. I am still very confused about drug combinations and their effects.

    Agree Disagree Not Sure

15. I am not confident that I can estimate pupil size accurately.

    Agree Disagree Not Sure

16. I would have to say that this School wasn't quite as hard as I thought it would be.

    Agree Disagree Not Sure

17. There were too many quizzes in this School.

Agree Disagree Not Sure

18. The final examination was much harder than it should have been.

Agree Disagree Not Sure

19. We did not receive enough information about the effects, signs and symptoms of the various drug categories.

Agree Disagree Not Sure

20. I am confident that I will succeed in the Certification Stage of my training.

Agree Disagree Not Sure

21. The DRE School is at least one day too short.

Agree Disagree Not Sure

4. Rating of Instructors

On a scale from 1 (="poor") to 5 (="excellent"), please indicate your overall assessment of each instructor.

Instructor	Rating
Instructor	Rating
Instructor	Rating
Instructor	Rating
Instructor	Rating
Instructor	Rating

Instructor	Rating
Instructor	Rating
Instructor	Rating
Instructor	Rating
Instructor	Rating
Instructor	Rating
Instructor	Rating
Instructor	Rating
Instructor	Rating
Instructor	Rating
Instructor	Rating
Instructor	Rating

5. Overall Rating Of The School

On a scale from 1 (="poor") to 5 (="excellent"), please indicate your overall assessment of the quality of this School:

1 2 3 4 5

Please offer any final comments or suggestions that you feel are appropriate.

National Standards of the Drug Evaluation and Classification Program

A Product of

The IACP Advisory Committee on Highway Safety
of the International Association of Chiefs of Police

with grant assistance from
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TABLE OF CONTENTS

EXECUTIVE SUMMARY

Since 1984, the National Highway Traffic Safety Administration (NHTSA) has supported the Drug Evaluation and Classification Program. The program which was initially developed by the Los Angeles, California, Police Department, was validated through both laboratory and field studies conducted by Johns Hopkins University. In 1987, the Highway Safety Committee of the International Association of Chiefs of Police (IACP) was requested by NHTSA to participate in the development and national expansion of the program. As the program has grown, it has become apparent that in order to ensure continued success, nationally accepted standards must be established. These standards, which establish criteria for the selection, training and certification of drug recognition experts, would help to ensure the continued high level of performance of the Drug Evaluation and Classification Program. In 1988, NHTSA asked the IACP and its Highway Safety Committee to develop this system of nationally accepted standards.

In March of 1989, the IACP and NHTSA sponsored a meeting at the Transportation Safety Institute in Oklahoma City, Oklahoma. Persons invited to this meeting included experienced drug recognition experts, instructors, curriculum specialists, toxicologists, prosecutors and training administrators. The participants met in working groups to reach consensus concerning the many issues relating to the Drug Evaluation and Classification Program and to develop recommended minimum standards to the Highway Safety Committee. The standards were drafted and presented to the committee for review at its mid-year meeting in June 1989. In addition, the committee agreed to name a Drug Evaluation and Classification Technical Advisory Panel to assist and advise the committee concerning technical aspects relating to the operation of the program.

The Highway Safety Committee, by resolution, adopted the Interim National Standards of the Drug Evaluation and Classification Program. The standards were subsequently approved by the voting membership of the IACP. The standards were adopted on an interim basis pending the outcome of an evaluation of the effectiveness of the program to be performed by NHTSA. In October 1992, the standards were officially approved and adopted.

Presented in this document are standards specifying the requirements for certification and recertification of DREs and DRE instructors, standards for decertification and standards for agency participation. Also, for those agencies participating in the National Certification Program, a set of administrative guidelines are provided.

I. STANDARDS FOR CERTIFICATION AS A DRUG RECOGNITION EXPERT

The standards in this section specify the criteria which must be met prior to an individual's being certified as a drug recognition expert (DRE). These criteria outline the knowledge and skills required to be considered for training, as well as the knowledge and proficiencies required for final certification.

The currently approved curriculum involves a three-phase training process. Prior to beginning the training program, students are required to be trained in and demonstrate proficiency in the use of the NHTSA-approved standardized field sobriety tests, including the horizontal gaze nystagmus test. Phase I of the drug recognition training consists of a two-day (16-hour) preschool. During this preschool, students are taught the definition of the term "drug" as it is used in the Drug Evaluation and Classification Program, and become familiar with the techniques of the drug evaluation. Students also begin to learn the techniques and procedures for evaluating persons suspected of drug impairment.

Phase II of training is a seven-day (56-hour) classroom program during which students receive detailed instruction in the techniques of the drug evaluation examination as well as in physiology, the effects of drugs and legal considerations. Upon completion of this phase of training, the student must pass a comprehensive written examination before proceeding to Phase III of training, the field certification.

The field certification portion of training begins immediately following completion of the classroom training and is conducted at periodic intervals for the next sixty to ninety days. During this portion of the training, students, under the direction of certified instructors, evaluate subjects suspected of being impaired by drugs other than alcohol. After participating in and documenting the results of at least twelve drug evaluations and completing a comprehensive examination, the student is certified as a drug recognition expert.

1.1 In order to be considered for certification as a drug recognition expert, a person shall be in the employ and under the direct control of a public criminal justice agency or institution involved in providing training services to officers of law enforcement agencies.

Commentary: At the discretion of the agency head or administrator, and with the consent of the training body, other persons may audit or observe any or all portions of the DRE training. Persons attending the course as auditors or observers shall not be eligible for certification.

Persons pursuing certification as drug recognition experts for the purpose of instructing in the Drug Evaluation and Classification Program must meet all requirements for certification and re-certification in order to maintain their standing as DREs or DRE instructors.

1.2 All DRE candidates must attend and complete the IACP/NHTSA DRE Pre-school or an IACP-recognized equivalent prior to progressing to Phase II, the DRE School.

Commentary: The drug evaluation process requires that the contribution of alcohol to observed impairment be determined or eliminated. The National Highway Traffic Safety Administration has developed, and the IACP has adopted, the Standardized Field Sobriety Test procedure in conjunction with immediate breath testing, as a means of identifying the alcohol-impaired driver. If the effects of alcohol are determined not to be the sole cause of impairment, the officer can begin the evaluation process to determine what other causes may be responsible.

In order to conform to the NHTSA model curriculum, SFST training must be at least sixteen hours in length and include at least two controlled drinking sessions utilizing volunteer drinkers. In addition, the training must instruct students in the administration of the horizontal gaze nystagmus, walk and turn, and one leg stand tests.

Each agency should ensure that candidates submitted for DRE training have had adequate time prior to beginning the training program to develop and to demonstrate proficiency in the use of SFST/HGN or allow for refresher training in these techniques as necessary.

1.3 Effective September 30, 1992, all DRE candidates must attend and complete the IACP/NHTSA-approved course of instruction in Standardized Field Sobriety Testing, or an equivalent curriculum approved by the IACP, and shall demonstrate proficiency in the use of Standardized Field Sobriety Tests, to the satisfaction of a DRE instructor, by the conclusion of the IACP/NHTSA DRE Pre-school or a school meeting Standard 1.2 above.

Commentary: Candidates attending school prior to the effective date must demonstrate proficiency or complete an approved course.

1.4 Prior to attending phase II of the DRE training, the candidate shall have met the learning objectives for phase I of the training program, the IACP-approved DRE preschool. The candidate shall be able to

1. Define the term "drug" as it is used in the DEC Program;
2. Name the seven drug categories identified in the DRE training program;
3. Measure vital signs, including blood pressure, pulse and body temperature;
4. Show familiarity with the 12-step drug recognition evaluation process;
5. Demonstrate proficiency in the administration of the Standardized Field Sobriety Tests, including Horizontal Gaze Nystagmus;
6. Show familiarity with the administration of the eye examinations, including pupil size, vertical nystagmus and lack of convergency.

These learning objectives are generally met through completion of Phase I, the DRE preschool. However, agencies have the latitude to determine the best means of ensuring that candidate DREs meet the prerequisites. The agency must verify, through the application process to the instructor responsible for delivering the training, that a candidate meets all requirements. Each candidate DRE will be required to demonstrate the knowledge and skills outlined.

Administrative guidelines and suggested application forms containing the necessary information will be provided by IACP staff to agencies and training institutions .

1.5 The candidate DRE must have experience in the preparation of comprehensive investigative reports and in providing detailed court testimony.

Commentary: The technical nature of the drug evaluation process and the need to provide detailed and accurate documentation of findings and conclusions requires proficiency in the preparation of reports. Candidate DREs should have demonstrated the ability to investigate, document and prepare detailed reports of incidents such as major traffic accidents or criminal violations. In addition, DREs must be able to provide court testimony concerning their methods and results, as well as their training and qualifications.

1.6 The candidate DRE shall complete an approved classroom training course which shall, at minimum, achieve the learning objectives as stated in the IACP-approved training curriculum.

Commentary: The National Highway Traffic Safety Administration, in conjunction with the Los Angeles Police Department, has developed a classroom training course that, when completed, qualifies the student to proceed to the field certification portion of the training program. Because of differences in the type and level of training for officers in the detection of the impaired subject, agencies should determine the most effective means of providing classroom training in drug recognition. However, in order to maintain the credibility and integrity of the certification program, agencies that use a training program other than that currently approved by the IACP, must have the alternative curriculum approved by the IACP Drug Evaluation and Classification Technical Advisory Panel as meeting learning objectives. In addition, the Drug Evaluation and Classification Technical Advisory Panel will be responsible for providing periodic updates and modifications to the IACP training curriculum.

1.7 All candidate DREs shall attend and complete all classroom portions of an approved DRE curriculum prior to progressing to Phase III (the field certification phase) of the training. This shall include satisfactorily completing all assignments and required examinations. Students shall not be permitted to "test out" of portions of the training, nor shall they be permitted to attend only those classes that they have not previously completed.

Commentary: Class sessions missed should be made up at the earliest possible time.

1.8 In order to satisfactorily complete the classroom portion of the training and proceed to field certification, candidate DREs must complete an IACP-approved final examination with a score of not less than eighty percent (80%). Candidates scoring less than 80% on the final examination may be retested one time, under the supervision of a certified DRE instructor. The retest shall be completed not less than fifteen nor more than thirty days following the completion of the classroom training.

Commentary: Upon satisfactory completion of the examination the candidate may then proceed to field certification. The examination used to retest the candidate shall be an IACP-approved examination and shall not have been administered to the candidate previously. If the candidate does not achieve a passing score on reexamination, the candidate must retake the classroom portion of the training and pass the knowledge examination before proceeding further in the certification process.

1.9 Upon completion of the field certification phase of training, the candidate must demonstrate the ability to conduct a complete drug evaluation in an approved sequence and appropriately document and interpret the results. The candidate must also be able to document the findings of the evaluation and demonstrate proficiency in interviewing techniques.

Commentary: One of the primary factors in the success of the Drug Evaluation and Classification Program has been the emphasis upon a standardized approach to the drug recognition process. The training stresses the importance of a systematic, structured approach to performing the drug evaluation. This includes completing all portions of the evaluation in the appropriate sequence. Upon conclusion of an evaluation the DRE reviews the results of all tests, examinations and observations; documents the findings; and draws a conclusion based on the totality of the evidence.

1.10 To be considered for certification as a drug recognition expert, the candidate must satisfactorily complete a minimum of twelve (12) drug evaluations, during which the candidate must encounter and identify subjects under the influence of at least three of the drug categories as described in the DRE training program. All three drug categories must be supported by toxicology.

Of the evaluations required for certification, the candidate shall administer at least six evaluations. The candidate may observe the remaining evaluations. Certification training evaluations will be conducted in accordance with the current procedures and guidelines established in the DECP training curricula.

All evaluations, either administered or observed, and documented for certification purposes, shall be supervised by at least one certified DRE instructor.

Commentary: Ideally, a drug evaluation will be performed by no more than two persons: the evaluator and one observer. At no time should more than four persons participate in an evaluation, as the results of the evaluation may be influenced by the distraction caused by a large number of persons observing the process.

1.11 Prior to completing the certification phase of training, the candidate DRE must demonstrate the ability to draw correct conclusions consistent with observed physiological signs and symptoms. In addition, the conclusions must be supported by the findings of a forensic toxicology laboratory. No candidate DRE shall be certified as a drug recognition expert unless blood, urine, or other appropriate biological samples are obtained and submitted from at least nine (9) subjects whom the candidate DRE has examined for certification purposes. These may include subjects for whom the candidate DRE served as the examination recorder or observer as well as those subjects directly evaluated by the candidate DRE. Further, the candidate DRE cannot be certified unless the opinion concerning the drug category or categories affecting the subject is supported by forensic toxicological analysis seventy-five percent (75%) of the time, or in at least seven (7) of the nine (9) samples submitted for certification purposes. For purposes of this standard, a candidate DRE's opinion is supported if the toxicological analysis discloses the presence of at least one drug category named by the candidate DRE. In the event that the candidate DRE has concluded that three or more categories of drugs are involved, at least two categories must be supported by toxicology results.

