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OF
TRANSPORTATION

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DRUG EVALUATION AND CLASSIFICATION TRAINING

"THE DRUG RECOGNITION
SCHOOL"



STUDENT MANUAL

DRUG EVALUATION AND CLASSIFICATION TRAINING PROGRAM
THE DRUG RECOGNITION EXPERT SCHOOL

1993 EDITION

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TABLE OF CONTENTS

Session	Title
I	Introduction and Overview
II	Drugs in Society and in Vehicle Operation
III	Development and Effectiveness of the DEC Program
IV	Overview of Drug Recognition Expert Procedures
V	Eye Examinations
VI	Physiology and Drugs: An Overview
VII	Examination of Vital Signs
VIII	Demonstrations of the Evaluation Sequence
IX	Central Nervous System Depressants
X	Central Nervous System Stimulants
XI	Practice: Eye Examinations
XII	Alcohol Workshop
XIII	Physician's Desk Reference
XIV	Hallucinogens
XV	Practice: Test Interpretation
XVI	Phencyclidine (PCP)
XVII	Narcotic Analgesics
XVIII	Practice: Test Interpretation
XIX	Inhalants
XX	Practice: Vital Signs Examinations
XXI	Cannabis
XXII	Overview of Signs and Symptoms
XXIII	Resume Preparation and Maintenance
XXIV	Drug Combinations

XXV	Practice: Test Interpretation
XXVI	Preparing the Narrative Report
XXVII	Practice: Test Administration
XXVIII	Case Preparation and Testimony
XXIX	Classifying a Suspect (Role Play)
XXX	Transition to the Certification Phase of Training

THE DRE SCHOOL - SCHEDULE (page 1)

WEDNESDAY	THURSDAY	FRIDAY
0800-0850 SESSION I: Introduction & Overview	0800-0850 SESSION V: Continued	0800-0850 SESSION IX: Central Nervous System Depressants
0850-0900 BREAK	0850-0900 BREAK	0850-0900 BREAK
0900-1000 SESSION I: Continued	0900-1005 SESSION VI: Physiology & Drugs (Overview)	0900-1000 SESSION IX: Continued
1000-1010 BREAK	1005-1015 BREAK	1000-1010 BREAK
1010-1030 Pre-Test	1015-1110 SESSION VI: Continued	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: Continued
1130-1230 SESSION III: Development & Effectiveness of the Program	1200-1300 LUNCH	1200-1300 LUNCH
1230-1330 LUNCH	1300-1400 SESSION VII: Continued	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: Continued	1415-1700 SESSION XII: Alcohol Workshop
1450-1550 SESSION IV: Continued	1430-1515 SESSION VIII: Demonstrations of the Evaluation Sequence	
1550-1600 BREAK	1515-1530 BREAK	
1600-1630 SESSION IV: Continued	1530-1605 SESSION VIII: Continued	
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	0800-0820 QUIZ NUMBER TWO	0800-0915 SESSION XXIV: Drug Combinations	0800-1000 FINAL EXAM
0830-0915 SESSION XIV: Hallucinogens	0820-0850 SESSION XVII: Continued	0915-0930 SESSION XXIV: Continued	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: Continued	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: Continued	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: Continued	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: Continued	
1515-1530 BREAK	1530-1540 BREAK	1630-1700 QUIZ NUMBER FOUR	
1530-1630 SESSION XVII: Continued	1540-1640 SESSION XXII: Overview of Signs and Symptoms	1700-1800 BREAK	
1630-1730 SESSION XVII: Continued	1640-1650 BREAK	1800-2000 OPTION REVIEW SESSION #2	
1730-1800 BREAK	1650-1730 SESSION XXIII: Resume Preparation & Maintenance		
1800-2030 OPTIONAL REVIEW SESSION #1	1730-1800 QUIZ NUMBER THREE		

SESSION I

INTRODUCTION AND OVERVIEW

SESSION I

INTRODUCTION AND OVERVIEW

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

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

NOTE: Throughout this Manual, the term "DRE" is used to designate an individual who is specially trained to conduct examinations of suspected drug-impaired drivers. In some participating agencies, the term stands for "drug recognition expert"; in others, it means "drug recognition examiners"; and in others "drug recognition evaluator". In addition, some agencies use the terms "DRT" (for drug recognition technician) or "DRS" (drug recognition specialists). All of these are acceptable and synonymous. But for this training program, the standard term is DRE.

A. INTRODUCTION TO THE SECOND STAGE OF TRAINING: THE DRE SCHOOL

The Drug Evaluation and Classification training program focuses on a set of examination procedures. These examinations include:

- o a breath test to determine blood alcohol concentration (BAC);
- o preliminary assessments of the subject's speech, breath, appearance, demeanor, behavior, etc;
- o examinations of the subject's eyes (for nystagmus, tracking ability, ability to converge, pupil size, pupil reaction to light, etc.);
- o psychophysical evaluations of the subject, based on divided attention tests;
- o examinations of the subject's vital signs (e.g., blood pressure, pulse rate and temperature);
- o inspections of the subject's arms, neck, nasal area, oral cavity, etc. for signs of drug ingestion.

Based on these examinations, and on other articulable evidence that may emerge during contact with the subject, a trained drug recognition expert (DRE) can reach reasonably accurate conclusions concerning the general kind or kinds of drugs, or medical conditions, causing the impairment observed in the subject. Based on these informed conclusions, the DRE can request the collection and analysis of an appropriate chemical sample (blood or urine) to obtain corroborative, scientific evidence of the subject's drug use.

The DRE School provides detailed explanations of the examination procedures; careful demonstrations of these procedures, both "live" and via video tape; and, ample opportunities for the students to practice administering the examinations. By the completion of this course of instruction, students should be fully proficient in checking vital signs, conducting careful evaluations of eyes, administering divided attention tests and, in general, carrying out the procedural steps of the DRE's job.

However, there is one essential learning experience that this classroom training cannot provide. It cannot afford students an opportunity to practice examining subjects who are under the influence of drugs other than alcohol. For this reason, the classroom training only constitutes Phase I in the process of developing DRE skills. Phase II of the training (which commences upon the successful completion of this course) involves hands-on practice in an actual enforcement context, i.e., examining persons who are under arrest on suspicion of drug impairment.

Although this DRE School will not conclude with the student's immediate certification as a DRE, successful completion of this classroom training is nevertheless highly important. No one can advance to Certification Training until he or she demonstrates a mastery of basic knowledge of drug categories and their effects on the human mind and body, and of basic skills in administering and interpreting the examinations involved in the Drug Evaluation and Classification process.

Mastering the necessary knowledge and skills is not difficult, if students apply themselves diligently to study and practice. There is no reason why a student who possesses solid skills in detecting and investigating persons under the influence of alcohol cannot achieve proficiency as a DRE.

B. GOALS AND OBJECTIVES OF THE TRAINING

The ultimate goal of the Drug Evaluation and Classification Program, and of this course of instruction, is to "help prevent crashes and avoid deaths and injuries by improving enforcement of drug-impaired driving violations".

No one knows precisely how many people operate motor vehicles while under the influence of drugs, or how many crashes, deaths and injuries these people cause. But even the most conservative estimates suggest that America's drug-impaired drivers kill thousands of people each year, and seriously injure tens of thousands of others. In one study by the University of Tennessee (1988), 40% of crash-involved drivers treated at the University's Trauma Center had drugs other than alcohol in their urine. A similar study in Maryland (1986) showed that 32% of crash-injured drivers had evidence of marijuana in their blood. As law enforcement agencies improve their abilities to detect and convict these violators, fewer crashes should occur.

It should be noted that traffic crash reduction is not the only benefit that should result from an effective Drug Evaluation and Classification program. Improved investigative skills should increase society's effectiveness in combating the drug threat in general, and result in significant economic and human savings.

The goals of this classroom training, from the viewpoint of the law enforcement agencies participating in it, are three-fold:

1. To help police officers acquire the knowledge and skills needed to distinguish individuals under the influence of alcohol only from individuals who are under the influence of other drugs, or of combinations of alcohol and other drugs, or who are suffering from an injury or illness.
2. To enable police officers to identify the broad category or categories of drugs inducing the observable signs of impairment manifested by an individual.

3. To qualify police officers to progress to Certification Training.

The objectives of this course, from the viewpoint of the individual students who enroll in it, are as follows:

- o to be able to describe the involvement of drugs in impaired driving incidents.
- o to be able to name the seven broad categories of drugs, and recognize their effects on human beings.
- o to be able to describe, and administer properly, the psychophysical and physiologic examinations included in the Drug Evaluation and Classification process.
- o to be able to document the results of Drug Recognition Expert examinations.
- o to interpret the results of these examinations accurately.
- o to be able to prepare a narrative Drug Influence Report based on these examinations.
- o to be able to testify properly in typical drug evaluation cases.
- o to develop and maintain up-to-date, relevant resumes to document their qualifications as DREs.

Throughout this classroom training, and especially at its conclusion, students will be tested to assess their ability to do these things.

C. OVERVIEW OF CONTENT AND SCHEDULE

During this classroom training some the major content topics will be: the incidence of drugs in society and in vehicle operation, the development and effectiveness of the DEC Program, the DRE procedures, eye examinations, physiology and drugs, vital signs examination, Physicians Desk Reference, interviewing suspects, resume preparation, case preparation and testimony and interpreting and documenting the results of the examination. Since hands-on practice is the principal learning activity, time will be spent on conducting the eye examinations, psychophysical tests, interpreting the examination results, administering vital signs examinations, practicing the DEC procedures and simulating the drug-impaired examinations.

D. OVERVIEW OF STUDENT MANUAL

The student manual is be used as a reference and is a summary of material presented. It is imperative for you to attend every session of the DRE School in order to proceed to the certification training phase.

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 remedy 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 vessel that carries blood from the heart to the body tissues.

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, viz. 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).

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. Persons suffering from conjunctivitis have "pink eyes", 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". Crack is also known as rock cocaine.

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

See: "heroin".

DIASTOLIC

The lowest value of blood pressure. The blood pressure reaches its diastolic value when the heart is fully expanded.