Commentary: Successful and uniform application of this standard places important forensic toxicological requirements on the program. First, the blood or urine specimen must be obtained as soon as possible after the arrest so that the contents of the sample refer to the subject's status at the time of the offense. Second, the sample must be properly sealed, stored, transported to the forensic toxicology laboratory and analyzed in a timely fashion to maintain the integrity of the specimen. Third, the drug recognition examination should be conducted as soon as possible after the offense so that the results of the evaluation accurately refer to the subject's status at the time of the offense. Fourth, the laboratory should use its full powers of analysis and detection to attempt to identify each category named by a candidate DRE; in some cases this may require the laboratory to modify its routine screening and confirmation procedures. Finally, the laboratory must complete its report on the samples as soon as possible and provide a copy of the report to the arresting officer, DRE or candidate DRE submitting the sample. It is the submitting officer's responsibility to provide a report to each DRE or candidate DRE who participated in the evaluation.

Although the candidate DRE must complete a minimum of twelve (12) drug evaluations (standard 1.10), standard 1.11 requires only 75 percent of those to include a biological sample. This allows for those cases in which a biological sample is unavailable, such as when a subject refuses or cannot provide one. In those cases when an evaluation is not supported by forensic toxicology, a certified DRE instructor should ensure that the candidate DRE's opinion was based on observable signs and symptoms consistent with the opinion.

1.12 Prior to concluding field certification training, the candidate shall satisfactorily complete an approved "Certification Knowledge Examination." The examination shall be administered and the results reviewed by at least one certified instructor. The examination shall only be administered after the candidate has completed not less than three drug evaluations.

Commentary: The "Certification Knowledge Examination" consists of a comprehensive written examination followed by a detailed interview with the reviewing instructor(s). As stated previously, certification is based on the evaluation by the instructor(s) of the skills and abilities of the candidate rather than on the completion of a specified set of tasks. The purpose of the examination and interview is to aid the instructor(s) in evaluating the candidate's qualifications, performance and general abilities.

The examination should be administered when, in the judgment of the reviewing instructor(s), the candidate has demonstrated proficiency in conducting, evaluating and documenting results of the drug evaluation process.

1.13 The candidate DRE shall complete the field certification phase of training within six months following completion of the classroom training, unless the time limit is extended by the agency DRE coordinator

Commentary: Under normal circumstances, a candidate not completing field certification within the prescribed time period will be dropped from the program. However, a re-evaluation of the candidate's qualifications and the reasons for noncompletion may be conducted by the agency DRE coordinator to determine whether or not circumstances exist that indicate that the candidate should continue in the program.

1.14 By the time the candidate DRE has completed field certification training, the candidate shall have prepared a resumé which shall reflect the candidate's training and experience in drug recognition. The resumé shall include a complete log of all evaluations in which the candidate has participated.

Commentary: In order to be accepted as a credible witness, the drug recognition expert must be able to document and articulate a body of information concerning training, qualifications and experience in the field of drug evaluation and classification. Toward this end, candidates are instructed in the importance and proper preparation of a professional resumé.

1.15 When the candidate DRE has satisfactorily completed all requirements of the classroom and field certification portions of training, at least two certified DRE instructors who have observed the candidate during the field certification process will verify that the candidate meets all requirements for certification as a drug recognition expert.

Commentary: The certification process relies in large part on the judgment of the instructor(s) as to the abilities and performance of the candidate. Experience has shown that in many cases, particularly those in which a candidate's qualifications may be in question, the opinion of a second instructor as to readiness for certification is of value. In addition, the use of a second instructor to evaluate the candidate may overcome any bias, either for or against a candidate. For these reasons, each candidate be evaluated by at least two instructors prior to becoming certified as a DRE.

1.16 Following completion of certification requirements, copies of all documents, including test results, evaluation logs and drug evaluation reports shall be forwarded to an agency DRE coordinator. The DRE coordinator shall forward the names and copies of certification progress logs of the DREs to the appropriate state and/or national organizations for inclusion in their registers as certified drug recognition experts.

Commentary: The IACP/DRE Section staff shall maintain current listings of persons certified by agencies as drug recognition experts. Upon notification that a person has met all requirements, staff shall complete and forward to the individual a certificate of completion indicating that he/she meets all requirements of the Drug Examination and Classification Program as a drug recognition expert.

II. STANDARDS FOR CERTIFICATION AS DRUG RECOGNITION EXPERT INSTRUCTOR

Because of the highly technical nature of the functions performed by the drug recognition expert, only persons experienced in the techniques of drug evaluation should instruct in the Drug Evaluation and Classification Program. In general, these instructors will be certified drug recognition experts with experience in performing drug evaluations and in providing testimony in court in the area of drug recognition. However, persons who possess specialized skills or credentials may be utilized to teach certain parts of the training course as associate instructors. Dedicated, qualified instructors are critical to the continued success of the Drug Evaluation and Classification Program.

Certified instructors are responsible for observing, evaluating and verifying the performance of candidate DREs throughout the training and certification process. In addition, certified instructors must provide periodic update training to DREs already certified.

Also addressed in this section are standards for the use of instructor/trainers in the program. These individuals are responsible for the training of DRE instructors.

2.1 Only persons certified as drug recognition experts may be certified as DRE instructors.

Commentary: Persons not certified as DREs but who possess knowledge, expertise or credentials deemed valuable to the program may be designated as associate instructors for the Drug Evaluation and Classification Program. Persons who might be considered for such designation may include medical professionals, attorneys and others who possess knowledge in a designated field of expertise. Associate instructors must be familiar with the Drug Evaluation and Classification Program and fully conversant with the lesson plans for their assigned blocks of instruction. Classes taught by associate instructors shall be taught in cooperation with certified DRE instructors to ensure consistency.

Each associate instructor shall provide to the IACP staff a biographical sketch to be included in the national file of approved instructional staff. The biographical sketch shall include those segments of the training curricula that the associate instructor is qualified to teach.

DREs desiring to become instructors in the Drug Evaluation and Classification Program shall make written application through and be recommended by their agencies as meeting all requirements to become instructors.

Commentary: The agency head shall verify to the training provider that a candidate instructor meets all prerequisites to enter DRE instructor training. Prerequisites may also include any state, local or agency requirements specified for instructors within the jurisdiction.

The IACP staff shall provide to requesting agencies the administrative guide and sample application forms for candidate instructors.

2.3 The candidate shall satisfactorily complete the IACP-approved Drug Evaluation and Classification Instructor Training Program, or an approved equivalent, which shall include both knowledge and practical examination of candidate instructors.

Commentary: This requirement does not preclude states or local jurisdictions from placing additional requirements on persons wishing to teach in the local law enforcement community.

2.4 Upon satisfactory completion of the IACP-approved classroom portion of training or completion of an equivalent program, the student shall be designated an assistant instructor for purposes of completing instructor certification. To complete instructor certification, the assistant instructor must

- Teach for a minimum of two hours in the classroom portion of an approved drug recognition training program; and
- Supervise the administration of not less than two drug evaluations performed by candidate DREs during certification training.

The assistant instructor's progress shall be monitored and evaluated by at least one certified DRE instructor.

Commentary: The National Highway Traffic Safety Administration has developed, and the IACP has adopted, a training curriculum for instructors in the Drug Evaluation and Classification Program. The learning objectives for this program emphasize specific techniques for teaching the specialized information contained in the drug recognition training program. Because agencies may differ in their specific requirements for instructors, particularly those involved in the Drug Evaluation and Classification Program, agencies wishing to use a training curriculum other than that utilized by the IACP may do so, provided that, upon completion of the training, the student instructor meets or exceeds the requirements set forth in these standards.

The Drug Evaluation and Classification Technical Advisory Panel shall be responsible for reviewing and evaluating alternative training programs submitted by agencies. Those programs meeting or exceeding the approved learning objectives for instructor training shall be deemed "equivalent."

2.5 Upon satisfactory completion of instructor training, copies of all documentation, including instructor progress logs, examination scores and instructor evaluations, shall be forwarded to the agency DRE coordinator. The agency DRE coordinator shall forward the names of certified DRE

instructors and copies of instructor progress logs to the appropriate state and/or national organizations for inclusion in their registers as certified DRE instructors.

Commentary: The IACP/DRE Section staff will maintain current registers of persons certified as instructors in the Drug Evaluation and Classification Program. Upon notification that a person has met all requirements, the staff shall complete and forward to the individual a certificate indicating that he/she meets all requirements as a DRE instructor.

The administrative guidelines shall provide sample forms for necessary progress logs and certification documents.

2.6 All training sessions conducted as part of the Drug Evaluation and Classification Program shall be coordinated by a certified DRE instructor who has previously instructed, to ensure the proper conduct and delivery of the approved curriculum. All classes taught by associate or assistant instructors shall be supervised directly by a certified DRE instructor.

Commentary: To ensure that all training classes are conducted in accordance with applicable standards, it is recommended that the instructor coordinating the training program have a minimum of one-year experience as a drug recognition expert instructor.

2.7 An instructor trainer shall have demonstrated proficiency as an instructor.

2.8 An instructor trainer must be knowledgeable of and have audited all phases of the Drug Evaluation and Classification training program and must be fully conversant with the student and instructor manuals.

Commentary: An instructor trainer must demonstrate present evidence of the satisfactory completion of the NHTSA Instructor's Development Course or equivalent. Instructor trainers must be familiar with the Drug Evaluation and Classification Program and fully conversant with the lesson plans for their assigned blocks of instruction. Classes taught by instructor trainers shall be taught in cooperation with certified DRE instructors to ensure consistency.

Each instructor trainer shall provide, through the agency DRE coordinator to IACP staff, a biographical sketch to be included in the national file of approved instructional staff. The biographical sketch shall include those segments of the training curricula that the instructor trainer is qualified to teach.

The IACP/Drug Recognition Section staff will maintain current registers of persons certified as instructor trainers in the Drug Evaluation and Classification Program.

III. STANDARDS FOR RECERTIFICATION

A topic area not previously addressed by operating guidelines of the Drug Evaluation and Classification Program is that of recertification of drug recognition experts and instructors. As more agencies become involved in the program and as the programs in the pilot agencies mature, it is apparent that a system is needed to ensure that DREs and DRE instructors maintain proficiency. Just as the standards in the previous sections have outlined the criteria for original certification, standards are required to ensure that professional integrity is maintained throughout the system.

The standards in this section outline the requirements for periodic recertification of DREs and DRE instructors in the Drug Evaluation and Classification Program.

3.1 The following records concerning certification and recertification shall be maintained:

Individual DRE/ DRE Instructor	Copies of all drug evaluations Evaluation logs Resume Certification and recertification progress logs Certificates
Agency DRE Coordinator	Copies of evaluation logs Certification progress logs Copies of certificates Instructor ratings and summaries of student critiques Records of classes taught by each instructor
State DRE Coordinator and/or IACP/Section Staff	Copies of evaluation logs (optional) Certification progress logs File of certified DREs and instructors Recertification information

Commentary: Guidelines for the retention of pertinent records concerning the program operation help to ensure integrity of the program and provide valuable information for purposes of statistics and court verification of training. Other records as deemed appropriate by local agencies or certification commissions may be required of the individual DRE or agency DRE coordinator.

3.2 DREs shall be required to renew their certificates of continuing proficiency every two years. A one-year grace period following the lapse of certification may be allowed for those not meeting recertification standards. During the grace period, the DRE may be recertified without having to repeat the original certification process.

Commentary: All DREs currently certified will maintain currency. A rotating schedule of recertification will be established upon adoption of these standards by the IACP.

3.3 Agency DRE coordinators shall be notified of those DREs in need of recertification at least six months prior to the expiration of the certificates. The agency DRE coordinator shall forward to the IACP staff required documentation indicating the completion of recertification requirements. The staff will issue appropriate certificates when requirements are met.

3.4 A DRE shall demonstrate continuing proficiency by

- Performing a minimum of four (4) acceptable evaluations since the date of last certification, all of which shall be reviewed and approved by a certified DRE instructor and one (1) of which shall be witnessed by a certified DRE instructor. These evaluations may be performed on subjects suspected of drug and/or alcohol impairment or during classroom simulations; and

- Completing a minimum of eight hours of IACP recertification training since the date of the DRE's most recent certification, which may alternatively be presented in two sessions of no less than four hours, and which shall be consistent with any IACP standards for such training; and

- Presenting an updated resume and rolling log to the agency coordinator or his/her designee for review.

Commentary: The agency coordinator or his/her designee is responsible for maintaining the integrity of the program, and the agency coordinator, consistent with this responsibility, is encouraged to withhold recertification for, or refer for remediation, any DRE whose rolling log indicates an unacceptable level of accurate evaluations, as indicated by toxicology results.

3.5 When a DRE has completed all requirements for recertification, a certified DRE instructor shall verify to the agency DRE coordinator that minimum recertification requirements have been met.

3.6 A certified instructor shall maintain instructor certification so long as DRE certification is maintained.

Commentary: An instructor may be decertified for cause, such as for conducting substandard instructional programs, and still maintain certification as a DRE.

IV. STANDARDS FOR DECERTIFICATION OF DRUG RECOGNITION EXPERTS AND INSTRUCTORS

The standards in this section outline the circumstances and procedures for decertifying individual DREs or DRE instructors. In order to ensure that standards of performance are maintained, a means of removing persons unable to meet those criteria of competence and professionalism from the roles of the program is needed. The final authority and responsibility for maintaining program standards lies with the agency and the agency DRE coordinator. It shall be incumbent upon the agency DRE coordinator to ensure that certified DREs meet approved standards for conduct and qualifications.

4.1 Decertification shall occur when a DRE or DRE instructor fails to meet minimum standards and requirements for certification, or demonstrates substantial unethical or unprofessional behavior that reflects adversely on the Drug Evaluation and Classification Program.

Commentary: All DREs are responsible for maintaining and forwarding to the agency DRE coordinator information regarding required training or experience. If such information is not provided in a timely manner, certification will lapse.

Local agencies and licensing/certification bodies may, at their discretion, establish certification and decertification criteria to conform with local laws or rules. Nothing in these standards should be construed to overrule local authority in establishing standards for the performance of officers in this area.

4.2 Requests for voluntary decertification will be honored when submitted by a DRE or DRE instructor to the section staff and with approval of the agency DRE coordinator.

4.3 Cases involving poor performance or inconsistent findings shall be referred to the agency DRE coordinator for investigation, recommendation and action.

4.4 Certification of a DRE shall not terminate as long as the DRE meets the requirements of Standards 1.1 and 4.1.

4.5 The agency, upon the recommendation of the agency DRE coordinator and with concurrence of the state DRE coordinator, shall initiate the decertification process against a DRE or DRE instructor. The agency coordinator shall inform the IACP/DRE section staff of all decertification actions. The staff shall have the right to investigate any and all recommendations for decertification as it deems necessary or as directed by the section.

V. STANDARDS FOR REINSTATEMENT OF A DECERTIFIED DRUG RECOGNITION EXPERT

The standards in this section outline the procedures for reinstating a previously decertified DRE and/or DRE instructor.

5.1 An individual can be reinstated as a DRE when the following conditions are met:

(1) The applicant must pass the 100-item exam (same as that given at the end of the DRE school, or the make-up exam) as witnessed by a certified DRE instructor, with a score of at least 80%.

(2) The applicant must complete four (4) hands-on drug evaluations within a one-year period from the date of request to be certified.

An individual can be reinstated as a DRE instructor when the following conditions are met:

(1) The applicant meets conditions 5.1 and is reinstated as a DRE.

(2) The applicant's eligibility and reinstatement as a DRE instructor is reviewed and approved by an agency and a state coordinator.

Commentary: In many instances, a DRE certification lapses through no fault of the DRE due to transfers, promotions, etc., and recertification requirements have not been met. In many cases a DRE may want to reapply DRE skills with a new assignment. IACP suggests that a written request for reinstatement to the program come from the applicant to the state coordinator, through the proper agency channels. A form is provided by the IACP to DEC state coordinators for the purpose of reinstatement. Agency and state coordinators are cautioned to conduct a thorough check on the cause of the applicant's decertification and reason for application for reinstatement.

VI. STANDARDS FOR AGENCY PARTICIPATION

Since 1986, the National Highway Traffic Safety Administration has endeavored to expand the Drug Evaluation and Classification Program to jurisdictions outside the Los Angeles metropolitan area. In an effort to contain costs, ensure the most efficient use of resource and maintain a high probability of program success, NHTSA developed site selection criteria to be used in assessing potential suitability of pilot sites. Factors such as demographics, favorable legislation, agency operations and system support for the program were considered in evaluating potential pilot sites for the implementation of the Drug Evaluation and Classification Program.

It is recognized that law enforcement agencies, in considering the implementation of new traffic enforcement programs, must be aware of both short- and long-term costs that are involved. The Drug Evaluation and Classification Program requires that agencies commit considerable resources long term to the detection and apprehension of the drug-impaired driver in order for the program to achieve maximum results.

6.1. A DEC Program site should be a state, a political subdivision of a state, or a group of subdivisions.

Commentary: Experience has shown that a DEC Program will take firm root only if the resources to support the program are concentrated in a relatively small geographical area, such as a major city or county. Given that these new sites will begin operations with a small cadre of DREs, a community-focused DEC Program will allow the DREs to respond quickly to the location(s) where drug-impaired drivers might be taken for processing. By concentrating its forces, the program can ensure that a qualified DRE is available at any time or place needed. The concentrated focus of a community-based program allows the DREs ample opportunity to conduct evaluations and maintain skills at peak proficiency.

6.2 A proposed program site should be able to produce enough drug-impaired driving arrests to (1) justify the expense of training the DREs, and (2) provide enough evaluation opportunities for DREs to maintain proficiency.

Commentary: As a general rule, each DRE at a site should conduct at least one drug evaluation per week to keep skills at peak levels. In other words, a proposed site should be able to apprehend at least fifty drug-impaired drivers per year for each DRE. Studies indicate that 15 to 40 percent of the persons arrested for impaired driving are actually under the influence of drugs, either alone or in combination with alcohol. Thus, a site should produce between 350 and 500 DUI arrests annually per DRE to provide ample drug evaluation opportunities.

6.3 Prior to implementation of a DEC Program, a site must be located in a state with an implied consent law that

- Explicitly allows the chemical test sample to be analyzed to determine the presence and/or concentration of drugs other than alcohol;
- Explicitly indicates that the "consent" applies to multiple tests, i.e. that the person is "deemed to have given consent to a test or tests of blood, breath or urine"; and
- Empowers the arresting officer and/or the law enforcement agency to select the types of chemical tests to be taken, rather than giving the suspect the option of choosing the tests.

Commentary: It is pointless to evaluate drivers for drug-induced impairment unless those found to be so impaired can be prosecuted successfully. The requirements for multiple chemical tests are essential because both a breath test and blood or urine test are integral components of the drug recognition process. In addition to implied consent legislation, the effectiveness of DEC programs is greatly enhanced by legislation that

- Allows the fact of a suspect's refusal to submit to the chemical test to be introduced as evidence in court; and
- Makes it an offense to be under the influence of drugs, whether or not the suspect is operating a motor vehicle.

6.4. At least eighty percent (80%) of a participating agency's traffic law enforcement officers must be fully trained and proficient in the use of the NHTSA/IACP approved standardized field sobriety tests, including the horizontal gaze nystagmus test.

Commentary: It is recommended that the agency's SFST training program is consistent with the NHTSA/IACP model curriculum. In particular, the training must be at least sixteen hours long and include at least two practice sessions with volunteer drinkers.

6.5 Participating agencies must maintain accurate and timely records of

- Alcohol and drug-related arrests and convictions;
- Alcohol and drug offense processing time;
- All drug recognition evaluations; and
- All toxicological examinations.

Commentary: In order to evaluate critically the effectiveness of the Drug Evaluation and Classification Program, it is necessary that, at a minimum, the above records be maintained. In addition to evaluation purposes, the records may prove beneficial in establishing program validity for court purposes.

6.6 Participating agencies must have the capability to establish centralized booking or processing of all DUI arrestees.

Commentary: The ideal situation is one in which all persons arrested for DUI are taken to a single location for processing. One or two DREs could then be stationed at that location to ensure prompt access to all suspects apprehended for drug-impaired driving. However, it is feasible for a jurisdiction to have a few centralized processing facilities as long as there are enough DREs to staff them adequately and enough DUI arrests to ensure that the DREs conduct frequent evaluations.

6.7 Each DUI arrest processing location must have adequate facilities for conducting drug recognition evaluations. These facilities shall include

- A room sufficiently large to permit unobstructed administration of the Standardized Field Sobriety Tests;
- A separate room that can be completely darkened for the eye examination;
- Storage space for test data forms, reference documents, blood pressure kits, etc;
- Access to breath testing equipment producing on-the-spot results; and
- Facilities and materials for collecting blood and/or urine samples.

Commentary: Because of the unique requirements of the DEC Program, it is sometimes more economical for several agencies within a site to share DUI processing facilities. Other desirable characteristics for a DUI processing facility include

- Adequate holding cells for arrestees;
- Separate interrogation and report writing areas that provide a private area away from the general prisoner population; and
- Testing facilities that are out of main traffic patterns and allow the drug evaluation process to be performed without interruption or distraction.

6.8 Participating agencies must have access to laboratories that are capable of identifying the presence of the most commonly abused drugs when these drugs are present in sufficient concentrations to produce impairment.

Commentary: Ideally, the laboratories will also be able to identify the concentration of these drugs. In any case, the accuracy of the chemical analysis should be consistent with state-of-the-art drug testing. In other words, screening tests are not sufficient; a jurisdiction should be able to produce a confirmatory analysis. Although either blood or urine samples are acceptable, it is best if the jurisdiction has the ability to test both.

6.9 All agencies interested in participating in a Drug Evaluation and Classification Program must have the following endorsements:

- The state governor's representative for highway safety;
- The chief elected official of each political subdivision to be included in the site;
- The commanding officer of each participating law enforcement agency;
- The administrative judge of each court that tries people arrested for DUI within the jurisdiction;
- The chief prosecuting attorney for each court in the jurisdiction; and
- Representatives of any other agencies that would be involved in covering the costs of developing and sustaining the DEC Program.

DRUG EVALUATION AND CLASSIFICATION PROGRAM
ADMINISTRATIVE GUIDELINES
INTERNATIONAL ASSOCIATION OF CHIEFS OF POLICE

At the request of the National Highway Traffic Safety Administration (NHTSA), the International Association of Chiefs of Police has agreed to develop certification standards and to administer the Drug Evaluation and Classification Program. Under these administrative guidelines, it will be the responsibility of the individual and the agency to ensure that specific requirements of the standards are met. The staff at the IACP will be responsible for maintaining records, issuing certificates of completion, coordinating certain training-related events and maintaining and updating training materials as required.

The following procedures have been developed by the staff of the International Association of Chiefs of Police for use by agencies participating in the Drug Evaluation and Classification Program and wishing to certify drug recognition experts and instructors in their employ.

Obtaining certification from the International Association of Chiefs of Police as a drug recognition expert or DRE instructor ensures that an individual meets minimum requirements for training and experience as established by the IACP and the IACP Drug Evaluation and Classification Technical Advisory Panel. The Drug Evaluation and Classification Administrative Guidelines accompany the *National Standards of the Drug Evaluation and Classification Program.*

For the certification process to operate efficiently, it is recommended that coordinators at the agency and state levels be identified. The responsibilities of the coordinators may include reviewing the qualifications of the candidate DREs, supplying required documentation that minimum standards have been met, and maintenance of individual and program records. The coordination functions may be performed by one person or may be divided among several persons, as operational needs demand.

1. NOTIFICATION OF CANDIDATE DRUG RECOGNITION EXPERTS

When an individual has completed all agency application requirements for admission for training as a drug recognition expert, the agency DRE coordinator shall provide the following information to the state coordinator:

1. Candidate's name
2. Mailing address
3. Sponsoring agency
4. Social security number
5. Verification that candidate has satisfactorily completed a NHTSA-approved course in Standardized Field Sobriety Testing

In addition, the agency DRE coordinator shall provide the above information to the agency or individual responsible for providing training to ensure that all students meet prerequisites prior to the beginning of the training phase:

State program coordinators shall forward to the IACP staff the above information on all candidate DREs at the following address:

International Association of Chiefs of Police
Division of State and Provincial Police
515 North Washington Street
Alexandria, VA 22314

The IACP staff will maintain records of all candidate DREs as they progress through the training and certification program.

2. OBTAINING IACP CERTIFICATION AS A DRUG RECOGNITION EXPERT

All candidates for certification by the IACP under the National Drug Evaluation and Certification Program must demonstrate completion of all requirements specified in Section I of the *National Standards of the Drug Evaluation and Classification Program.* Each candidate's progress toward meeting certification requirements shall be documented on the "Certification Progress Log," which shall be supplied to all agency DRE coordinators by the IACP staff. Each candidate shall be responsible for maintaining a certification progress log.

Completion of each step in the certification process shall be verified by the signature of at least one certified DRE instructor. Upon completion of all certification requirements, copies of the certification log shall be forwarded to the agency DRE coordinator and to the state program coordinator. The state program coordinator shall verify all information on the certification log and ensure that all

entries are correct. The state program coordinator shall forward to the IACP staff a copy of each candidate's completed progress log.

Upon receipt of the completed certification log, the IACP staff shall ensure that all necessary information is complete and accurate. Upon verifying the information, the IACP staff shall forward to the candidate DRE a certificate of completion and an identification card signifying that the candidate has met or exceeded all requirements for certification as a drug recognition expert by the International Association of Chiefs of Police. The IACP staff shall notify the agency and state coordinators that the candidate meets all certification requirements. In the event that the candidate fails to meet all requirements for certification, notification will be sent to the individual with copies to the state and agency coordinators indicating the specific reasons(s) for non-qualification.

The IACP staff shall maintain a computerized database of all nationally certified DREs. Each record in the database will contain the following information:

1. Name
2. Social Security Number
3. Department/agency
4. Mailing address
5. Telephone number
6. Dates of all events specified on the progress log
7. Name(s) of instructors verifying completion of training events
8. Date certification is awarded
9. Date certification expires

3. OBTAINING CERTIFICATION AS DRE INSTRUCTOR

Candidates for certification by the IACP as DRE instructors must demonstrate that they meet all requirements specified in Section II of the *National Standards of the Drug Evaluation and Classification Program.* The candidate instructor's progress toward completing certification requirements shall be documented on the form, "DRE Instructor's Progress Log," which shall be supplied by IACP staff to all agency DRE coordinators. The individual candidate DRE instructor shall be responsible for maintaining the log.