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 DRTs 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.

EFFERENT NERVES

See: "Motor Nerves".

ENDOCRINE SYSTEM

The set of body glands and other tissues that produce hormones.

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.

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. This condition is sometimes reported in persons suffering from withdrawal from narcotic analgesics.

HOMEOSTASIS

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

HORIZONTAL GAZE NYSTAGMUS

A side-to-side jerking of the eyeball that occurs as the eye is turned toward the side.

HORMONES

Chemicals, produced by the body's endocrine system, that 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).

HYPERTENSION

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

HYPOTENSION

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

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.

INTRA-OCULAR

"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

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 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.

METABOLITE

A chemical break-down 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 the 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 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.

NEUROTRANSMITTERS

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 eyeball.

"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.

PARANOIA

Mental disorder characterized by systematized 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 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.

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

SFST

Standardized field sobriety test. 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 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 instrument used to apply measured amounts of external pressure to an 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 neurotransmitters 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. Example: each time a person hears a telephone ring, he or she "sees" a flash of blue 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, and blood is sent surging into the arteries.

TACHYCARDIA

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

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 are elevated.

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.

SESSION II

DRUGS IN SOCIETY AND IN VEHICLE OPERATION

SESSION II

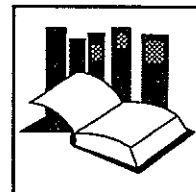
DRUGS IN SOCIETY AND IN VEHICLE OPERATION

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

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

A. Definitions and Categories of Drugs

The word "drug" means many things to many people. The word is used in a number of different ways, by different people, to convey some very different ideas.



Some Examples

- (1) From Webster's Seventh New Collegiate Dictionary, 1971. "A drug is a substance used as a medicine or in making medicines."

As a police officer, would you agree that all of the things that you consider to be "drugs" have "medicinal value"? Can you think of any substances that people abuse illegally that would not be used as medicines?

- (2) From Webster's, again. "A drug is a narcotic substance or preparation."

Webster's further defines a "narcotic" as (among other things) "something that soothes, relieves or lulls". Would you agree that all "drugs" are narcotics? Can you think of any "drugs" that definitely do not soothe their users?

- (3) From Random House's College Dictionary, 1982. "A drug is a chemical substance administered to a person or animal to prevent or cure disease or otherwise to enhance physical or mental welfare."

This definition would appear to exclude any "drug" that is harmful in any way. Can you think of any "drugs" that have no value in treating disease or enhancing welfare?

- (4) From Random House, again. "A drug is a habit-forming medicinal substance, especially a narcotic."

From your experience, do you think that all "drugs" are habit-forming? Can you think of any that are not?

From a law enforcement perspective, none of these "dictionary definitions" seems completely suitable. Each of them appears to exclude some substances whose users represent threats to society and violators of its laws. Each definition also seems to include some substances that, ordinarily, would not call for any enforcement action.

For purposes of this training, a simple, enforcement-oriented definition is needed:

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

This definition is adapted from the California Vehicle Code, Section 312, and reflects the traffic-safety orientation of this training program.

It is worth noting that this simple, enforcement-oriented definition excludes many substances that physicians and others would consider "drugs". For example, nicotine (cigarettes) and acetyl salicylic acid (aspirin) would not be considered "drugs" for purposes of this training. Similarly, this definition includes as "drugs" many substances that physicians wouldn't ordinarily think of when they hear the word. Model airplane glue, for example, is a "drug" for purposes of this training.

Under this simple definition, there are seven broad categories of drugs.

Central Nervous System Depressants

Examples

Alcohol
Barbiturates
Anti-Anxiety Tranquilizers



Central Nervous System Stimulants

Examples

Cocaine
Amphetamines

Hallucinogens

Examples

LSD
Psilocybin
Peyote

Phencyclidine (PCP)

This category consists of the drug, PCP, and its various analogs or "chemical cousins".

Narcotic Analgesics

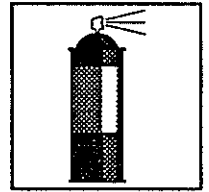
Examples

Heroin
Codeine
Demerol

Inhalants

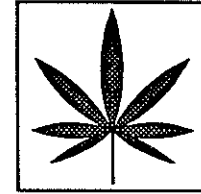
Examples

Glue
Gasoline
Aerosols



Cannabis

This category includes the various forms and products of Cannabis plants (e.g., marijuana, hashish, etc.)



Each category produces a different set of effects on the human mind and body. Each category exhibits different signs of drug influence, signs which come to light in the Drug Evaluation and Classification examinations. Each category also includes drugs that are widely abused.

B. Incidence and Characteristics of Drug Use in America

Estimates of the number of American drug users vary widely and are difficult to pinpoint with any accuracy. It is known that one drug, alcohol, is (at least occasionally) used by (at least) a majority of adults in this country. Despite the fact that almost all of the alcohol consumed in this country is legally manufactured -- and taxed -- under fairly close governmental scrutiny, experts disagree as to how many people abuse alcohol, how much they consume, how frequently, etc. Knowledge of consumption patterns of other drugs is even less exact, since these drugs often are produced and sold illegally.

Nevertheless, virtually all experts agree that millions of Americans use drugs other than alcohol. The National Institute on Drug Abuse estimated (in 1988) that more than 20 million Americans have used cocaine, and also estimated (in 1985) that 29 million Americans are regular users of marijuana. In an article published in February, 1989, the Washington Post indicated that several million Americans appear to use amphetamines; that same article reported an alarming increase in the use of Methamphetamine, or "Crank" in recent months. Federally-sponsored surveys during the late 1970's and early 1980's put the estimated number of Hallucinogen users at one million; however, due to the recent upsurge in popularity of LSD, especially among high school students, that figure probably is outdated. The number of Narcotic addicts is estimated to be one-half million.

Certain prescription drugs evidently are widely used. As reported in the Washington Post (Tuesday, February 17, 1987) there were sixty-one million prescriptions for Valium, Librium and similar central nervous system depressants written in the United States during 1985.

One fact that is abundantly clear is that many drug users don't stick with only one substance, but instead routinely ingest more than one drug category at a time. This behavior is called "poly-drug" use (the prefix "poly" derives from the Greek word for "many"). Some very commonly-abused combinations of drugs include:

- o Alcohol and virtually any other drug
(for example, out of 173 drivers arrested by LAPD on suspicion of being under the influence of drugs, 81 -- or 47% -- had consumed alcohol and some other drug).
- o Marijuana and PCP
(A very common way of ingesting PCP is to sprinkle it on a marijuana cigarette and smoke it. The user then automatically ingests both PCP and Cannabis.)
- o Cocaine and Heroin
(This combination has its own "street name": it is commonly called a "speedball".)
- o Heroin and Amphetamine
(This combination sometimes is called a "poor man's speedball".)
- o Heroin and PCP
(Sometimes called a "fireball".)
- o "Crack" Cocaine and PCP
(Sometimes called "space base".)
- o "Crack" cocaine and marijuana
(Sometimes called "primo".)
- o "Crack" and Methamphetamine
(Sometimes called "croak".)

The practice of polydrug use is so common that a drug recognition technician should expect to encounter many suspects who are under the influence of more than one category of drugs. Indeed, at some times and places, polydrug use may be more common than single drug use.

Drug use remains particularly common among teenagers and young adults. In its 1988 National High School Senior Survey, the National Institute on Drug Abuse (NIDA) found that one-third of the seniors in the class of '88 had smoked marijuana during their senior year. The USA Today reported (on September 17, 1987) that 70% of high school coaches believe that drug use among their athletes is a serious problem. In 1987, NIDA reported that about 30% of college seniors have tried cocaine.

C. Incidence of Drug-Impaired Driving

Accurate data on the frequency with which people drive while under the influence of drugs are very hard to come by. First of all, many impaired drivers are never detected. Secondly, since many drug users also drink alcohol, when they are stopped for impaired driving they may be arrested (and tabulated in statistics) as alcohol-impaired drivers only. Thirdly, when they are involved in crashes, they may not be tested chemically for drugs other than alcohol.

Nevertheless, some limited studies have been conducted that suggest that drug-impaired driving is a problem of significant proportions.

- (1) A North Carolina study of 600 drivers killed in single-vehicle crashes during 1978-81 showed that 14% had drugs other than alcohol in them at the time of the crash. These drugs included marijuana; barbiturates and methaqualone (central nervous system depressants); cocaine and amphetamines (central nervous system stimulants); PCP; and, opiates (narcotic analgesics). It is especially noteworthy that most of the fatally-injured drug-using drivers in this study also had consumed alcohol. In fact, 10% of all of these fatally-injured drivers had blood alcohol concentrations of 0.10% or higher and also had drugs other than alcohol in them.
- (2) A study was conducted in California of young (15-34 years old) male drivers killed in crashes during 1982 and 1983. This study covered 440 such drivers. More than half (51%) were found to have some drug or drugs other than alcohol in them. The most prevalent drug other than alcohol was cannabis, which was found in 37% of these young dead drivers. Nearly one-third of these 440 dead drivers (30%) had alcohol and cannabis in them.
- (3) In what is probably the most comprehensive study of this kind conducted to date, the University of Tennessee Medical Center analyzed the urine samples of crash-injured drivers for a broad spectrum of drugs, and found that forty percent had evidence of drugs other than alcohol.

Topics for Study

1. What does the term "drug" mean, as it is used in this course?
2. What are the seven categories of drugs? To which category does alcohol belong? To which category does cocaine belong?
3. What does "polydrug use" mean?
4. What is a "speedball"? What is "Space Base"?
5. What percentage of crash-injured drivers had drugs in their urine, in the University of Tennessee study?
6. According to NIDA, what proportion of high school seniors smoke marijuana during their senior year?

SESSION III

DEVELOPMENT AND EFFECTIVENESS OF THE DRUG EVALUATION
AND CLASSIFICATION PROCESS

HS 172 R4/93

SESSION III

DEVELOPMENT AND EFFECTIVENESS OF THE DRUG EVALUATION
AND CLASSIFICATION PROCESS

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

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

A. Origin and Evolution of the Program

The Drug Evaluation and Classification Program was developed by personnel of the Los Angeles Police Department. The initial impetus for the program stemmed from the frequent encounters, by experienced traffic enforcement officers, with drivers who were clearly impaired but whose blood alcohol concentrations were very low or zero. The logical suspicion was that these drivers were under the influence of drugs other than alcohol. But obtaining convincing evidence to back up that suspicion was not easy. Occasionally, officers succeeded in having physicians examine their low-BAC suspects, sometimes resulting in a medical diagnosis of drug influence. But medical personnel typically received little or no training in the recognition of specific signs of drug impairment, particularly at street-level doses; therefore, they often were unable or reluctant to offer a judgment about a suspect's condition. As a result, many drivers who almost certainly were under the influence were not prosecuted or convicted.

Two sergeants were instrumental in organizing a program to help police officers develop the skills needed to perform their own assessments of drug-impaired drivers. One was Dick Studdard, a traffic officer, the other was Len Leeds, a narcotics officer. They undertook independent research by consulting with physicians, enrolling in relevant courses, studying text books and technical articles, etc. And, they secured management-level support within LAPD to continue and to accelerate the research and development effort. With the assistance of many others, Sergeants Studdard and Leeds ultimately succeeded in developing a drug recognition program based on a three-step process:

STEP ONE

Verify that the suspect is impaired, and verify that the suspect's blood alcohol concentration is not consistent with the degree of impairment that is evident.

STEP TWO

Determine whether the impairment is drug-related or medically-related (i.e., injury or illness).

STEP THREE

Use proven diagnostic procedures to determine the category (or combination of categories) of drugs that is the likely cause of the impairment.

In 1979, the Drug Recognition program received the official recognition of the LAPD.

Persons unfamiliar with drugs sometimes wonder why it is necessary to use an elaborate set of diagnostic procedures to point toward the likely category of drugs. At first glance, it might seem that the easily-observable inconsistency between the suspect's impairment and his or her BAC would be sufficient. In other words, if the suspect is obviously impaired, and if the alcohol level in the suspect's blood is not enough to account for that impairment, why not simply obtain a blood sample and analyze it for drugs? For several reasons, this simplistic approach would not work.

- o The request for the blood sample should be based on (at least) the strongest articulable evidence of drugs that is available. The mere inconsistency between BAC and observable impairment might not be deemed (by courts, or by motor vehicle licensing agencies) as sufficient to justify the subsequent chemical test. For example, it could be argued that the suspect is ill or injured, or is simply very susceptible to the effects of even low doses of alcohol. It is preferable if the officer who initiates the chemical test for drugs can articulate a credible basis for believing that those drugs are present.
- o The suspect may simply refuse to submit to the blood test. Although that action might put the suspect's driver's license in jeopardy of suspension or revocation, it also will deny the prosecution access to the scientific evidence of drug involvement. Conviction or acquittal in such a case may hinge on the officer's ability to submit detailed and convincing testimony concerning the signs pointing toward a specific category or categories of drugs.
- o Chemical tests of blood or urine usually disclose only whether or not a particular drug was recently used. The chemical test cannot be relied upon to determine whether the drug was psychoactive in the suspect at that time (i.e., whether the suspect was "under the influence" of the drug, within the meaning of the law). The DRE is needed to establish the fact that the drug was indeed causing impairment.
- o Analysis of blood (or urine) samples for "drugs" can be very expensive, and may require a large volume of the blood. Practical constraints require that the officer requesting the chemical analysis be able to point the laboratory technician toward the type of drugs most likely to be found in the sample.



- o There is always the possibility that a person suspected of drug impairment is actually suffering from an illness or injury requiring medical attention. If the suspect's blood simply is drawn for subsequent analysis, and he or she is not examined by someone qualified to recognize the presence -- or absence -- of symptoms of drug impairment, the medical problem may not be discovered until it is too late. Drug recognition experts take justifiable pride in the numerous instances where they have secured prompt medical care for persons initially suspected of drug abuse.

B. Evidence of Program Effectiveness

Proof of the effectiveness of the drug evaluation and classification program began to be accumulated from the very outset of the program: LAPD personnel demonstrated that they could conduct examinations that led directly to the conviction of drug-impaired drivers and other drug-law violators. And, they demonstrated that they could train others to conduct these examinations successfully.

Scientific evidence that the examinations provide accurate indicators of drug categories began to be accumulated in the early 1980's. The National Highway Traffic Safety Administration sponsored a controlled, laboratory evaluation of the LAPD drug recognition procedures. The evaluation was conducted by researchers from Johns Hopkins University, assisted by senior drug recognition experts from LAPD. The researchers recruited volunteers who agreed to consume a variety of drugs, and other substances, under the researchers' supervision. During each experimental session, each volunteer swallowed a "pill" and smoked a "cigarette". Subsequently, each volunteer was examined, independently, by four LAPD DRES.

The "pills" given to volunteers contained one of the following:

- o a placebo (i.e., no drug at all)
- o secobarbital (a Central Nervous System Depressant)
- o valium (i.e., diazepam -- another Central Nervous System Depressant)
- o desoxyn (i.e., methamphetamine sulfate -- a Central Nervous System Stimulant)

The "cigarette" contained marijuana or a placebo (i.e., no drug) marijuana that either actually contained THC or from which the THC had been removed (i.e., a placebo).

No combinations of drug categories were administered to any volunteer on any session. That is, if a volunteer received a marijuana cigarette, then that volunteer received a placebo pill. If the volunteer received a "loaded" pill (i.e., with a drug), then his or her cigarette was a placebo. Some volunteers, on some sessions, received no drug at all: i.e., both the "pill" and the "cigarette" were placebos.

Two different dose levels of marijuana, diazepam and methamphetamine sulfate were used. That is, some of the marijuana cigarettes were "weak", some were "strong". Similarly, some of the diazepam and methamphetamine sulfate pills were "weak", some "strong". All of the secobarbital pills were "strong". Note, however, that even the "strong" dose levels were a good deal weaker than the drugs typically abused by impaired drivers encountered by police officers.

A most important condition of this laboratory experiment is that neither the volunteers nor the LAPD officers knew what drugs the volunteers had received. Also, the DRE's were not allowed to "compare notes" concerning their examinations of the suspects. Each DRE conducted his or her examinations in a separate room, and each had to reach an independent judgment as to what category (if any) of drug was present.

The DREs' performance in the laboratory experiment was excellent. They correctly classified 95% of the placebo-only subjects as "not impaired". Conversely, they correctly classified 98.7% of the subjects who received "strong" drug doses as "impaired". And, they correctly identified the category of drugs for 91.7% of those "strong"-dose subjects.

The DREs were less successful in identifying the volunteers who received "weak" drug doses. For example, they classified as "impaired" only about one-third of the subjects who received "weak" marijuana cigarettes, and only about one-sixth of those who received "weak" methamphetamine sulfate pills. However, it is unlikely that those "weak"-dose subjects would have been stopped by officers, if they actually had been driving.

NHTSA followed up the laboratory experiment by sponsoring a Field Validation Study, in Los Angeles. Arrangements were made to have an independent laboratory analyze blood samples drawn from persons actually arrested on suspicion of drug-impaired driving. Any suspect who was involved in a crash was excluded from the study, since injuries could have confounded the drug examination. Similarly, any suspect who refused to submit to the blood test was excluded, since there would have been no way to substantiate or refute the DRE's conclusions.

Ultimately, 173 suspected drug-impaired drivers were included in the Field Validation Study. Each was examined by an LAPD DRE, and subsequently provided a blood sample for analysis by the independent laboratory.

A number of important facts emerged from this field validation study:

1. When a trained drug recognition expert concludes that a suspect is under the influence of drugs, chances are very good indeed that the suspect actually has drugs in his or her body. Only one of the 173 suspects was found to have no alcohol or other drug. Only ten others were found to have

alcohol only. Thus, 93.6% of the suspects were confirmed to have drugs other than alcohol in their bodies.

2. Polydrug use is very common. Only 27% of the suspects had consumed exactly one drug. This includes the 10 suspects who had alcohol only. But 72% were found to have two or more drug categories in their system. Among the more common combinations were the following:

- o Alcohol and PCP (23 suspects)
- o Alcohol and Cannabis (19 subjects)
- o Alcohol and PCP and Cannabis (18 subjects)
- o Cannabis and PCP (20 subjects)

3. The independent blood analyses confirmed the DREs' opinions in most cases. Overall, for more than nine out of ten suspects (92.5%), the blood test confirmed the presence of at least one drug category "predicted" by the DREs.

4. Confirmation rates varied among the categories, as follows:

<u>Category</u>	<u>Percent Confirmed by Blood</u>
PCP	92%
Narcotic Analgesics	85%
Cannabis	78%
Depressants (other than alcohol)	50%
Stimulants	33%

5. The relatively low confirmation rates for Depressants and Stimulants may have been due to limitations in the laboratory rather than because of misjudgments by the DREs. For example, the laboratory analyzed the blood only for the subcategories of Depressants known as the Barbiturates and the Benzodiazepines; there are many Depressant drugs that do not belong to those two groupings. In addition, the blood samples were not frozen prior to their shipment to the laboratory. Unfortunately, cocaine continues to metabolize in unfrozen blood samples. Therefore, it is possible that, in some samples obtained from Stimulant abusers, the cocaine simply disappeared before the samples were analyzed.

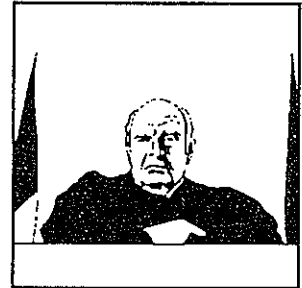
Since the initiation of the Drug Evaluation and Classification Program in Phoenix late in 1987, the Arizona Department of Public Safety's Central Regional Crime Laboratory has maintained records of the toxicologic analyses corresponding to DREs' opinions. Based on 526 cases reported by December, 1990 an overall laboratory confirmation rate of 86.5% had been achieved.