Completion of each step in the instructor certification phase shall be verified by at least one certified DRE instructor. Upon completion of all certification requirements, copies of the DRE instructor's Certification Progress Log shall be forwarded to the agency DRE coordinator and to the state DRE coordinator. The state DRE coordinator, after verifying that all information on the logs is complete and accurate, shall forward copies of all completed instructors' certification logs to the IACP staff.

Upon receipt of the certification log, the IACP staff shall verify that all information on the log is complete and accurate. Upon verification, the IACP staff shall forward to the instructor a certificate

of completion signifying that the candidate meets or exceeds all requirements of the Drug Evaluation and Classification Program as a DRE instructor. The IACP staff shall send notification to the state and agency coordinators that the instructor has been certified. In the event that the instructor does not meet all requirements for certification, notification will be sent to the individual with copies to the agency and state coordinators indicating the specific reason(s) for non-qualification.

The IACP staff will maintain a computerized database of all certified DRE instructors and associate instructors. Each record in the database will contain the following information:

1. Name
2. Social Security Number
3. Department/agency
4. Mailing address
5. Telephone number
6. Dates of all training events specified in the progress log
7. Name(s) of instructors verifying completion of training events
8. Date certification was awarded
   All pertinent information relating to the instructor's experience and credentials

Drug recognition expert instructors shall maintain certification as long as DRE certification is maintained. As a service to the Drug Evaluation and Classification Program, the IACP will maintain a national database of persons designated as associate instructors or as instructor trainers for the Drug Evaluation and Classification Program. In order that the national database for instructors and associate instructors may be kept current, and therefore of use to the participants, agencies hosting DRE training events (pre-schools, DRE training, instructor schools) should provide to the IACP staff a list of all instructors and their instruction assignments.

1. PROCEDURES FOR RECERTIFICATION OF DRUG RECOGNITION EXPERTS AND DRE INSTRUCTORS

As specified in Section III of the *National Standards of the Drug Evaluation and Classification Program*, all drug recognition experts must be recertified every two years following original certification. DRE instructors shall maintain their instructor certification as long as DRE certification remains in effect. All applicable recertification standards for DREs shall apply to DRE instructors.

The following process will be utilized to ensure timely notification and compliance with recertification requirements:

1. Eighteen (18) months following the date of original certification, the IACP will send a renewal advisory notice to the individual DRE with copies to the appropriate agency and state DRE coordinators.

2. Prior to the expiration of certification, the DRE shall forward to the IACP evidence of completion of all recertification requirements. The DRE shall forward copies of all documentation to the appropriate agency and state DRE coordinators.

3. Upon notification that a person has met all requirements under section III of the *National Standards of the Drug Evaluation and Classification Program,* IACP staff shall issue a certificate recertifying the DRE for a period of two years.

In the event that information verifying completion of recertification requirements is not received by the IACP staff prior to the expiration of certification, the IACP staff will notify the individual DRE, with copies to the appropriate agency and state coordinators, that certification has expired. Following expiration of certification, the DRE may renew certification without penalty for a period of one year by providing proof of completion of recertification requirements. A DRE wishing to renew certification following the expiration of the one-year grace period must again complete all training and certification requirements enumerated in Section I of the *National Standards of the Drug Evaluation and Classification Program.*

5. DECERTIFICATION OF DRUG RECOGNITION EXPERTS

Decertification of a drug recognition expert may take place if one or more of the following conditions exist:

1. The requirements as enumerated in Section 3 of the *National Standards of the Drug Evaluation and Classification Program* are not met by the individual DRE, allowing certification to lapse.

2. A DRE voluntarily requests decertification.

3. There is evidence of poor performance, inconsistent findings, or other acts on the part of the DRE which reflect discredit upon the Drug Evaluation and Classification Program.

In the case of a lapse of certification, the procedures in Section 4 of the Administrative Procedures shall be followed.

A DRE wishing to be decertified shall submit a written request through the appropriate agency and state coordinators to the IACP staff. Upon receipt of approval of the request by the agency DRE coordinator, IACP staff shall remove the name of the individual from the list of certified DREs.

Agency DRE coordinators shall monitor the performance of DREs within their agencies and shall investigate complaints arising from their activities in the drug evaluation area. When, in the opinion of the agency coordinator, and with the approval of the agency head or his designate, a DRE's actions warrant decertification, the agency shall notify the IACP staff that the DRE is no longer certified within that agency. The IACP staff, upon receipt of this information, shall notify the DRE, with copies to the agency and state DRE coordinators, that IACP certification has been withdrawn at the request of the agency.

Nothing in this procedure should be construed as to prevent an agency from following internal disciplinary or administrative personnel procedures. The IACP staff will maintain records of all decertified DREs and the reason(s) for decertification.

6. APPROVAL OF DRUG RECOGNITION TRAINING CURRICULA

The National Highway Traffic Safety Administration (NHTSA), in conjunction with the Los Angeles Police Department has developed a course of instruction to train police officers in the techniques of drug recognition. This course of training has been adopted by the IACP as the minimum training requirement for national certification for DREs and DRE instructors.

The course of instruction adopted by the IACP requires a total of seventy-two hours of classroom instruction followed by field certification during which a candidate must participate in a minimum of twelve drug evaluations. In the course of the required drug evaluations, a candidate must encounter and correctly identify subjects under the influence of at least three different categories of drugs. The complete requirements for certification as a DRE are enumerated in Section I of the *National Standards of the Drug Evaluation and Classification Program.*

In recent years, several training programs have been developed by police agencies and commercial training institutions with the aim of training individuals to detect persons impaired by drugs. A number of agencies currently utilize portions of the NHTSA/IACP approved program or variations of it in teaching officers the techniques of detecting the drug-impaired driver.

Section I of the *National Standards of the Drug Evaluation and Classification Program* requires that a candidate for certification complete "...an approved classroom training course which shall, at minimum, achieve the learning objectives as stated in the IACP approved training curriculum." The Advisory Committee on Highway Safety of the IACP is charged with overseeing the operation and development of the Drug Evaluation and Classification Program. In order to maintain the high standards of the program, the committee has established the Drug Evaluation and Classification Technical Advisory Panel. Responsibilities of this panel, appointed by the IACP Highway Safety Committee, include the review of proposed alternative training programs to determine whether or not course content and learning objectives are consistent with approved standards.

Organizations wishing to submit proposed training curricula for review and approval as equivalent programs for the purpose of certifying individuals as drug recognition experts shall submit lesson plans, visual aids and any other required materials to the IACP staff. The IACP staff will submit the proposed course to the Technical Advisory Panel for evaluation. Courses which meet applicable standards and learning objectives shall be termed as equivalent courses. Completion of said courses shall qualify the candidate for certification by the IACP as a DRE.

GLOSSARY OF TERMS

AGENCY DRE COORDINATOR:

The person designated within each department or agency responsible for maintaining program records, ensuring maintenance of program standards and conducting training and certification sessions within the agency. Responsibility for this function may rest with one individual, in the case of a small or closely coordinated effort, or may be decentralized among several people throughout the agency.

BLOOD ALCOHOL CONCENTRATION (BAC):

A person's blood alcohol concentration indicates the grams of alcohol per 100 milliliters of blood. For example, a BAC of 0.10% means that there is one-tenth of a gram of alcohol in 100 milliliters of the person's blood.

CANDIDATE DRE:

An individual in the process of achieving certification as a drug recognition expert. To achieve certification, a person must successfully complete a three-phase training program consisting of

A two-day DRE preschool
A seven-day DRE school
On-the-job field certification

CERTIFIED DRE INSTRUCTOR:

Individuals who, having been trained and certified as drug recognition experts, receive further training and experience instructing within the Drug Evaluation and Classification Program. Certified instructors will usually be certified DREs with experience in performing drug evaluations and in providing testimony in court in the area of drug recognition. Certified instructors are responsible of observing, evaluating and verifying the performance of candidate DREs.

CRIMINAL JUSTICE AGENCY:

For purposes of these standards, a criminal justice agency is any organization, funded by public monies, that is involved in the apprehension, prosecution, adjudication of public miscreants; or in the incarceration, detention, supervision or control of said miscreants following apprehension, prosecution and/or adjudication.

DRUG:

For purposes of the Drug Evaluation and Classification Program, a drug is any chemical substance, natural or artificial, which, when taken into the human body, can impair the ability of the person to operate a motor vehicle safely. Note that this is not necessarily a strict medical definition.

DRUG EVALUATION:

A process of systematically examining a person suspected of being under the influence of a drug, for the purpose of ascertaining what category of drugs (or combination of categories) is causing the person's impairment. A trained DRE can identify, with a high degree of reliability, the distinguishing signs of seven broad categories of drugs, which encompass all drugs now known.

DRUG EVALUATION AND CLASSIFICATION TECHNICAL ADVISORY PANEL:

This group, consisting of thirteen members, was formed to assist the Advisory Committee on Highway Safety of the International Association of Chiefs of Police on specific matters relating to the Drug Evaluation and Classification Program. These matters include the revision of the approved training curriculum, review and approval of proposed alternative training programs, and other matters relating to the technical aspects of the DEC Program.

DRUG RECOGNITION EXPERT (DRE):

An individual who has successfully completed all phases of training requirements for certification established by the International Association of Chiefs of Police and the National Highway Traffic Safety Administration.

HORIZONTAL GAZE NYSTAGMUS (HGN):

An involuntary jerking of the eyes that occurs as a person follows a stimulus with the eyes to the side. If a person is under the influence of alcohol or certain other drugs, the jerking tends to become very distinct and will commence relatively soon after the eyes start to move toward the side.

HGN is a very reliable and scientifically validated field sobriety test. A properly trained officer will systematically check for three clues of HGN in each of the suspect's eyes. The more impaired the suspect is, the more likely it will be that these clues will be observed.

IMPAIRMENT:

One of several terms used to describe the degradation of driving ability due to alcohol or other drugs. The term "impairment" usually connotes observable effects that are less severe

than those associated with "intoxication" or "drunkenness." "Impairment" as a concept is less closely linked to alcohol specifically than are "intoxication" and "drunkenness"; in other words, "impairment" is a condition associated with any drug, including but not limited to alcohol.

IMPLIED CONSENT:

Every state has enacted a version of an Implied Consent law, which serves to encourage persons arrested for DWI to submit to a chemical test to determine blood alcohol content. Many states also allow for the testing of blood, breath or urine for the presence of drugs. The concept of implied consent is that the state views the suspect as already having agreed to take the test, as a condition of operating a vehicle in the state. The typical wording of an implied consent law is as follows: "Any person who operates a motor vehicle upon the public highways of this state shall be deemed to have given consent to a chemical test or tests for the purpose of determining the alcohol (or drug) content of his or her blood, when arrested for any act alleged to have been committed while the person was operating a vehicle while under the influence of alcohol (or any drug)."

The law further provides that, if the arrestee nevertheless refuses to submit to the chemical test, he or she will not be forced to submit, but the driver's license will be suspended or revoked.

IACP STAFF

At the request of the National Highway Traffic Safety Administration, the Division of State and Provincial Police of the IACP has agreed to develop standards and assist in managing the certification process for the Drug Evaluation and Classification Program. As part of this agreement, the IACP will perform necessary staff and coordination functions for the program. The staff of the Division of State and Provincial Police is responsible for maintaining records for the national program and will coordinate certification and recertification processes.

INTOXICATION:

One of the several terms used to describe the degradation of driving ability and other faculties due to ingestion of alcohol or other drugs. The term usually connotes very easily observable and severe effects of alcohol, and often is used interchangeably with the word "drunk." However, "intoxication" sometimes has a quasi-legal connotation as well and may be linked with a specific level of BAC.

NHTSA:

The National Highway Traffic Safety Administration, within the United States Department of Transportation that exercises primary responsibility for coordinating federal efforts to ensure the safe design and operation of motor vehicles.

NYSTAGMUS:

An involuntary jerking of the eye. Certain forms of nystagmus, especially horizontal gaze nystagmus, are affected by alcohol and certain other drugs. There are numerous forms or types of nystagmus other than HGN; for example, vertical nystagmus, positional alcohol nystagmus, rotational nystagmus, caloric nystagmus, and many others.

STANDARDIZED FIELD SOBRIETY TESTS:

The Standardized Field Sobriety Tests include three tests that were developed and validated through a series of controlled experiments sponsored by NHTSA. The three tests include Horizontal Gaze Nystagmus (HGN); Walk and Turn (WAT); and One Leg Stand (OLS).

The HGN test is described elsewhere in this glossary.

Walk and Turn and One Leg Stand are *divided attention tests.* As such, they require the suspect to concentrate on more than one thing at a time. Because driving a motor vehicle is itself a fairly complex divided attention test, these examinations have face validity as indicators of driving impairment.

The training course developed by NHTSA, "DWI Detection and Standardized Field Sobriety Testing," is a 16- to 24-hour program designed to train traffic enforcement officers to administer the sobriety tests. The training includes two controlled drinking sessions. During these sessions, students practice administering the test battery to volunteers who have received predetermined doses of alcohol. In order to complete the course satisfactorily, students must pass a written examination and demonstrate proficiency in administering the field sobriety test battery.