The overall conclusion of both the Laboratory and Field Studies is that the Drug Evaluation and Classification Program is a worthwhile tool for enforcement of drug-impaired driving. The tool is not 100% accurate, especially in a climate of polydrug use. However, it will furnish reliable evidence of the link between a particular suspect and a particular category of drugs in much more than a majority of cases.

C. Case Law Review

The Drug Recognition Expert Program is receiving increasingly favorable attention in court. During 1991, courts in Arizona and New York held that Drug Evaluation and Classification procedures meet the FRYE standards for evidence to corroborate, or attack, the issues of a suspect's impairment. The Frye standard is that set by the U.S. Supreme Court to govern the admissibility of "new" scientific evidence. In effect, the Arizona and New York courts took judicial notice of the Drug Recognition Expert Program, so that it is no longer necessary -- within the jurisdictions of those specific courts -- to introduce expert scientific testimony to secure the admissibility of the results of a drug influence examination.

The applicable courts are (1) the Municipal Court of the City of Tucson, County of Pima, State of Arizona (acting in "State of Arizona vs. Dayton Johnson and Samuel Rodriguez, et al.", numbers 90056865 and 90035883); and, (2) the District Court of Suffolk County, New York (acting in "The People of the State of New York vs. Mary Quinn", Docket Number 3130122). Note that in neither Arizona nor New York does the ruling apply State-wide. However, hopes are high that, via the appellate process, the two States' Supreme Courts ultimately will uphold the lower courts' rulings, so that Statewide judicial notice of DRE procedures will be secured. Similarly, it is reasonable to expect that other States will follow Arizona's and New York's lead.



One key element of the drug influence examination -- namely, horizontal gaze nystagmus -- has been found to meet the Frye standard by several State Supreme Courts. The first case that led to State-wide judicial notice of HGN is commonly known as "State vs. Blake" (718 P.2d 171; Arizona, 1986). See also "State vs. Superior Court of County of Cochise, 149 Ariz 269, 718 P.2d 171, 60 ALR 4th, 1103). In this landmark ruling, the Arizona Supreme Court also set standards governing the training of officers who would be qualified to testify about HGN. The court also explicitly ruled that HGN cannot be used to establish BAC quantitatively in the absence of a chemical test.

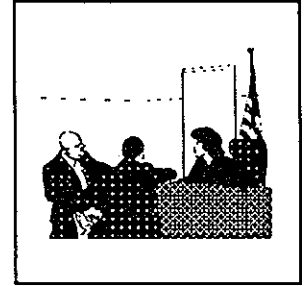
TO SUMMARIZE:

The prevailing trend in court is to accept HGN as evidence of impairment, provided the proper scientific foundation is laid. However, courts consistently reject any attempt to derive a quantitative estimate of BAC from nystagmus. Keep in mind that neither nystagmus nor any other elements of the drug recognition examination are intended to substitute for chemical testing. It is true that there is an approximate, statistical relationship between BAC and angle of onset, but this approximate relationship is not sufficiently reliable to permit BAC "prediction" in any individual case.

HGN COURT DECISIONS

Other court decisions -- both favorable and unfavorable -- concerning HGN as a field sobriety test are discussed below.

PEOPLE vs. LOOMIS (California, 1984)
156 Cal. App. 3d 1, 203 Cal. Rptr. 767 (Cal. Super. 1984)



The arresting officer attempted to testify to his opinion concerning the suspect's BAC, in quantitative terms, based solely on the angle of onset of HGN. The suspect had refused to submit to a chemical test. The court held that the officer was not entitled to testify as either a lay or expert witness about HGN, or to give his opinion about the defendant's BAC. The court held that HGN is a new form of scientific evidence, that will be allowed only when there is a preliminary showing of its general acceptance in the scientific community. Moreover, it was clear from the officer's testimony that he had not been formally or properly trained in HGN, and didn't really understand how the test is to be given.

STATE vs. DAVIDSON (Maryland, 1985)
Circuit Court for Montgomery County, Criminal No. 36521, April 25, 1985.

The court held that it is permissible to use HGN as a field test solely to establish probable cause for arrest. However, the court concluded that HGN does not possess the degree of reliability or acceptance in the scientific community to permit its use as substantive evidence of guilt. The court also held that HGN cannot be used, over the defense's objection, as evidence of the defendant's BAC.

People vs. Colorado (Colorado, 1986)
County Court, County of Boulder, Case No. 85T10439

The court denied a defense motion to suppress HGN evidence, and ruled that the officer could testify to the results of all field sobriety tests, including HGN. In this case, the officer made no attempt to relate HGN to a quantitative estimate of BAC.

STATE vs. REED (Oregon, 1986)
732 P.2d 66 (Or. App. 1987)

The prosecution sought to have the appellate court take judicial notice of HGN, but the court refused. The court held that the prosecution did not offer sufficient expert testimony and evidence to establish the scientific reliability of HGN.

STATE vs. RICHARDS (New Hampshire, 1987)
Merimack, SS, Superior Court 85-5-391, September 16, 1987)

The Superior Court held that HGN meets the Frye standards for admissibility of scientific evidence. However, the court found that HGN is not admissible as a quantitative indicator of BAC.

STATE vs. BARKER (West Virginia, 1988)
366 S.E.2d 642 (W.Va. 1988)

The prosecution attempted to introduce HGN as evidence of a specific BAC. The court ruled that it was not admissible. The court did not explicitly rule on the basic admissibility of HGN as evidence of impairment; however, the court stated that, if evidence of HGN's scientific reliability were introduced, the test probably would be admitted as evidence that the defendant was under the influence.

STATE vs. CLARK (Montana, 1988)
762 P.2d 853 (Montana, 1988)

The court ruled that HGN results may be admitted at trial. This ruling was not based on the Frye standards, but on more "liberal" rules of evidence: the court held that all scientific evidence should be admitted unless it is "exaggerated popular opinion". In this case, no attempt was made to infer a quantitative estimate of BAC from the angle of onset.

MIDDLETON vs. STATE (Arkansas, 1989)
780 S.W.2d 581 (Ark.App. 1989)

The court held that the results of an HGN test could not be admitted into evidence at a DWI trial to prove a specific BAC level. In addition, the court held that the police officer's "testimony was insufficient to establish that gaze nystagmus testing is reliable and generally accepted in the scientific community".

ROSS vs. STATE (Georgia, 1989)
386 S.E.2d 721 (Ga.App. 1989)

The court held that the results of an HGN test could be admitted into evidence at a DWI trial as part of the "series of observations" made by a police officer to determine if a driver was under the influence of alcohol. There was no mention in the case of using the results of the HGN test to prove a specific BAC level.

STATE vs. WHEELER (Missouri, 1989)
764 N.W.2d 523 (Mo.App. 1989)

The HGN test could not be admitted into evidence at a DWI trial, since the State did not present a sufficient foundation for the court to determine the scientific reliability of the test.

UNITED STATES vs. VAN GRIFFIN (U.S. 9th Circuit Court, 1989)
874 F.2d 634 (9th Cir. 1989)

In this case involving DWI on Federal park lands, the court held that HGN test results could be admitted into evidence, as part of the results of a series of tests performed on the driver to determine if he or she was under the influence of alcohol. The issue of whether the HGN test could be used to establish a specific BAC level was not addressed in the case.

STATE vs. GRIER (Alaska, 1990)
791 P.2d 627 (Alaska App. 1990)

Court of appeals held that 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, 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 vs. ARMSTRONG (Louisiana, 1990)
561 So.2d 883 (La.App. 2 Cir. 1990)

Court held that the "HGN test meets the standards of admissibility in Frye and, with a proper foundation, may be admitted as evidence of intoxication." The court did not directly address the issue of whether HGN test results could be admitted into evidence to establish a specific BAC level.

STATE vs. MURPHY (Iowa, 1990)
451 N.W.2d 154 (Iowa, 1990)

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 were not used to determine a specific BAC level. The court considered HGN to be one of the standard field sobriety tests law enforcement officers administer to persons suspected of DWI. The officer in the case was properly trained to administer the HGN test and other field sobriety tests. 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 were objective in nature.

STATE vs. BRESSON (Ohio, 1990)
554 N.E.2d 1330 (Ohio 1990)

This State Supreme Court ruling reversed the 1988 finding of the Ohio 10th Appellate District court, that had refused to admit HGN evidence in the Bresson case. The Supreme Court held that HGN test results 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 HGN could not be used to prove a specific BAC level.

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).
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7. Burnes & 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).

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Topics for Study

1. State four reasons why it is important not to rely simply on a chemical test to establish a suspect's drug impairment.
2. What categories of drugs were included in the Johns Hopkins Laboratory Evaluation?
3. In what percentage of cases in the Los Angeles field validation study did blood tests confirm the DREs' opinion that PCP was present?
4. What percentage of suspects were found to be polydrug users in the Field Validation Study?
5. What was the landmark State Supreme Court case that upheld the use of HGN as evidence of impairment?
6. What do we call the standards for admissibility of scientific evidence, set by the U.S. Supreme Court?
7. In which two States were Drug Evaluation and Classification procedures first found to meet those standards of scientific evidence?

SESSION IV

OVERVIEW OF DRUG RECOGNITION EXPERT PROCEDURES

HS 172 R4/93

SESSION IV

OVERVIEW OF DRUG RECOGNITION EXPERT PROCEDURES

Upon successfully completing this session, the participants 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 session.

A. Components of the Drug Recognition Expert Procedure.

The Drug Recognition Expert Procedure is a systematic, standardized method of examining a suspect to determine:

- (1) Whether the suspect is impaired; and if so,
- (2) Whether the impairment relates to drugs or a medical condition; and if drugs,
- (3) The category or combination of categories of drugs that is the likely cause of the impairment.

It is a systematic process because it is based on a complete set of observable signs and symptoms that are known to be reliable indicators of drug impairment. A drug recognition expert never reaches a conclusion based on any one element of the examination, but instead on the totality of facts that emerge. These facts are obtained from careful observations of the suspect's:

- o appearance
- o behavior
- o performance of psychophysical tests
- o eyes
- o vital signs
- o etc.