STATE DRE COORDINATOR

In each of the states in which the Drug Evaluation and Classification Program has been implemented under the auspices of the National Highway Traffic Safety Administration, an individual has been designated to act as the statewide coordinator for the DEC Program. The duties of the position generally include but are not limited to

1. Acting as an information clearinghouse and central communication point for the program within the state.
2. Assisting in coordinating training and other support activities for all agencies participating in the program within the state.

3. Coordinating the assignment of instructors in response to requests for service from federal and other sources.

In many cases, this individual works under the direction of the Governor's Office of Highway Safety.

The International Standards of the Drug Evaluation and Classification Program

A Product of

The DEC Standards Revision Subcommittee
of the Technical Advisory Panel
of the IACP Highway Safety Committee

Revised June 2, 1999

The enclosed, titled:

"The International Standards of the Drug Evaluation and Classification Program" (Revised June 2, 1999)

is to be inserted in place of the

"National Standards of the Drug Evaluation and Classification Program" (Revised December 3, 1997)

located in the Drug Evaluation and Classification Manual behind the "Appendix" tab.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Since 1984, the National Highway Traffic Safety Administration (NHTSA) has supported the Drug Evaluation and Classification Program. The program which was initially developed by the Los Angeles, California, Police Department, was validated through both laboratory and field studies conducted by Johns Hopkins University. In 1987, the Highway Safety Committee of the International Association of Chiefs of Police (IACP) was requested by NHTSA to participate in the development and national expansion of the program. As the program grew, it became apparent that in order to ensure continued success, nationally accepted standards needed to be established. These standards, which establish criteria for the selection, training and certification of drug recognition experts, helped to ensure the continued high level of performance of the Drug Evaluation and Classification Program. In 1988, NHTSA asked the IACP and its Highway Safety Committee to develop this system of nationally accepted standards.

In March of 1989, the IACP and NHTSA sponsored a meeting at the Transportation Safety Institute in Oklahoma City, Oklahoma. Persons invited to this meeting included experienced drug recognition experts, instructors, curriculum specialists, toxicologists, prosecutors and training administrators. The participants met in working groups to reach consensus concerning the many issues relating to the Drug Evaluation and Classification Program and to develop recommended minimum standards to the Highway Safety Committee. The standards were drafted and presented to the committee for review at its mid-year meeting in June 1989. In addition, the committee agreed to name a Drug Evaluation and Classification Technical Advisory Panel to assist and advise the committee concerning technical aspects relating to the operation of the program.

The Highway Safety Committee, by resolution, adopted the *Interim National Standards of the Drug Evaluation and Classification Program.* The standards were subsequently approved by the voting membership of the IACP. The standards were adopted on an interim basis pending the outcome of an evaluation of the effective-ness of the program to be performed by NHTSA. In October 1992, the standards were officially approved and adopted. Revisions and updates are periodically made to the standards.

Presented in this document are standards specifying the requirements for certification and recertification of DREs and DRE instructors; standards for decertification and reinstatement; and standards for agency participation. Also, for those agencies participating in the program, a set of administrative guidelines is provided.

These standards, when adopted by other countries, will be administered pursuant to their political structure.

DEFINITIONS

Associate Instructor: Persons not certified as DREs but who possess knowledge, expertise or credentials deemed valuable to the program may be designated as associate instructors for the Drug Evaluation and Classification Program.

Blood Alcohol Concentration (BAC): A person's blood alcohol concentration indicates the grams of alcohol per 100 milliliters of blood. For example, a BAC of 0.10% means that there is one-tenth of a gram of alcohol in 100 milliliters of the person's blood.

Candidate DRE: An individual in the process of achieving certification as a drug recognition expert. To achieve certification, a person must successfully complete a training program consisting of

An IACP/NHTSA-approved SFST training course of instruction
A two-day IACP/NHTSA-approved DRE preschool
A seven-day IACP/NHTSA-approved DRE school
On-the-job field certification

Candidate DRE Instructor: An individual in the process of achieving certification as a DRE instructor. To achieve certification, a DRE must successfully complete the IACP/NHTSA-approved DRE instructor training, conduct a minimum of two hours of DRE training, and witness two drug evaluations.

Course Manager: An individual who ensures that each training event follows the standardized curriculum and evaluates the training event to identify ways to improve it. The course manager represents the National Highway Traffic Safety Administration and the International Association of Chiefs of Police and resolves issues with the content and/or delivery of the training.

DRE Coordinator: The appropriate DRE coordinator will be one of the following:

Agency Coordinator: The person designated within each department or agency responsible for maintaining program records, ensuring maintenance of program standards and conducting training and certification sessions within the agency. Responsibility for this function may rest with one individual, in the case of a small or closely coordinated effort, or may be decentralized among several people throughout the agency. If there is no designated agency coordinator, the appropriate DRE coordinator shall be the state coordinator.

State Coordinator: In each of the states in which the Drug Evaluation and Classification Program has been implemented under the auspices of the National Highway Traffic Safety Administration, an individual has been designated to act as the statewide coordinator for the DEC Program. The duties of the position generally include but are not limited to

1. Acting as an information clearinghouse and central communication point for the program within the state.
2. Assisting in coordinating training and other support activities for all agencies participating in the program within the state.
3. Coordinating the assignment of instructors in response to requests for service from federal and other sources.

The Governor's Office of Highway Safety shall be responsible for designating the state coordinator. If there is no designated state coordinator, the appropriate DRE coordinator shall be the TAP regional coordinator, who shall assume the duties and responsibilities as described above.

TAP Regional Coordinator: One DRE from each of the four regions, as established by the Division of State and Provincial Police, is appointed by the IACP Highway Safety Committee Chair to serve on the Technical Advisory Panel.

DRE Instructor: Individuals who, having been trained and certified as drug recognition experts, receive further training and experience instructing within the Drug Evaluation and Classification Program. Certified instructors will usually be certified DREs with experience in performing drug evaluations and in providing testimony in court in the area of drug recognition. Certified instructors are responsible for observing, evaluating and verifying the performance of candidate DREs.

Criminal Justice Agency: For purposes of these standards, a criminal justice agency is any organization, funded by public monies, that is involved in the apprehension, prosecution, adjudication of public miscreants; or in the incarceration, detention, supervision or control of said miscreants following apprehension, prosecution and/or adjudication.

Drug: For purposes of the Drug Evaluation and Classification Program, a drug is any substance that, when taken into the human body, can impair the ability to operate a motor vehicle safely. Note that this is not necessarily a strict medical definition.

Drug Evaluation: A process of systematically examining a person suspected of being under the influence of a drug, for the purpose of ascertaining what category of drugs (or combination of categories) is causing the person's impairment. A trained DRE can identify, with a high degree of reliability, the distinguishing signs and symptoms of seven broad categories of drugs.

Drug Evaluation and Classification Technical Advisory Panel: This group was formed to assist the Highway Safety Committee of the International Association of Chiefs of Police on specific matters relating to the Drug Evaluation and Classification Program. These matters include the revision of the approved training curriculum, review and approval of proposed alternative training programs, and other matters relating to the technical aspects of the DEC Program.

Drug Recognition Expert (DRE): An individual who has successfully completed all phases of training requirements for certification established by the International Association of Chiefs of Police and the National Highway Traffic Safety Administration.

Highway Safety Committee: A standing committee of the IACP that addresses highway safety issues.

Horizontal Gaze Nystagmus (HGN): A loss of the normal control of the eyes observed as an involuntary jerking occurring when a person attempts to follow as stimulus with the eyes and/or looks to the left or right side.

Impairment: One of the several terms used to describe the degradation of mental and/or motor abilities necessary for safely operating a motor vehicle.

Implied Consent: Every state has enacted a version of an Implied Consent law, which serves to encourage persons arrested for DWI to submit to a chemical test to determine blood alcohol content. Many states also allow for the testing of blood, breath or urine for the presence of drugs and/or alcohol. The concept of implied consent is that the state views the suspect as already having agreed to take the test, as a condition of operating a vehicle in the state. The typical wording of an implied consent law is as follows: "Any person who operates a motor vehicle upon the public highways of this state shall be deemed to have given consent to a chemical test or tests for the purpose of determining the alcohol (or drug) content of his or her blood, when arrested for any act alleged to have been committed while the person was operating a vehicle while under the influence of alcohol (or any drug)."

The law further provides that, if the arrestee nevertheless refuses to submit to the chemical test, he or she will not be forced to submit, but the driver's license will be suspended or revoked.

IACP Staff: With grant assistance from the National Highway Traffic Safety Administration, the Division of State and Provincial Police of the IACP has agreed to develop standards and assist in managing the certification process for the Drug Evaluation and Classification Program. As part of this agreement, the IACP will perform necessary staff and coordination functions for the program. The staff of the Division of State and Provincial Police is responsible for maintaining records for the program and will coordinate certification and recertification processes.

Instructor Trainer: An experienced DRE instructor who conducts instructor training courses and who must be knowledgeable of and have audited all phases of the Drug Evaluation and Classification training program and must be fully conversant with the student and instructor manuals.

Intoxication: One of the several terms used to describe the degradation of mental and/or motor skills and other faculties due to ingestion of alcohol or other drugs.

NHTSA: The National Highway Traffic Safety Administration, within the United States Department of Transportation that exercises primary responsibility for coordinating federal efforts to ensure the safe design and operation of motor vehicles.

Standardized Field Sobriety Tests: The Standardized Field Sobriety Tests include three tests that were developed and validated through a series of controlled experiments supported by research grants from NHTSA. The three tests include Horizontal Gaze Nystagmus (HGN); Walk and Turn (WAT); and One Leg Stand (OLS).

The HGN test is described elsewhere in these definitions.

Walk and Turn and One Leg Stand are *divided attention tests.* As such, they require the suspect to concentrate on more than one thing at a time.

The training course developed by IACP and NHTSA, "DWI Detection and Standardized Field Sobriety Testing," is a program designed to train traffic enforcement officers to administer the sobriety tests. The training includes two approved alcohol workshops. During these workshops, students practice administering the test battery. In order to complete the course satisfactorily, students must pass a written examination and demonstrate proficiency in administering the field sobriety test battery.

STANDARDS FOR THE DRUG EVALUATION AND CLASSIFICATION PROGRAM

I. Standards for Certification as a Drug Recognition Expert

The standards in this section specify the criteria that must be met prior to an individual's being certified as a drug recognition expert (DRE). These criteria outline the knowledge and skills required to be considered for training, as well as the knowledge and proficiencies required for final certification.

The currently approved curriculum involves a three-phase training process. Prior to beginning the training program, students are required to be trained in and demonstrate proficiency in the use of the IACP/NHTSA-approved standardized field sobriety tests, including the horizontal gaze nystagmus test. Phase I of the drug recognition training consists of a two-day (16-hour) preschool. During this preschool, students are taught the definition of the term "drug" as it is used in the Drug Evaluation and Classification Program, and become familiar with the techniques of the drug evaluation. Students also begin to learn the techniques and procedures for evaluating persons suspected of drug impairment.

Phase II of training is a seven-day (56-hour) classroom program during which stu-dents receive detailed instruction in the techniques of the drug evaluation examina-tion as well as in physiology, the effects of drugs and legal considerations. Upon completion of this phase of training, the student must pass a comprehensive written examination before proceeding to Phase III of training, the field certification.

The field certification portion of training follows completion of the classroom training and is conducted at periodic intervals for the next sixty to ninety days. During this portion of the training, students, under the direction of certified instructors, evaluate subjects suspected of being impaired by drugs other than alcohol. After participating in and documenting the results of at least twelve drug evaluations and completing a comprehensive examination, the student is certified as a drug recognition expert.

1.1 In order to be considered for certification as a drug recognition expert, a person shall be in the employ and under the direct control of a public criminal justice agency or institution involved in providing training services to officers of law enforcement agencies.

Commentary: At the discretion of the agency head or administrator, and with the consent of the training body, other persons may audit or observe any or all portions of the DRE training. Persons attending the course as auditors or observers shall not be eligible for certification.

Persons pursuing certification as drug recognition experts for the purpose of instructing in the Drug Evaluation and Classification Program must meet all requirements for certification and recertification in order to maintain their standing as DREs or DRE instructors.

1.2 The candidate DRE must have experience in preparing comprehensive investigative reports and in providing detailed court testimony.

Commentary: The technical nature of the drug evaluation process and the need to provide detailed and accurate documentation of findings and conclusions requires proficiency in preparing reports. Candidate DREs should have demonstrated the ability to investigate, document and prepare detailed reports of incidents such as major traffic crashes or criminal violations. In addition, DREs must be able to provide court testimony concerning their methods and results, as well as their training and qualifications.

1.3 All DRE candidates must attend and complete the IACP/NHTSA-approved course of instruction in Standardized Field Sobriety Testing, or an equivalent curriculum approved by the IACP Highway Safety Committee and Technical Advisory Panel. They shall demonstrate proficiency in the use of Standardized Field Sobriety Tests, to the satisfaction of a DRE instructor, by the conclusion of the IACP/NHTSA DRE Pre-school or a school meeting Standard 1.2 above.

Commentary: The drug evaluation process requires that the contribution of alcohol to observed impairment be determined. The National Highway Traffic Safety Administration has developed, and the IACP has adopted, the Standardized Field Sobriety Test procedure in conjunction with immediate breath testing, as a means of identifying the alcohol-impaired driver. If the effects of alcohol are determined not to be the sole cause of impairment, the officer can begin the evaluation process to determine what other causes may be responsible.

In order to conform to the IACP/NHTSA model curriculum, SFST training must contain the specified number of hours and include at least two approved alcohol workshops. In addition, the training must instruct students in the administration of the horizontal gaze nystagmus, walk and turn, and one leg stand tests.

Each agency should ensure that candidates submitted for DRE training have had adequate time prior to beginning the training program to develop and to demonstrate proficiency in the use of SFST/HGN or allow for refresher training in these techniques as necessary.

1.4 All DRE candidates must attend and complete the IACP/NHTSA DRE Pre-school or an IACP-recognized equivalent prior to progressing to Phase II, the DRE School.

1.5 Prior to attending phase II of the DRE training, the candidate shall have met the learning objectives for phase I of the training program, the IACP/NHTSA-approved DRE preschool. The candidate shall be able to

1. Define the term "drug" as it is used in the DEC Program;
2. Name the seven drug categories identified in the DRE training program;
3. Measure vital signs, including blood pressure, pulse and body temperature;
4. Show familiarity with the 12-step drug recognition evaluation process;
5. Demonstrate proficiency in the administration of the Standardized Field Sobriety Tests, including Horizontal Gaze Nystagmus;
6. Show familiarity with the administration of the eye examinations, including pupil size, vertical nystagmus and lack of convergence.

These learning objectives are generally met through completion of Phase I, the DRE preschool. However, agencies have the latitude to determine the best means of ensuring that candidate DREs meet the prerequisites. The agency must verify, through the application process to the instructor responsible for delivering the training, that a candidate meets all requirements. Each candidate DRE will be required to demonstrate the knowledge and skills outlined.

Administrative guidelines and suggested application forms containing the necessary information will be provided by IACP staff to agencies and training institutions.

1.6 The candidate DRE shall complete an approved classroom training course which shall, at minimum, achieve the learning objectives as stated in the IACP-approved training curriculum.

Commentary: The National Highway Traffic Safety Administration and the International Association of Chiefs of Police have developed a classroom training course that, when completed, qualifies the student to proceed to the field certification portion of the training program. Because of differences in the type and level of training for officers in the detection of the impaired subject, agencies should determine the most effective means of providing classroom training in drug recognition. However, in order to maintain the credibility and integrity of the certification program, agencies that use a training program other than that currently approved by the IACP, must have the alternative curriculum approved by the IACP Technical Advisory Panel as meeting learning objectives. In addition, the Technical Advisory Panel will be responsible for providing periodic updates and modifications to the IACP training curriculum.

1.7 All candidate DREs shall attend and complete all classroom portions of an approved DRE curriculum prior to progressing to Phase III (the field certification phase) of the training. This shall include satisfactorily completing all assignments and required examinations. Students shall not be permitted to "test out" of portions of the training, nor shall they be permitted to attend only those classes that they have not previously completed.

Commentary: Class sessions missed should be made up prior to the final exam.

1.8 In order to complete satisfactorily the classroom portion of the training and proceed to field certification, candidate DREs must complete an IACP-approved final examination with a score of not less than eighty percent (80%). Candidates scoring less than 80% on the final examination may be retested one time, under the supervision of a certified DRE instructor. The retest shall be completed not less than fifteen nor more than thirty days following the completion of the classroom training.

Commentary: Upon satisfactory completion of the examination, the candidate may then proceed to field certification. The examination used to retest the candidate shall be an IACP-approved examination and shall not have been administered to the candidate previously. If the candidate does not achieve a passing score on reexamination, the candidate must retake the classroom portion of the training and pass the knowledge examination before proceeding further in the certification process.

1.9 Upon completion of the field certification phase of training, the candidate must demonstrate the ability to conduct a complete drug evaluation in an approved sequence and appropriately document and interpret the results. The candidate must also be able to document the findings of the evaluation and demonstrate proficiency in interviewing techniques.

Commentary: One of the primary factors in the success of the Drug Evaluation and Classification Program has been the emphasis upon a standardized approach to the drug recognition process. The training stresses the importance of a systematic, structured approach to performing the drug evaluation. This includes completing all portions of the evaluation in the appropriate sequence. Upon conclusion of an evaluation the DRE reviews the results of all tests, examinations and observations; documents the findings; and draws a conclusion based on the totality of the evidence.

1.10 To be considered for certification as a drug recognition expert, the candidate must satisfactorily complete a minimum of twelve (12) drug evaluations, during which the candidate must encounter and identify subjects under the influence of at least three of the drug categories as described in the DRE training program. All three drug categories must be supported by toxicology.

Of the evaluations required for certification, the candidate shall administer at least six evaluations. The candidate may observe the remaining evaluations. Certification training evaluations will be conducted in accordance with the current procedures and guidelines established in the DECP training curricula.

All evaluations, either administered or observed, and documented for certification purposes, shall be observed and supervised by at least one certified DRE instructor.

Commentary: Ideally, a drug evaluation will be performed by no more than two persons: the evaluator and one observer. At no time should more than four persons participate in an evaluation, as the results of the evaluation may be influenced by the distraction caused by a large number of persons observing the process.

1.11 Prior to completing the certification phase of training, the candidate DRE must demonstrate the ability to draw correct conclusions consistent with observed physiological signs and symptoms. In addition, the conclusions must be supported by the findings of a forensic toxicology laboratory. No candidate DRE shall be certified as a drug recognition expert unless blood, urine, or other appropriate biological samples are obtained and submitted from at least nine (9) subjects whom the candidate DRE has examined for certification purposes. These may include subjects for whom the candidate DRE served as the examination recorder or observer as well as those subjects directly evaluated by the candidate DRE. Further, the candidate DRE cannot be certified unless the opinion concerning the drug category or categories affecting the subject is supported by forensic toxicological analysis seventy-five percent (75%) of the time, or in at least seven (7) of the nine (9) samples submitted for certification purposes. For purposes of this standard, a candidate DRE's opinion is supported if the toxicological analysis discloses the presence of at least one drug category named by the candidate DRE. In the event that the candidate DRE has concluded that three or more categories of drugs are involved, at least two categories must be supported by toxicology results.

Commentary: Successful and uniform application of this standard places important forensic toxicological requirements on the program. First, the blood or urine specimen must be obtained as soon as possible after the arrest so that the contents of the sample refer to the subject's status at the time of the offense. Second, the sample must be properly sealed, stored, transported to the forensic toxicology laboratory and analyzed in a timely fashion to maintain the integrity of the specimen. Third, the drug recognition examination should be conducted as soon as possible after the offense so that the results of the evaluation accurately refer to the subject's status at the time of the offense. Fourth, the laboratory should use its full powers of analysis and detection to attempt to identify each category named by a candidate DRE; in some cases this may require the laboratory to modify its routine screening and confirmation procedures. Finally, the laboratory must complete its report on the samples as soon as possible and provide a copy of the report to the arresting officer, DRE or candidate DRE submitting the sample. It is the submitting officer's responsibility to provide a report to each DRE or candidate DRE who participated in the evaluation.

Although the candidate DRE must complete a minimum of twelve (12) drug evaluations (standard 1.10), standard 1.11 requires only 75 percent of those to include a biological sample. This allows for those cases in which a biological sample is unavailable, such as when a subject refuses or cannot provide one. In those cases when an evaluation is not supported by forensic toxicology, a certified DRE instructor should ensure that the candidate DRE's opinion was based on observable signs and symptoms consistent with the opinion.

1.12 Prior to concluding field certification training, the candidate shall satisfactorily complete an approved "Certification Knowledge Examination." The examination shall be administered and the results reviewed by at least one certified instructor. The examination shall only be administered after the candidate has completed not less than three drug evaluations.

Commentary: The "Certification Knowledge Examination" consists of a comprehensive written examination followed by a detailed interview with the reviewing instructor(s). As stated previously, certification is based on the evaluation by the instructor(s) of the skills and abilities of the candidate rather than on the completion of a specified set of tasks. The purpose of the examination and interview is to aid the instructor(s) in evaluating the candidate's qualifications, performance and general abilities.

The examination should be administered when, in the judgment of the reviewing instructor(s), the candidate has demonstrated proficiency in conducting, evaluating and documenting results of the drug evaluation process.

1.13 The candidate DRE shall complete the field certification phase of training within six months following completion of the classroom training, unless the time limit is extended by the appropriate DRE coordinator.

Commentary: Under normal circumstances, a candidate not completing field certification within the prescribed time period will be dropped from the program. However, a reevaluation of the candidate's qualifications and the reasons for non-completion may be conducted by the appropriate DRE coordinator to determine whether or not circumstances exist that indicate that the candidate should continue in the program.

1.14 By the time the candidate DRE has completed field certification training, the candidate shall have prepared a résumé which shall reflect the candidate's training and experience in drug recognition. The résumé shall include a complete log of all evaluations in which the candidate has participated.

Commentary: In order to be accepted as a credible witness, the drug recognition expert must be able to document and articulate a body of information concerning training, qualifications and experience in the field of drug evaluation and classification. Toward this end, candidates are instructed in the importance and proper preparation of a professional résumé.

1.15 When the candidate DRE has satisfactorily completed all requirements of the classroom and field certification portions of training, at least two certified DRE instructors who have observed the candidate during the field certification process will verify that the candidate meets all requirements for certification as a drug recognition expert.

Commentary: The certification process relies in large part on the judgment of the instructor(s) as to the abilities and performance of the candidate. Experience has shown that in many cases, particularly those in which a candidate's qualifications may be in question, the opinion of a second instructor as to readiness for certification is of value. In addition, the use of a second instructor to evaluate the candidate may overcome any bias, either for or against a candidate. For these reasons, each candidate must be evaluated by at least two instructors prior to becoming certified as a DRE.

1.16 Following completion of certification requirements, copies of all documents, including test results, evaluation logs and drug evaluation reports shall be forwarded to the agency DRE coordinator who shall forward all documents to the state coordinator. The state DRE coordinator shall forward the names and copies of certification progress logs of the DREs they have certified as having successfully completed all phases of the DRE training program. The IACP will then credential each applicant and will register him as a certified drug recognition expert.

Commentary: The IACP staff shall maintain current listings of persons certified as drug recognition experts. Upon notification that a person has met all requirements, staff shall complete and forward to the state coordinator a certificate indicating that he meets all requirements of the Drug Evaluation and Classification Program as a drug recognition expert. The state coordinator shall forward these documents to the agency which, in turn, will present them to the DRE.

II. Standards for Certification as Drug Recognition Expert Instructor

Because of the highly technical nature of the functions performed by the drug recognition expert, only persons experienced in the techniques of drug evaluation should instruct in the Drug Evaluation and Classification Program. In general, these instructors will be certified drug recognition experts with experience in performing drug evaluations and in providing testimony in court in the area of drug recognition. However, persons who possess specialized skills or credentials may be utilized to teach certain parts of the training course as associate instructors. Dedicated, qualified instructors are critical to the continued success of the Drug Evaluation and Classification Program.

Certified instructors are responsible for observing, evaluating and verifying the performance of candidate DREs throughout the training and certification process. In addition, certified instructors must provide periodic update training to DREs already certified.

Also addressed in this section are standards for the use of instructor trainers in the program. These individuals are responsible for the training of DRE instructors.

2.1 Only persons certified as drug recognition experts may be certified as DRE instructors.

Commentary: Persons not certified as DREs but who possess knowledge, expertise or credentials deemed valuable to the program may be designated as associate instructors for the Drug Evaluation and Classification Program. Persons who might be considered for such designation may include medical professionals, attorneys and others who possess knowledge in a designated field of expertise. Associate instructors must be familiar with the Drug Evaluation and Classification Program and fully conversant with the lesson plans for their assigned blocks of instruction. Classes taught by associate instructors shall be taught in cooperation with certified DRE instructors to ensure consistency.

Each associate instructor should provide to the state coordinator a biographical sketch to be included in the file of approved instructional staff. The biographical sketch shall include those segments of the training curricula that the associate instructor is qualified to teach.

2.2 A DRE desiring to become an instructor in the Drug Evaluation and Classification Program shall make written application to the agency coordinator. The agency coordinator will ensure that the candidate meets all requirements to become an instructor and will refer the application to the state coordinator.

Commentary: The agency head shall verify to the training provider that a candidate instructor meets all prerequisites to enter DRE instructor training. Prerequisites may also include any state, local or agency requirements specified for instructors within the jurisdiction. The state coordinator shall provide to requesting agencies the administrative guide and sample application forms for candidate instructors.

2.3 The candidate shall satisfactorily complete the IACP/NHTSA-approved Drug Evaluation and Classification Instructor Training Program, or an approved equivalent, which shall include both knowledge and practical examination of candidate instructors.

Commentary: This requirement does not preclude states or local jurisdictions from placing additional requirements on persons wishing to teach in the local law enforcement community.