The process is standardized in that it is conducted in exactly the same way, by every drug recognition expert, for every suspect. A drug recognition expert never leaves out any step in the examination, even if it is not expected to provide a positive indicator of the type of drugs that the expert may suspect. The expert also never modifies the examination by including some unproven "indicators" that he or she thinks may be helpful.

Standardization is very important, because it helps to:

- o avoid errors of omission or commission
- o promote professionalism among drug recognition experts
- o secure acceptance in court

The Drug Recognition Expert Procedure can be broken down into twelve major components. The checklist on the next page lists the twelve components in the sequence in which they must be performed. Always follow the checklist when conducting an examination.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

DRUG EVALUATION AND CLASSIFICATION PROGRAM

DRUG INFLUENCE REPORT CHECKLIST

- _____ 1. Breath alcohol test
- _____ 2. Interview of arresting officer
(Note: Gloves must be worn from this point on.)
- _____ 3. Preliminary examination and first pulse
- _____ 4. Eye examinations
- _____ 5. Divided attention tests:
 - _____ Romberg balance
 - _____ Walk and turn
 - _____ One leg stand
 - _____ Finger to nose
- _____ 6. Vital signs and second pulse
- _____ 7. Dark room examinations and ingestion examination
- _____ 8. Check for muscle tone
- _____ 9. Check for injection sites and third pulse
- _____ 10. Interrogation, statements, and other observations
- _____ 11. Opinion of evaluator
- _____ 12. Toxicological examination

1. The Breath Alcohol Test, to determine the suspect's blood alcohol concentration (BAC).

By obtaining an accurate and immediate measurement of BAC, the drug recognition expert can determine whether alcohol may be contributing to the suspect's observable impairment, and whether the concentration of alcohol is sufficient to be the sole cause of that impairment.

It is always possible that a person suspected of being under the influence of drugs other than alcohol may actually have consumed only alcohol. However, it is also very common to find that a suspect has consumed alcohol and other drugs.

2. The Interview of the Arresting Officer, to take advantage of the things that he or she may have seen or heard during earlier contact with the suspect.



Most arresting officers are not as knowledgeable about drugs as are drug recognition experts. The arresting officers may have uncovered some drug paraphernalia, or overheard the suspect using drug-related "street" terms, without recognizing their significance. A few minutes spent in a careful discussion with the arresting officer can alert the drug recognition expert to the most promising areas of investigation to be explored with the suspect.

3. The Preliminary Examination, which is a structured series of questions, specific observations and simple tests that provides the first opportunity to examine the suspect closely and directly.

One major purpose of the preliminary examination is to determine if the suspect may be suffering from an injury or some other condition not necessarily related to drugs. Another major purpose is to begin systematically assessing the suspect's appearance, behavior, etc. for signs of possible drug influence.

4. The Examinations of the Eyes, which include horizontal gaze nystagmus, vertical nystagmus and a check for lack of convergence.

Certain categories of drugs induce nystagmus, an involuntary jerking that may occur as the eyes gaze to the side or as they are elevated. The presence of nystagmus, and the point at which it becomes observable, can shed light on the possible presence of those drugs and the extent to which they may be affecting the suspect. The inability of the eyes to converge toward the bridge of the nose also gives evidence of the possible presence of certain types of drugs.

5. The Divided Attention Psychophysical Tests, which include the Romberg Balance; the Walk and Turn; One Leg Stand; and, the Finger to Nose.

The suspect's performance of these tests produces articulable evidence of his or her psychophysical impairment. The specific errors of omission or commission may point toward the categories of drugs that are behind that impairment.

6. The Vital Signs Examinations, which include systematic checks of the suspect's blood pressure; pulse rate; and, temperature.

Certain categories of drugs may elevate blood pressure, pulse rate and raise the body temperature. Other drugs would have precisely the opposite effects. Vital signs examinations thus provide much valuable evidence of the presence and influence of a variety of drugs.

7. The Dark Room Examinations, which include systematic checks of the size of the pupils of the suspect's eyes; the reaction of the pupils to light; and, evidence of ingestion of drugs by nose or mouth.

Certain categories of drugs affect the eyes, and especially the pupils, in predictable ways. By examining the eyes under carefully controlled lighting conditions, important evidence of those drugs may be obtained.

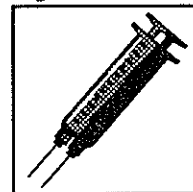
8. Examination for Muscle Tone

Certain categories of drugs will cause the muscles to become hypertense, and thus very rigid. Some other categories may cause the muscles to become very loose and flaccid.

Begin with the left bicep then move towards the left wrist to determine if the muscle is flaccid, normal or rigid.

9. Examination for Injection Sites, e.g., via hypodermic needles.

Certain users of certain categories of drugs routinely or occasionally ingest their drugs via injection. Evidence of needle use (scars, "tracks", etc.) may be found on veins along the neck, arms, legs, etc.



10. Suspect's Statements and Other Observations.

Based on the nine previous components of the drug examination, the drug recognition expert should have formed at least an articulable suspicion as to the category or categories of drugs that may be present. The expert then can proceed, in full conformance with the suspect's

Constitutional rights, to attempt to interview the suspect concerning the drug or drugs involved.

11. Opinions of the Evaluator

Based on all of the evidence and observations obtained during the preceding ten steps, the drug recognition expert should be able to reach an informed conclusion concerning:

- o Whether the suspect is under the influence of a drug or drugs; and if so,
- o The category or combination of categories of drugs that is the probable cause of the suspect's impairment.

These conclusions should be documented, along with a narrative capsule summary of the observed facts that led to the conclusions.

12. The Toxicological Examination, which is a chemical test or tests that can provide scientific, admissible evidence to substantiate the drug recognition expert's conclusions.

B. General Guidelines for Interviewing the Arresting Officer

In most cases, the people you examine on suspicion of drug impairment will not be people whom you arrested. Some other officer usually will have had the first contact with the suspect, and will have made the arrest. The charge or charges of arrest may vary widely, and may or may not involve a traffic-related offense. In any event, the situation usually will be that the arresting officer (or someone else) recognizes that the suspect may be impaired, has some reason to believe that drugs other than alcohol may be contributing to the impairment, and summons you to conduct an examination of the suspect.

In a particular case, the arresting officer may happen to be quite knowledgeable about drugs and may have some very well-informed suspicions as to what types of drugs the suspect may be using. In another case, the arresting officer may not have the slightest idea as to the kinds of drugs that may be involved. But in all cases there is the possibility that the arresting officer may have seen, or heard, or smelled or uncovered something that could be a significant clue of drug influence to a trained drug recognition expert. A few minutes spent in a careful, systematic interview of the arresting officer may supply the DRE with some very important insights as to the categories of drugs most likely to be found in the particular case at hand.

The key concept here is that the interview be systematic. The DRE shouldn't simply ask the arresting officer an open-ended question such as "What do we have here?" The arresting officer may not be sufficiently knowledgeable about drugs to recognize what is relevant, and what is not. Instead, the DRE should inquire in a logical sequence as to the suspect's behavior, statements and any physical evidence that may have been uncovered.

Inquiries concerning the suspect's behavior

- (1) Was the suspect operating a vehicle?
(This may help to establish whether the implied consent law applies to this particular case, and also serve to identify whether potential traffic law violations may be relevant.)
- (2) What vehicle/operator actions, maneuvers, etc. were observed?
(This may disclose evidence of impaired divided attention ability, relaxed inhibitions, etc.)
- (3) Was there a collision?
(This can indicate whether the suspect may have suffered injuries that could confound the drug examination.)
- (4) Was the suspect observed smoking, drinking or eating?
(All of these are common means of ingesting various drugs.)
- (5) Was the suspect apparently inhaling any substance?
(Another common method of ingesting certain drugs.)
- (6) How did the suspect respond to the arresting officer's command to stop?
(Actions during the stopping sequence may also disclose indicators of impairment.)
- (7) Did the suspect attempt to conceal or throw away any items or materials?
(Such materials may have been drugs or drug-related paraphernalia.)
- (8) What has been the suspect's attitude and demeanor during contact with the arresting officer?
(This information can be very relevant to the DRE's own safety, and can also shed light on the kinds of impairment the suspect may be experiencing.)

Inquiries concerning the suspect's statements

- (9) Has the suspect complained of an illness or injury?
(An illness or injury could confound the drug examination, but could also suggest the effects of certain types of drugs.)

- (10) Has the suspect used any "street terms" or slang associated with drugs or drug paraphernalia?
(Persons who use such terms are likely to be users of the drugs to which the terms relate.) NOTE: The arresting officer might not recognize "street terms" for what they are. It may be useful to follow up this question by asking the officer whether the suspect used any unusual or unfamiliar words or phrases.
- (11) How has the suspect responded to the arresting officer's questions?
(Impairment may be evident, in a variety of ways, from the manner of the suspect's responses.)
- (12) Does the suspect's speech appear to be slurred, slow, rapid, thick, mumbled, incoherent, etc?
(Various types of drugs may affect speech in various ways.)
- (13) What, specifically, has the suspect said to the arresting officer?
(Numerous utterances may shed light on the kinds of drug-related effects that the suspect is experiencing.)

Inquiries Concerning Physical Evidence

- (14) What items or materials were uncovered during the search of the suspect and/or vehicle?
(Even seemingly innocuous or familiar items may be recognized by trained DREs as being associated with possible drug use.)
- (15) Were any smoking paraphernalia uncovered?
(Even routine smoking items, such as commercially produced cigarettes, pipes, etc. may disclose evidence of drugs.)
- (16) Was there any injection related material?
(For example, such material could include needles, syringes, leather straps or rubber tubes used as tourniquets to help expose veins, bent spoons or bottle caps used in heating and dissolving drugs, etc.)
- (17) Were there any balloons, plastic bags, small metal foil wrappings or any similar items?
(These kinds of items frequently are used as drug containers.)
- (18) What was the suspect's blood alcohol concentration?
(If an attempt to administer a breath test has not yet been made, the drug recognition expert should do so now.)

C. Overview of the Preliminary Examination.

The preliminary examination of the suspect consists of a series of questions; observations of the suspect's face, breath and speech; an initial series of checks of the suspect's eyes; and, the first of three checks of the suspect's pulse rate that will be made during the drug evaluation and classification process.

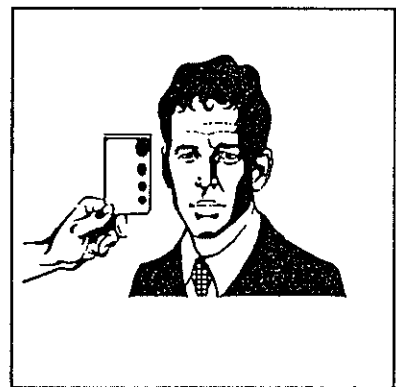
The questions are a set of formal inquiries about any injuries or medical problems from which the suspect may be suffering. Courts generally hold that these questions do not conflict with the suspect's Constitutional rights. However, you should be guided by your department's policy and procedure concerning the possible need to admonish the suspect of those rights prior to posing these questions. The questions include:

- o Are you sick or injured?
- o Do you have any physical defects?
- o Are you diabetic or epileptic?
- o Do you take insulin?
- o Are you under a doctor's or dentist's care?
- o Are you taking medication?

Answers to these questions may disclose circumstances that could impede or confound the subsequent steps in the drug examination. The suspect's answers, and the manner in which he or she answers, could also give evidence of the possible presence of certain types of drugs.

The observations of the suspect's face, breath and speech are straight forward. Make note, for example, if the face appears flushed or pale, and if the suspect appears to be perspiring. Any noteworthy odors of the breath should be recorded, such as the odor of alcoholic beverages; an odor of marijuana; or, a chemical odor, such as ether. If the suspect's speech is in any way distorted, this too should be recorded.

The initial checks of the suspect's eyes include some very important items. One of these is the estimation of the size of the suspect's pupils. This estimation is made by using an instrument called a pupillometer, which has a series of small dark circles of various diameters. The diameter is measured and indicated in millimeters (abbreviated "mm"). By holding the pupillometer alongside the suspect's eye, you can determine which circle is approximately the same size as the pupil. You must check both pupils.



If they 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. Also, pupil size can indicate the possible presence of various drugs. Certain categories of drugs, for example, cause the pupils to expand, or dilate. Other drugs may cause the pupils to constrict.

A second important check of the eyes is an assessment of the eyes' tracking ability. You should hold a pencil, penlight or similar object about 12 - 15 inches in front of the suspect's face, and move it smoothly to the suspects extreme left, and smoothly back to the extreme right, instructing the suspect to follow the motion with his/her eyes. Always make at least two complete passes in front of the suspects eyes. If the two eyes do not exhibit the same tracking ability, this too may indicate a possible head injury or medical problem.



While you are assessing the suspect's tracking ability, you can also perform a preliminary assessment of whether horizontal gaze nystagmus is present in the suspect's eyes. In particular, if the nystagmus or "jerking" is observed, an initial estimation of the angle of onset can be made. The approximate angle of onset may help to determine whether the suspect has consumed some drug other than alcohol.

Research has shown that, when an individual consumes alcohol and no other drug, there is a statistical relationship, or correlation, between the angle of onset of nystagmus and the individual's blood alcohol concentration. This statistical relationship can be expressed by the formula

$$\text{BA} = 50 - \text{ANGLE}$$
$$\text{or, ANGLE} = 50 - \text{BA}$$

In this formula, "ANGLE" is the nystagmus onset angle, measured in degrees, and "BA" is the "blood alcohol", which is 100 times the BAC. For example, if BAC = 0.10%, then "BA" = 10.

To illustrate how this formula is used, suppose you examine a suspect who is known to have a blood alcohol concentration of 0.05%. If alcohol is the only drug in that suspect's system, one would expect that the nystagmus onset angle would be 45 degrees.

(from the formula, ANGLE = 50 - 5 = 45.)

But, suppose the suspect also has ingested some other drug that also causes nystagmus. For example, the suspect may have taken some central nervous system depressant other than alcohol; or may have used PCP or certain inhalants. Then, the nystagmus onset angle may occur much earlier than would be expected from the alcohol alone. For instance, if the suspect with the 0.05% BAC had also smoked some PCP, the onset of nystagmus might occur as early as 20 degrees.

Thus, if there is a significant disparity between the nystagmus onset angle, and what would be expected from the known BAC, the drug recognition expert should be alert to the possible presence of some other nystagmus causing drug.

The student is cautioned, however, not to attach too much importance to the nystagmus onset angle as an indicator of the presence of drugs other than alcohol. In the first place, not all drugs will induce nystagmus. Cannabis, for example, will not. Neither will narcotic analgesics, hallucinogens or central nervous system stimulants. Thus, a suspect could have consumed a small amount of alcohol, and smoked a large quantity of marijuana, and be very much impaired, but still exhibit a nystagmus onset angle that is consistent with a low BAC. In the second place, the relationship between BAC and onset angle is not really a precise, mathematical one, but rather is an approximate, statistical average. Human beings, and their eyes, do not all react to alcohol or other drugs in exactly the same way. The correlation between BAC and onset angle is susceptible to a great degree of individual variation. Thus, the average person, at 0.10% BAC, may exhibit a nystagmus onset angle of about 40 degrees. But individual humans, at the same BAC, could easily exhibit onsets of 35 degrees, or 45, or even wider variations.

The nystagmus onset angle is one clue to consider in assessing whether drugs other than alcohol may be present. But it certainly is not the only clue to consider, and it is far from being the most important.

One final thing to be examined in the initial checks of the suspect's eyes is the condition of the eyelids. Many drugs will cause the eyelids to droop, as the user exhibits a sleepy appearance. A drooping of one eyelid, but not the other, possibly signifies an injury or other medical problem. The medical, or technical, term for droopy eyelids is Ptosis.

The final element in the preliminary examination is the first check of the suspect's pulse rate. Pulse rate is one of the vital signs that serve as very reliable indicators of the possible presence of certain categories of drugs. Pulse rate can also be affected by anxiety, and it is common for an arrestee to experience anxiety while being examined by a police officer. Pulse rate is measured near the beginning of the drug evaluation and classification examination, again during the middle, and finally near the end to allow the suspect's anxiety to "settle down" before the last measurement.

D. Overview of the Examinations of the Eyes

The eye examinations consist of three tests, namely horizontal gaze nystagmus, vertical nystagmus and lack of convergence.



Horizontal gaze nystagmus (HGN) is the most complex of the three tests, although it is not difficult to administer or interpret. It consists of three separate checks, each of which is performed independently in each eye.

Check one: does the eyeball pursue, or track, smoothly?

Start with a stimulus (such as a pencil or penlight) held vertically in front of the suspect's face, and about 12 - 15 inches away from his or her nose. Keep the tip of the stimulus raised slightly higher than the suspect's eyes. Tell the suspect to keep the eyes focused on the tip of the stimulus, to hold the head steady, and to follow the movement of the stimulus with the eyes only. Move the stimulus smoothly to the suspect's extreme left, then smoothly all the way to his/her extreme right, then smoothly back to the extreme left and then back to the extreme right. The stimulus should be moved at a speed that requires 2 seconds to bring it from the center all the way to the side. Two complete passes should be made in front of the eye: that is, from the center to left the side, back to the right side, back to the left side again, back to the right side, and finally back to the center.



While the eyeball is moving, the examiner should observe it closely for signs of a "lack of smooth pursuit". If a person is sober (i.e., free of alcohol or other drugs that induce nystagmus), the eyeball should glide smoothly in the socket, in much the same fashion that a windshield wiper slides smoothly across the windshield when it is raining steadily. But if the person is under the influence of alcohol or other nystagmus-inducing drugs, the eyeball usually will jerk noticeably as it moves, similar to a windshield wiper dragging across a dry windshield.



Check two: does the eyeball jerk distinctly when the eye is held at maximum deviation?

Again position the stimulus about 12 - 15 inches in front of the suspect's face, with the tip of the stimulus above eye level. Instruct the suspect to keep the head still and follow the stimulus with the eyes. Move the stimulus all the way to the left side, until the eyeball is turned to its maximum deviation. Hold the stimulus in that position for about four seconds, and carefully observe the eyeball. Then, repeat the process with the stimulus at the suspect's

extreme right side. Persons under the influence of alcohol or other nystagmus-inducing drugs usually will exhibit a distinct, pulsating, very pronounced jerking when the eyeball is at maximum deviation. In order to consider this clue as "present", you must observe a clear and unmistakable jerking. A slight, barely visible tremor does not constitute "distinct jerking".

Check three: what is the angle of onset of the jerking?



Again position the stimulus about 12 - 15 inches in front of the suspect, and slowly move the stimulus toward the left side. As you are moving the stimulus, observe the eyeball closely for the first sign of jerking. When you think that you first see the eyeball jerk, stop the stimulus and hold it steady. Verify that the eyeball is jerking: if it is not, start moving it toward the side again until you see the jerking start. Then, repeat the process for the suspect's right eye.

Once you have found the onset point, estimate the angle at which the eyeball is gazing. Remember that there is a statistical correlation that gives the approximate BAC value corresponding to a particular angle:

$$BA = 50 - \text{Angle}$$

Vertical Nystagmus is a very simple test to administer. Hold the stimulus horizontally in front of the suspect's eyes, and about 12 - 15 inches in front of the suspect's face. Instruct the suspect 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".

It is also very easy to test for lack of convergence. Begin by holding the stimulus vertically in front of the subject's eyes, about 12 - 15 inches from the suspect's face. Instruct the suspect to focus on the tip and to keep the head still. Start moving the stimulus in a circle in front of the suspect's eyes, and observe the eyes to verify that the suspect is tracking the stimulus. Then, slowly push the tip of the stimulus in toward the bridge of the nose, holding the stimulus on the bridge of the suspect's nose for approximately one (1) second then remove the stimulus from the suspect's face, and observe the eyes. If one eye drifts away to the side instead of converging toward the bridge of the nose, lack of convergence is "present".