2.4 Upon satisfactory completion of the IACP-approved classroom portion of training or completion of an equivalent program, the student shall be designated as a candidate instructor for purposes of completing instructor certification. To complete instructor certification, the candidate instructor must teach for a minimum of two hours in the classroom portion of an approved drug recognition training program; and supervise the administration of not less than two drug evaluations performed by candidate DREs during certification training.

The candidate instructor's progress shall be monitored and evaluated by at least one certified DRE instructor.

Commentary: The National Highway Traffic Safety Administration and the IACP have developed a training curriculum for instructors in the Drug Evaluation and Classification Program. The learning objectives for this program emphasize specific techniques for teaching the specialized information contained in the drug recognition training program.

The Technical Advisory Panel shall be responsible for reviewing and evaluating alternative training programs submitted by agencies. Those programs meeting or exceeding the approved learning objectives for instructor training shall be deemed "equivalent." This does not preclude agencies or states from adopting more stringent standards.

2.5 Upon satisfactory completion of instructor training, copies of all documentation, including instructor progress logs, examination scores and instructor evaluations, shall be forwarded to the appropriate DRE coordinator. The agency DRE coordinator will forward these documents to the state coordinator who shall certify that they have successfully completed all phases of DRE instructor training. The IACP will then credential each applicant and will register him as a certified DRE instructor.

Commentary: The IACP staff will maintain a current register of persons certified as instructors in the Drug Evaluation and Classification Program. Upon notification that a person has met all requirements, the staff shall complete and forward to the state coordinator a certificate indicating that he/she meets all requirements as a DRE instructor. The state coordinator shall forward these documents to the agency who, in turn, will present them to the DRE instructor.

The administrative guidelines shall provide sample forms for necessary progress logs and certification documents.

2.6 To ensure the proper conduct and delivery of the approved curriculum, all training sessions conducted as part of the Drug Evaluation and Classification Program shall be coordinated by a certified DRE instructor who has previously instructed. All classes taught by associate or candidate instructors shall be supervised directly by a certified DRE instructor.

Commentary: To ensure that all training classes are conducted in accordance with applicable standards, it is recommended that the instructor coordinating the training program have a minimum of one-year experience as a drug recognition expert instructor.

2.7 An instructor trainer shall have demonstrated proficiency as an instructor.

2.8 An instructor trainer must be knowledgeable of and have audited all phases of the Drug Evaluation and Classification training program and must be fully conversant with the student and instructor manuals.

Commentary: An instructor trainer must present evidence of the satisfactory completion of the NHTSA/*IACP* Instructor's Development Course or equivalent. Instructor trainers must be familiar with the Drug Evaluation and Classification Program and fully conversant with the lesson plans for their assigned blocks of instruction. To ensure consistency, classes taught by instructor trainers shall be taught in cooperation with certified DRE instructors.

Each instructor trainer shall provide to the appropriate DRE coordinator a biographical sketch to be included in the file of approved instructional staff. The biographical sketch shall include those segments of the training curricula that the instructor trainer is qualified to teach.

The state coordinator should maintain a record of persons qualified as instructor trainers in the Drug Evaluation and Classification Program.

2.9 The course manager shall perform four duties: planning and preparation, on-scene course management, data collection, and reporting. These responsibilities involve the following:

1. Assigning instructors, and verifying in advance that the training is conducted in the standardized manner and that it is properly evaluated;
2. Ensuring at the training site that all necessary conditions exist to maximize the students' ability to learn;
3. Collecting certain data following every training event and forwarding it to the host state coordinator; and
4. Preparing a comprehensive report following every training event.

III. Standards for Recertification

Recertification is necessary to ensure that DREs and DRE instructors maintain proficiency. Just as the standards in the previous sections have outlined the criteria for original certification, the standards outlined in this section are required to ensure that professional integrity is maintained throughout the recertification process.

3.1 The following records concerning certification and recertification shall be maintained:

Individual DRE/ DRE Instructor	Copies of all drug evaluations Evaluation logs Resume Certification and recertification progress logs Certificates
Agency DRE Coordinator	Copies of evaluation logs Certification progress logs Copies of certificates Instructor ratings and summaries of student critiques Records of classes taught by each instructor
State DRE Coordinator and/or IACP Staff	Copies of evaluation logs (optional) Certification progress logs File of certified DREs and instructors Recertification information

Commentary: Guidelines for the retention of pertinent records concerning the program operation help to ensure integrity of the program and provide valuable information for purposes of statistics and court verification of training. Other records as deemed appropriate by local agencies or certification commissions may be required of the individual DRE or the appropriate DRE coordinator.

3.2 DREs shall be required to renew their certificates of continuing proficiency every two years. A one-year grace period following the lapse of certification may be allowed for those not meeting recertification standards. During the grace period, the DRE may be rectified without having to repeat the original certification process.

3.3 The state coordinator shall be notified of those DREs in need of recertification at least six months prior to the expiration of the certificates. The state DRE coordinator shall forward to the IACP staff required documentation indicating the completion of recertification requirements. The staff will issue new cards when requirements are met.

Commentary: In the absence of a state coordinator, the TAP regional coordinator will perform these functions.

3.4 A DRE shall demonstrate continuing proficiency by

Performing a minimum of four (4) acceptable evaluations since the date of last certification, all of which shall be reviewed and approved by a certified DRE instructor and one (1) of which shall be witnessed by a certified DRE instructor. These evaluations may be performed on subjects suspected of drug and/or alcohol impairment or during classroom simulations; and Completing a minimum of eight hours of recertification training since the date of the DRE's most recent certification, which may alternatively be presented in two sessions of no less than four hours, and which shall be consistent with any IACP standards for such training; and Presenting an updated resume and rolling log to the appropriate coordinator or his/her designee for review.

Commentary: All coordinators are responsible for maintaining the integrity of the program, and the appropriate coordinator, consistent with this responsibility, is encouraged to withhold recertification for, or refer for remediation, any DRE whose rolling log indicates an unacceptable level of accurate evaluations, as indicated by toxicology results.

3.5 When a DRE has completed all requirements for recertification, a certified DRE instructor shall verify to the appropriate DRE coordinator that minimum recertification requirements have been met.

3.6 A certified instructor shall maintain instructor certification so long as DRE certification is maintained.

Commentary: An instructor may be decertified for cause, such as for conducting substandard instructional programs, and still maintain certification as a DRE.

IV. Standards for Decertification of Drug Recognition Experts and Instructors

The standards in this section outline the circumstances and procedures for decertifying individual DREs or DRE instructors. In order to ensure that standards of performance are maintained, a means is needed for removing from the roles of the program those persons unable to meet the criteria of competence and professionalism. The responsibility for maintaining program standards lies with the agency and the appropriate DRE coordinator. It shall be incumbent upon all DRE coordinators to ensure that certified DREs meet approved standards for conduct and qualifications.

4.1 Decertification shall occur when a DRE or DRE instructor fails to meet minimum standards and requirements for certification or recertification, or demonstrates evidence of poor performance, inconsistent findings, or other substantiated acts on the part of the DRE that reflect discredit upon the Drug Evaluation and Classification Program.

Commentary: All DREs are responsible for maintaining and forwarding to the appropriate DRE coordinator information regarding required training or experience. If such information is not provided in a timely manner, certification will lapse.

Local agencies and licensing/certification bodies may, at their discretion, establish certification and decertification criteria to conform to local laws or rules. Nothing in these standards should be construed to overrule local authority in establishing standards no less stringent for the performance of officers in this area or to prevent an agency from following internal disciplinary or administrative personnel procedures.

4.1.1 Before decertification is finalized, a DRE or DRE instructor will be given written notice by the initiating DRE coordinator of the reasons for decertification. The subject of the action shall have the opportunity for a written or an oral response to the initiating DRE coordinator.

4.2 Requests for voluntary decertification will be honored when submitted by a DRE or DRE instructor to the section IACP staff and with approval of the agency appropriate DRE coordinator.

4.3 Cases involving poor performance or inconsistent findings shall be referred to the agency appropriate DRE coordinator for investigation, recommendation and action.

4.4 Certification of a DRE shall not terminate as long as the DRE meets the requirements of Standards 1.1 and 4.1.

4.5 The state DRE coordinator, upon the recommendation of the agency DRE coordinator or based on substantiated independent knowledge shall initiate the decertification process against a DRE or DRE instructor. The state coordinator shall inform the IACP staff of all decertification actions. In instances where these complaints have not been resolved by the appropriate coordinator, these complaints will be referred to the state's Governor's Office of Highway Safety for resolution.

V. Standards for Reinstatement of a Decertified Drug Recognition Expert

The standards in this section outline the procedures for reinstating a previously decertified DRE and/or DRE instructor.

5.1 An individual can be reinstated as a DRE when the following conditions are met:

(1) The applicant must pass the 100-item exam (same as that given at the end of the DRE school, or the make-up exam) as witnessed by a certified DRE instructor, with a score of at least 80%.

(2) The applicant must complete four (4) hands-on drug evaluations within a one-year period from the date of request to be reinstated.

(3) The applicant's eligibility and reinstatement as a DRE is reviewed and approved by the DRE's agency and the agency, state, and TAP regional DRE coordinators, where applicable.

5.2 An individual can be reinstated as a DRE instructor when the following conditions are met:

(1) The applicant meets conditions 5.1 and is reinstated as a DRE.

(2) The applicant's eligibility and reinstatement as a DRE instructor is reviewed and approved by the DRE's agency and the agency, state, and TAP regional DRE coordinators, where applicable.

Commentary: In many instances, a DRE certification lapses through no fault of the DRE due to transfers, promotions, etc., and recertification requirements have not been met. In many cases a DRE may want to reapply DRE skills with a new assignment. IACP suggests that a written request for reinstatement to the program come from the applicant to the appropriate coordinator, through the proper agency channels. A form is provided by the IACP to DEC state and TAP regional coordinators for the purpose of reinstatement. All coordinators are cautioned to conduct a thorough check on the cause of the applicant's decertification and reason for application for reinstatement.

VI. Standards for Agency Participation

Since 1986, the National Highway Traffic Safety Administration has endeavored to expand the Drug Evaluation and Classification Program. In an effort to contain costs, ensure the most efficient use of resources and maintain a high probability of program success, NHTSA developed site selection criteria to be used in assessing potential suitability of sites. Factors such as demographics, favorable legislation, agency operations and system support for the program are considered in evaluating potential sites for the implementation of the Drug Evaluation and Classification Program.

It is recognized that law enforcement agencies, in considering the implementation of new traffic enforcement programs, must be aware of both short- and long-term costs that are involved. In order for the program to achieve maximum results, the Drug Evaluation and Classification Program requires that agencies commit considerable resources long term to the detection and apprehension of the drug-impaired driver.

6.1 A DEC Program site should be a state, a political subdivision of a state, or a group of subdivisions.

Commentary: Experience has shown that a DEC Program will take firm root only if the resources to support the program are concentrated in a relatively small geographical area, such as a major city or county. Given that these new sites will begin operations with a small cadre of DREs, a community-focused DEC Program will allow the DREs to respond quickly to the location(s) where drug-impaired drivers might be taken for processing. By concentrating its forces, the program can ensure that a qualified DRE is available at any time or place needed. The concentrated focus of a community-based program allows the DREs ample opportunity to conduct evaluations and maintain skills at peak proficiency.

6.2 A proposed program site should be able to produce enough drug-impaired driving arrests to (1) justify the expense of training the DREs, and (2) provide enough evaluation opportunities for DREs to maintain proficiency.

Commentary: Studies indicate that up to 40 percent of the persons arrested for impaired driving are actually under the influence of drugs, either alone or in combination with alcohol. Thus, a site should produce an adequate number of DUI arrests annually per DRE to provide ample drug evaluation opportunities.

6.3 Prior to implementation of a DEC Program, a site should be located in a state with an implied consent law that

> Explicitly allows the chemical test sample to be analyzed to determine the presence and/or concentration of drugs other than alcohol;

Explicitly indicates that the "consent" applies to multiple tests, i.e., that the person is "deemed to have given consent to a test or tests of blood, breath or urine"; and

Empowers the arresting officer and/or the law enforcement agency to select the types of chemical tests to be taken, rather than giving the suspect the option of choosing the tests.

In the absence of an implied consent law, a site must certify that the above three criteria are met and apply to the Technical Advisory Panel for consideration for acceptance to the program.

Commentary: It is pointless to evaluate drivers for drug-induced impairment unless those found to be so impaired can be prosecuted successfully. The requirements for multiple chemical tests are essential because both a breath test and blood or urine tests are integral components of the drug recognition process. In addition to implied consent legislation, the effectiveness of DEC programs is greatly enhanced by legislation that

Allows the fact of a suspect's refusal to submit to the chemical test to be introduced as evidence in court; and

Makes it an offense to drive under the influence of any drug.

6.4 At least eighty percent (80%) of a participating agency's traffic law enforcement officers must be fully trained and proficient in the use of the IACP/NHTSA-approved standardized field sobriety tests, including the horizontal gaze nystagmus test.

Commentary: It is recommended that the agency's SFST training program is consistent with the IACP/NHTSA model curriculum. In particular, the training must contain the specified number of hours and include at least two approved alcohol workshops.