E. Review of the Divided Attention Psychophysical Tests

Four divided attention tests are administered to suspects during a drug evaluation and classification examination.

Romberg Balance

Tell the suspect to stand straight with the heels together and the arms at the sides, and to maintain that position while you give the instructions. Ask the suspect if he or she understands.

Tell the suspect that he or she will have to tilt the head back slightly (demonstrate this) and close the eyes (do not close your own eyes while demonstrating: maintain your personal safety). Tell the suspect that he or she is to stand perfectly straight in that position, and estimate when 30 seconds have elapsed. When the suspect believes that 30 seconds are over, he or she must open eyes, tilt head forward and say stop.

Ask the suspect if he or she understands.

Tell the suspect to start the test when you say start. Start timing the suspect, and make a note of how much time actually has elapsed when the suspect estimates that 30 seconds have passed. Also, make a note of the direction and degree of swaying that occurs when the suspect is performing the test.

Walk and Turn

Requires a straight line, long enough to allow a suspect to take 12-15 heel-to-toe steps.

Instruct the suspect to place the left foot on the line, then to place the right foot on the line with the heel of the right against the toes of the left. Demonstrate the proper stance to the suspect. Tell the suspect to keep the arms to the side and to remain standing in that position while you give the rest of the instructions. EMPHASIZE THAT THE SUSPECT IS NOT TO START WALKING UNTIL YOU SAY TO DO SO. Ask the suspect if he or she understands.

Give the following instructions, accompanied by clear demonstrations, as appropriate:

- o Take nine heel-to-toe steps along the line. (Demonstrate several heel-to-toe steps).
- o Keep arms at side at all times.
- o Watch your feet while walking and count your steps out loud.
- o When you have taken the 9th step, leave the front foot on the line, and turn around, using a series of small steps with the other foot. (Demonstrate a proper turn).
- o Take nine heel-to-toe steps back along the line.
- o Once you start walking, do not stop until the test is completed.

Ask the suspect if he or she understands.

During the instructions stage of the Walk and Turn test, carefully observe the suspect to determine if the following actions occur:

- (1) Does the suspect break away from the heel-to-toe stance?
- (2) Does the suspect start walking too soon?

Make a note of how often these occur.

During the walking stage of the test, carefully observe the suspect and note:

- (3) Whether the suspect stops walking;
- (4) Steps off the line;
- (5) Fails to touch heel to toe;
- (6) Raises the arms from the side.

Make a note of how often these occur.

Also, watch the suspect closely to determine:

- (7) The number of steps the suspect takes, first up and then down the line. (Make a note if the suspect takes more or fewer than nine steps in either direction).
- (8) Whether the suspect turns improperly (i.e., in any fashion other than the way in which you explained and demonstrated the turn).

One Leg Stand

Tell the suspect to stand straight with the feet together and the arms at the side, and to maintain that position while you give the instructions. Ask the suspect if he or she understands.

Tell the suspect that he or she will have to raise the right foot, and hold it approximately 6 inches off the ground with the toes pointed forward so the foot is parallel to the ground. (Demonstrate the proper one-leg stance.) Tell the suspect to keep the arms at the side and to stare at the elevated foot. Tell the suspect to count out loud for 30 seconds, as follows "one-thousand-and-one, one-thousand-and-two, and so on, to one-thousand-and-thirty". (Demonstrate several seconds of counting.)

Tell the suspect not to put the foot down until the 30 seconds have elapsed.

Ask the suspect if he or she understands.

Tell the suspect to perform the test. After the suspect has completed the test, allow him or her to relax for about 10 seconds, then instruct the suspect to stand on the other foot and perform the test again.

While the suspect is performing the test, observe him or her carefully to determine if the following actions occur:

- (1) Does the suspect raise the arms?
- (2) Does the suspect sway?
- (3) Does the suspect hop?
- (4) Does the suspect put the foot down before the 30 seconds are up?

Make a note of how often each occurs.

Finger to Nose

Tell the suspect to stand straight with the feet together, the arms down at the sides, and the index fingers extended.

Demonstrate how to properly touch the tip of the finger to the tip of the nose and how to tilt their head back. (For officer safety, do not close your eyes.)

Ask the suspect if he/she understands.

Tell the suspect to close the eyes and tilt the head back.

Tell the suspect to bring the tip of the left-hand index finger up to the tip of the nose.

Then tell the suspect to touch the right-hand index finger to the nose.

Then the left-hand finger.

Then the right-hand finger.

Then the right, again.

Then the left.

Make a note of exactly where the tips of the fingers contact the suspect's nose or face.

F. Overview of the Vital Signs Examinations

The three vital signs examined during the drug evaluation and classification process are pulse rate; blood pressure; and, body temperature. They are covered in some detail in Session VII of this training program. For the present, some simple definitions are sufficient:

Pulse rate is the number of pulsations, or surges of blood, that occur in an artery in one minute. Each time the heart "beats" (or contracts) it sends a surge of blood through the arteries. These surges can easily be felt, if you place your finger tips over an artery and apply slight pressure. All you have to do to measure pulse rate is to feel the surges while looking at a wristwatch, and count the number of surges that occur in thirty seconds, then multiply by two.

Blood pressure is the force that the circulating blood exerts on the walls of the arteries. A person's blood pressure constantly changes, from instant to instant. When the heart contracts, and sends the blood surging through the arteries, the blood pressure reaches its highest value. That is called the systolic pressure. As the heart expands, the surge of blood slows, and the pressure drops.

When the heart is fully expanded, the blood pressure falls to its lowest level, which is called the diastolic pressure.

Then, the heart starts to contract and the pressure rises again. The blood pressure continuously rises and falls, cycling between the systolic and diastolic values, as the heart beats.

Measurement of blood pressure requires a special instrument called a sphygmomanometer. A stethoscope is also needed.



G. Overview of the Dark Room Examinations

The principal activity during the dark room examinations is the estimation of the size of the suspect's pupils. This is done using the pupillometer, in exactly the same fashion as described during the preliminary examinations. However, in this case, pupil size must be estimated under three different lighting conditions, which will be controlled by a pen light.

Estimation of pupil size under near-total darkness.

Cover the tip of the pen light completely with your thumb or index finger, so that only a red glow emerges through your skin and no white light shines out. Bring the pen light up toward the suspect's face until it is just possible to distinguish the pupil from the iris, or colored portion of the eye. Hold the pupillometer alongside the eye and identify the circle that is closest in size to the pupil. Always do this first for the left eye, and then for the right.

Estimation of pupil size under indirect light.

Hold the penlight near the side of the suspect's face, and point the light toward the suspect's nose. The light must shine across but not directly into the suspect's eye. Position the light so that a shadow of the eye is cast on the side of the subjects nose near the corner of the eye. Hold the pupillometer alongside the eye and identify the circle that is closest in size to the pupil. Always do this first for the left eye, and then for the right.

Estimation of pupil size under direct light.

Leave the tip of the pen light completely uncovered. Bring the pen light up along the side of the suspect's face, then shine the beam directly into the suspect's eye. Hold the pen light away from the face so that the beam just exactly fills the entire eye socket. Hold the pupillometer alongside the eye, and identify the circle that is closest in size to the pupil. Always do this first for the left eye, and then for the right.

While checking the pupil size under direct light, you must evaluate the pupil's reaction to light. If a person is not under the influence of any drug, his or her pupils should constrict within one second when the pen light's beam strikes the eye directly. But certain categories of drugs may cause the constriction to occur more slowly, or perhaps not to occur at all.

Two other activities conducted in the darkroom are the examination of the nasal area and the examination of the oral cavity. In both cases, you must look closely for signs of drug use, or even for traces of the drug or concealed quantities of the drug.

Tell the suspect to tilt the head back, and shine the pen light directly into the nostrils. Look for traces of drugs or other materials in the nasal passages, and look for redness, scarring or abrasions that might indicate repeated "snorting" of certain drugs.

Tell the suspect to open the mouth wide. Shine the pen light directly into the mouth. "Play" the beam around the inside of the mouth to illuminate all areas. Look for residual quantities of drugs and for unusual coloring of the inside surfaces of the mouth (e.g., green or reddish coloring). Look near the gums for small balloons, bags, tissue- or foil-wrappings, or other small containers of drugs. Tell the suspect to elevate his or her tongue, and look under the tongue for debris, etc.

Two important things should be kept in mind about the dark room examinations. First, a second officer should always accompany you and the suspect into the dark room, simply as a safety precaution. Second, after entering the dark room, no examination should begin for at least 90 seconds, to allow your eyes, and the suspect's to adjust to the darkness.

H. Examination of Muscle Tone

To begin the examination of the muscle tone start with the left bicep then move towards the left wrist to determine if the muscle is flaccid, normal or rigid. Then check the right arm in the same manner.

I. Examination for Injection Sites

Persons who frequently inject drugs often develop lengthy scars, called "tracks", from repeated injections into the same vein. Fresh injection sites often can be found at the end of a "track". Many times, a fresh injection site will not be easily visible to the naked eye. Therefore, a drug recognition expert should search for injection sites by touch, running the fingers along such places as the neck, forearms, wrists, back of hands, etc. NOTE: to avoid infection, the drug recognition expert must wear gloves during this portion of the examination. When a possible injection site is located, a ski light can be used to provide a magnified and illuminated visual inspection.

Hypodermic needles are sized according to gauge. The gauge of a needle is a measurement of its inside diameter. The gauge number represents how many needles of that size would be needed to equal one inch. For example, a 24 gauge needle has an inside diameter of 1/24th of an inch; a 10 gauge needle has an inside diameter of 1/10th of an inch. Therefore, the higher gauge, the smaller the diameter of the needle.

J. Obtaining a Toxicological Sample

The process of obtaining toxicological samples will vary depending upon individual state implied consent statutes. The laws of your state will dictate what samples can be taken, i.e. urine, blood, saliva and/or breath. The containers for these samples will also vary depending on the type of test used and the laboratory that will do the analysis. A department or agency policy should delineate how each sample should be taken. You will need to become familiar with and follow your department's policies and procedures governing toxicological sample collection, handling, shipment, etc. Consideration should be given to witnessing the sample being obtained, chain of custody for the evidence, preservation and the return of the analysis by the laboratory.