6.5 Participating agencies must maintain accurate and timely records of

- Alcohol and drug-related arrests and convictions;
- Alcohol and drug offense processing time;
- All toxicological examinations; and
- All drug recognition evaluations to include documenting and collecting of basic data which includes, but is not limited to, the name and age of arrestee, date of arrest, sex, the DRE opinion, and the name of evaluator.

Commentary: In order to evaluate critically the effectiveness of the Drug Evaluation and Classification Program, it is necessary that, at a minimum, the above records be maintained. In addition to evaluation purposes, the records may prove beneficial in establishing program validity for court purposes. The IACP and NHTSA has endorsed a data collection software program which DECP states are encouraged to use.

6.6 Participating agencies should have the capability to establish centralized booking or processing of all DUI arrestees.

Commentary: The ideal situation is one in which all persons arrested for DUI are taken to a single location for processing. One or two DREs could then be stationed at that location to ensure prompt access to all suspects apprehended for drug-impaired driving. However, it is feasible for a jurisdiction to have a few centralized processing facilities as long as there are enough DREs to staff them adequately and enough DUI arrests to ensure that the DREs conduct frequent evaluations.

6.7 Each location where DRE evaluations are conducted must have adequate facilities, including

A room sufficiently large to permit unobstructed administration of the Standardized Field Sobriety Tests;

A separate room that can be completely darkened for the eye examination;

Storage space for test data forms, reference documents, blood pressure kits, etc;

Access to breath testing equipment producing on-the-spot results; and

Facilities and materials for collecting blood and/or urine samples.

Commentary: Because of the unique requirements of the DEC Program, it is sometimes more economical for several agencies within a site to share DUI processing facilities. Other desirable characteristics for a DUI processing facility include

Adequate holding cells for arrestees;

Separate interrogation and report writing areas that provide privacy from the general prisoner population; and

Testing facilities that are out of main traffic patterns and allow the drug evaluation process to be performed without interruption or distraction.

6.8 Participating agencies must have access to laboratories that are capable of identifying the presence of the most commonly abused drugs when these drugs are present in sufficient concentrations to produce impairment.

Commentary: Ideally, the laboratories will also be able to identify the concentration of these drugs. In any case, the accuracy of the chemical analysis should be consistent with state-of-the-art drug testing. In other words, screening tests are not sufficient; a jurisdiction should be able to produce a confirmatory analysis. Although either blood or urine samples are acceptable, it is best if the jurisdiction has the ability to test both.

6.9 All agencies and states interested in participating in a Drug Evaluation and Classification Program must have the following endorsements:

The state governor's representative for highway safety;

The chief elected official of each political subdivision to be included in the site;

The commanding officer of each participating law enforcement agency;

The administrative judge of each court that tries people arrested for DUI within the jurisdiction;

The chief prosecuting attorney for each court in the jurisdiction; and

Representatives of any other agencies that would be involved in covering the costs of developing and sustaining the DEC Program.

DRUG EVALUATION AND CLASSIFICATION PROGRAM ADMINISTRATIVE GUIDELINES INTERNATIONAL ASSOCIATION OF CHIEFS OF POLICE

With grant assistance from the National Highway Traffic Safety Administration (NHTSA), the International Association of Chiefs of Police has developed certification standards and administers the Drug Evaluation and Classification Program. Under these administrative guidelines, it will be the responsibility of the individual and all coordinators to ensure that specific requirements of the standards are met. The staff at the IACP will be responsible for maintaining records, issuing certificates of completion, coordinating certain training-related events and maintaining and updating training materials as required.

The following procedures have been developed by the staff of the International Association of Chiefs of Police for use by agencies participating in the Drug Evaluation and Classification Program and wishing to certify drug recognition experts and instructors in their employ.

Obtaining certification as a drug recognition expert or DRE instructor ensures that an individual meets minimum requirements for training and experience as established by the IACP and the IACP Technical Advisory Panel. The Drug Evaluation and Classification Administrative Guidelines accompany the *International Standards of the Drug Evaluation and Classification Program.*

For the certification process to operate efficiently, it is recommended that coordinators at the agency, ~~and~~ state, and regional levels be identified. The responsibilities of the coordinators may include reviewing the qualifications of the candidate DREs, supplying required documentation that minimum standards have been met, and maintaining individual and program records. The coordination functions may be performed by one person or may be divided among several persons, as operational needs demand.

1. Notification of Candidate Drug Recognition Experts

When an individual has completed all agency application requirements for admission for training as a drug recognition expert, the agency shall provide the following information to the appropriate coordinator:

1. Candidate's name
2. Mailing address
3. Sponsoring agency
4. Social security number
5. Verification that candidate has satisfactorily completed a NHTSA/*IACP*-approved course in Standardized Field Sobriety Testing

In addition, the appropriate DRE coordinator shall provide the above information to the agency or individual responsible for providing training to ensure that all students meet prerequisites prior to the beginning of the training phase:

State program coordinators shall forward to the IACP staff the above information on all candidate DREs at the following address:

International Association of Chiefs of Police
Division of State and Provincial Police
515 North Washington Street
Alexandria, VA 22314

2. Obtaining Certification as a Drug Recognition Expert

All candidates for certification under the International Drug Evaluation and Certification Program must demonstrate completion of all requirements specified in Section I of the *International Standards of the Drug Evaluation and Classification Program*. Each candidate's progress toward meeting certification requirements shall be documented on the "Certification Progress Log," which shall be supplied to all appropriate DRE coordinators by the IACP staff. Each candidate shall be responsible for maintaining a certification progress log.

Completion of each step in the certification process shall be verified by the signature of at least one certified DRE instructor. Final recommendation for certification must be verified by the signatures of two certified instructors. Upon completion of all certification requirements, copies of the certification progress log shall be forwarded to the agency DRE coordinator and to the state coordinator. The state coordinator shall verify all information on the certification *progress* log and ensure that all entries are correct. The state coordinator shall forward to the IACP staff a copy of each candidate's completed certification progress log.

Upon receipt of the completed certification progress log, the IACP staff shall ensure that all necessary information is complete. Upon verifying that the information is complete, the IACP staff shall forward to the DRE state or TAP regional coordinator a certificate of completion and an identification card signifying that the candidate has met or exceeded all requirements for certification as a drug recognition expert. In the event that proper documentation is not provided, notification will be sent to the state coordinator indicating the specific reasons(s) for non-qualification.

The IACP staff shall maintain records of all certified DREs. Each record will contain the following information:

1. Name
2. Social Security Number
3. Department/agency
4. Mailing address

5. Telephone number
6. Dates of all events specified on the progress log
7. Name(s) of instructors verifying completion of training events
8. Date certificate is awarded
9. Date certification expires

3. Obtaining Certification as DRE Instructor

Candidates for certification as DRE instructors must demonstrate that they meet all requirements specified in Section II of the *International Standards of the Drug Evaluation and Classification Program.* The candidate instructor's progress toward completing certification requirements shall be documented on the form, "DRE Instructor's Certification Progress Log," which shall be supplied by IACP staff to all appropriate DRE coordinators. The individual candidate DRE instructor shall be responsible for maintaining the log.

Completion of each step in the instructor certification phase shall be verified by at least one certified DRE instructor. Upon completion of all certification requirements, copies of the DRE instructor's certification progress log shall be forwarded to the agency DRE coordinator and to the state DRE coordinator. The state DRE coordinator, after verifying that all information on the logs is complete and accurate, shall forward copies of all completed instructors' certification progress logs to the IACP staff.

Upon receipt of the instructor certification progress log, the IACP staff shall verify that all information on the log is complete. Upon verification, the IACP staff shall forward to the state coordinator a certificate of completion signifying that the candidate meets or exceeds all requirements of the Drug Evaluation and Classification Program as a DRE instructor. The IACP staff shall send notification to the state coordinators that the instructor has been certified. In the event that the instructor does not meet all requirements for certification, notification will be sent to the state coordinators indicating the specific reason(s) for non-qualification.

The IACP staff will maintain records of all certified DRE instructors. Each record will contain the following information:

1. Name
2. Social Security Number
3. Department/agency
4. Mailing address
5. Telephone number
6. Dates of all training events specified in the progress log
7. Name(s) of instructors verifying completion of training events
8. Date certificate was awarded
9. All pertinent information relating to the instructor's experience and credentials

Drug recognition expert instructors shall maintain certification as long as DRE certification is maintained. State coordinators will maintain a list of persons designated as associate instructors or as instructor trainers for the Drug Evaluation and Classification Program. In order that the list for instructors and associate instructors may be kept current and, therefore, of use to the participants, agencies hosting DRE training events (pre-schools, DRE training, instructor schools) should provide the state coordinator a list of all instructors and their instruction assignments.

4. Procedures for Recertification of Drug Recognition Experts and DRE Instructors

As specified in Section III of the *International Standards of the Drug Evaluation and Classification Program,* all drug recognition experts must be recertified every two years following original certification. DRE instructors shall maintain their instructor certification as long as DRE certification remains in effect. All applicable recertification standards for DREs shall apply to DRE instructors.

The following process will be utilized to ensure timely notification and compliance with recertification requirements:

1. Eighteen (18) months following the date of original certification, the IACP will send a renewal advisory notice to state DRE coordinators.

2. The DRE shall forward to his state coordinator evidence of completion of all recertification requirements as well as a recertification form signed by his agency coordinator. The state coordinator, after signing the recertification form, will forward a copy to IACP staff.

3. Upon notification that a person has met all requirements under section III of the *International Standards of the Drug Evaluation and Classification Program,* IACP staff shall issue a card recertifying the DRE for a period of two years.

In the event that information verifying completion of recertification requirements is not received by the IACP staff prior to the expiration of certification, the IACP staff will notify the state coordinators that certification has expired. Following expiration of certification, the DRE may renew certification without penalty for a period of one year by providing proof of completion of recertification requirements. A decertified DRE wishing to be reinstated following the expiration of the one-year grace period must complete all training and certification requirements enumerated in Section V of the *International Standards of the Drug Evaluation and Classification Program.*

5. Decertification of Drug Recognition Experts

Decertification of a drug recognition expert may take place if one or more of the following conditions exist:

1. The requirements as enumerated in Section III of the *International Standards of the Drug Evaluation and Classification Program* are not met by the individual DRE, allowing certification to lapse.

2. A DRE voluntarily requests decertification.

3. There is evidence of poor performance, inconsistent findings, or other acts on the part of the DRE that reflect discredit upon the Drug Evaluation and Classification Program.

In the case of a lapse of certification, the procedures in Section 4 of the Administrative Procedures shall be followed.

A DRE wishing to be decertified shall submit a written request through the appropriate agency and state coordinators to the IACP staff. Upon receipt of approval of the request by the state DRE coordinator, IACP staff shall remove the name of the individual from the list of certified DREs.

Agency DRE coordinators shall monitor the performance of DREs within their agencies and shall investigate complaints arising from their activities in the drug evaluation area. When, in the opinion of the agency coordinator, and with the approval of the agency head or his designee, a DRE's actions warrant decertification, the agency shall notify the state coordinator that the DRE is no longer certified within that agency.

Nothing in this procedure should be construed as to prevent an agency from following internal disciplinary or administrative personnel procedures. The IACP staff will maintain records of all decertified DREs and the reason(s) for decertification.

6. Approval of Drug Recognition Training Curricula

The National Highway Traffic Safety Administration (NHTSA) and the International Association of Chiefs of Police (IACP) have developed a course of instruction to train police officers in the techniques of drug recognition. This course of training has been adopted by the IACP as the minimum training requirement for certification for DREs and DRE instructors. NHTSA and IACP are responsible for revising and updating the DRE training curricula.

The course of instruction adopted by the IACP requires a total of seventy-two hours of classroom instruction followed by field certification during which a candidate must participate in a minimum of twelve drug evaluations. In the course of the required drug evaluations, a candidate must encounter and correctly identify subjects under the influence of at least three different categories of drugs. The complete requirements for certification as a DRE are enumerated in Section I of the *International Standards of the Drug Evaluation and Classification Program.*

In recent years, several training programs have been developed by police agencies and commercial training institutions with the aim of training individuals to detect persons impaired by drugs. A number of agencies currently utilize portions of the NHTSA/IACP approved program or variations of it in teaching officers the techniques of detecting the drug-impaired driver.

Section I of the *International Standards of the Drug Evaluation and Classification Program* requires that a candidate for certification complete "...an approved classroom training course which shall, at minimum, achieve the learning objectives as stated in the IACP approved training curriculum." The Highway Safety Committee of the IACP is charged with overseeing the operation and development of the Drug Evaluation and Classification Program. In order to maintain the high standards of the program, the committee has established the Technical Advisory Panel. Responsibilities of this panel, appointed by the IACP Highway Safety Committee, include the review of proposed alternative training programs to determine whether or not course content and learning objectives are consistent with approved standards.

Organizations wishing to submit proposed training curricula for review and approval as equivalent programs for the purpose of certifying individuals as drug recognition experts shall submit lesson plans, visual aids and any other required materials to the IACP staff. The IACP staff will submit the proposed course to the Technical Advisory Panel for evaluation. Courses that meet applicable standards and learning objectives shall be termed as equivalent courses. Completion of said courses shall qualify the candidate for certification as a DRE.