K. A Brief Overview of Toxicology

1. Introduction

The material in this Section is intended to provide the basic understanding of chemical testing for drugs that a DRE needs to have to appreciate fully the role of toxicology in this program. As far as possible, the information has been kept non-technical. It will not be covered in depth in class, but you are expected to be familiar with what is given in this manual.

2. Some Key Concepts

DEFINITION: Toxicology is the study of poisons and their effects on living organisms. For DRE purposes, the "poisons" in question are drugs, and in some cases the metabolites of drugs. A DRE Toxicologist analyzes physical specimens such as blood and urine for drugs and drug metabolites.

A metabolite, for DRE purposes, is a chemical substance derived from a drug, and that is formed by the action of the body upon that drug. It is important to be aware that some metabolites are themselves psychoactive. That is to say, some metabolites cause impairment: Therefore, a metabolite may also be a drug. It is also important to know that it may be the metabolite, and not the original or "parent" drug that is detected in the laboratory. In some instances, finding a particular metabolite allows the chemist to conclude with certainty that a specific drug was ingested, even though the methods and equipment available to the lab can't detect that drug itself. Finding the metabolite is good, scientific evidence that the drug was there.

3. Limitations of Toxicology

Toxicology has some important limitations. One limitation is that, with the exception of alcohol, toxicology cannot produce "per se" proof of drug impairment. That is, the chemist can't analyze the blood or urine and come up with a number that "proves" the person was or wasn't impaired. For alcohol alone, the chemist can do that, or at least come very close to doing it.

But alcohol is a special drug. Chemically speaking, the alcohol molecule is very simple compared to the molecules of other drugs. Alcohol's metabolites don't impair. Scientists have had many opportunities to study alcohol's effects under carefully controlled experimental conditions. And, the scientific community has a pretty clear understanding of how alcohol works on the body and brain. These statements generally can't be made about other drugs. Drugs are metabolized in complex ways, and sometimes the metabolites are also drugs. Some drugs can be stored in the body's tissues, so that even after the drug has cleared from the blood, it's still in the body and brain, and still causing impairment. Apart from post-mortem studies of lethal levels, there haven't been routine opportunities to correlate drug concentrations with degrees of impairment. Ethical concerns limit our ability to study illegal drugs, especially at "street" dosages. And, it is difficult to replicate in the laboratory the drug combinations, methods of ingestion and drug purities characteristic of "street" use. Even if it were possible to study individual drug concentrations and their relationships to impairment in depth, the practice of poly-drug use and the myriad of different combinations seen on the street would make that information of little practical use. And finally, many laboratories simply don't perform quantitative analyses to determine the drug concentrations, but only determine qualitatively the presence of the drugs. The reasons for avoiding quantitative analysis include the facts that it is costly, time consuming, and may be beyond the capability of the equipment available to the lab. Also, if urine is the specimen preferred by or submitted to the lab, quantitative analysis is less important, because it doesn't lend itself to clear interpretation. In short, chemistry basically cannot supply the "magic number" of impairment for drugs.

Another limitation of toxicology is that it doesn't provide evidence of the time at which the drug was ingested. Therefore, the chemist won't be able to provide direct evidence of the suspect's condition at the time of arrest. In some instances, it is possible that a "positive" chemical test reflects drugs that the suspect took long before being arrested, and that were metabolized and no longer causing impairment prior to his or her arrest.

4. Toxicology's Roles in this Program

Exactly what are the roles that toxicology plays in this program? First and foremost, toxicology is **the twelfth step in the drug influence evaluation**. A DRE doesn't complete the evaluation until he or she either obtains a specimen from the suspect, or formally documents the fact that the suspect refused to submit to the toxicological test. And, it is important that the court be aware that toxicology is the final step of the evaluation. It follows the formation of the DRE's opinion; the opinion is not based on the results of the toxicological analysis. Similarly, the arrest, booking and charging of the suspect are not based on the toxicological analysis, and must be supported by other, solid evidence.

The DRE hopes -- and expects -- that toxicology will **support or corroborate the opinion** he or she has formed. And, a toxicological analysis supports the opinion by confirming the presence of a particular drug that is consistent with the DRE's opinion. The concentration at which the drug is present shouldn't be an issue. That's because it isn't possible to relate concentration to "impairment" with any degree of reliability.

DREs also need to understand that sometimes the toxicological analysis will not confirm the DRE's opinion. And the DRE needs to be honest enough to admit that, when that happens, it may be because his or her opinion is incorrect. The drug influence evaluation isn't an exact science. Drugs affect different people in different ways. In this program, we "never say never", and we "always avoid saying always".

But sometimes, the toxicology doesn't corroborate a DRE's opinion even though the opinion is correct. The lab's instruments, personnel and analytic methods are not infallible. There are certain drugs that a particular laboratory simply can't detect at all. And, there are others that can't be "seen" unless they are present at fairly high concentrations.

To corroborate DREs' opinions, toxicology performs two kinds of analyses: **screening and confirmation**. Screening tests are easier, cheaper and faster than are confirmatory tests. But, confirmatory tests are more detailed and more specific than are screening tests. In very loose terms, we can say that a positive screening test means "it looks like this sort of drug is there". A positive confirmatory test means "this particular drug is definitely there".

Confirmatory tests employ methods different from those of the screening tests. The confirmatory test is designed to provide absolute proof of a drug's presence -- or at least, as close to absolute as science can come. And, confirmatory tests usually are required if the case goes to trial. DREs should be aware that, to cut down on costs, some labs do not conduct the confirmatory tests unless the case is going to go to trial. If this is

the policy of your laboratory, you must provide the chemist with as much advanced notice of the trial date as possible, so he or she can perform the confirmatory analysis in a timely manner.

Suppose the screening test is positive, but the confirmatory test is not positive; what does that mean? Here again, DREs need to admit that it may mean that the drug isn't there. Some "screens" will react to substances other than psychoactive drugs. The screening tests are not absolutely indicative of drug presence; if they were, there would be no need for a confirmatory test.

But a failure to confirm a drug does not necessarily mean that the "screen" was inaccurate. Every analytic procedure has a "detection" threshold; that is the lowest quantity or concentration of the drug that the instrument can possibly detect. Above that is the "quantification" threshold; that is the lowest concentration that can be numerically determined by the instrument. Standard laboratory procedure calls for establishing a third level, called the "cut-off" level, which usually is set slightly above the "quantification" threshold. Typically, the laboratory's report for the confirmatory test will read "not detected" unless the drug is found at a concentration greater than or equal to the "cut-off" level. But in fact, the drug could be present, at a somewhat lower concentration.

Then why don't laboratories simply lower their "cut-off" levels, if they really want to support their DREs. The simple fact is that the laboratory needs to preserve its scientific validity. If it loses that, the testimony of its chemists will be worthless. There are definite limits to the accuracy of chemical equipment and procedures. If the cut-offs are set too low, "false positives" will result (i.e., reports of "drug found" when it isn't really there). The lab won't be able to defend its reports scientifically, so it won't be able to support the DREs at all. Still, it is important for DREs and State and agency DRE coordinators to consult with their toxicologists to try to reach agreement concerning optimum cut-offs, that do not compromise scientific integrity but at the same time provide adequate support to this program.

Fundamentally, then, toxicology's role in this program is **corroborative**. The observations of the arresting officer, and the observations, measurements and estimates of the DRE provide the best proof of the suspect's impairment. Toxicological analysis provides scientific corroboration that the suspect actually ingested a drug; in some cases, the analysis may also provide scientific support for the allegation that the suspect was impaired. And, toxicology also plays an important role in on-going studies to document the validity of this program, in monitoring the work of individual DREs and in assessing the progress students are making during their certification training.

5. Blood or Urine: Which is Better?

Blood and urine are the primary specimens available for analyses for drugs. If we have a choice, which should we pick?

The answer is, it depends. The laws of your State, the policies and procedures of your department, the particular condition of your suspect, the equipment and procedures available to your laboratory and -- possibly -- the drug categories you believe are causing the suspect's impairment will all have a bearing on the choice. **There is no single perfect or "best" specimen.** It is not possible to say that blood is better or that urine is better. Each has advantages and disadvantages.

Some advantages of blood:

- o The presence of a drug in blood more reliably indicates recent use than does the presence of the drug in urine. Urine tests may produce "positive" results weeks after the drugs were used. This is much less likely to happen with blood tests. Thus a positive blood test is more contemporaneous with drug impairment.
- o Some drugs are easier to detect in blood than in urine.
- o The extraction of a blood specimen usually occurs under a greater degree of supervision. When providing a urine specimen, a suspect may have an opportunity to dilute or contaminate the specimen, or even substitute some other fluid for it.
- o Quantitative analysis of urine specimens provides information of essentially no value. Quantitative analysis of drugs in blood may help to corroborate impairment.

Some advantages of urine:

- o Urine is usually easier to obtain. Suspects often are more willing to supply urine, and medical personnel need not be present to extract it.
- o Urine analysis is less expensive than blood analysis.
- o Some drugs are easier to detect in urine than in blood.
- o Drug concentrations usually are higher -- and thus easier to detect -- in urine than in blood.
- o Some drugs clear very quickly from the blood. Thus, even a short delay between formation of the DRE's opinion and extraction of the blood sample may impede the laboratory's ability to corroborate the DRE. But drugs usually remain detectable in the urine for longer periods of time.

6. What DREs Can Do To Optimize Laboratory Corroboration

DREs can help the lab help them by following a few simple reporting procedures. First, make sure that you **tell the lab what drug categories you believe are present** when you send in the urine or blood specimen. Some labs want to get a copy of the complete DRE report along with the specimen; others don't. But all labs need to know the kinds of drugs that may be present, because that information can help the chemist determine if he or she needs to extend testing beyond the standard "menu" of screening procedures. And, make sure you **tell the lab what drugs the suspect admitted taking**, and also let them know **what drugs you found in the suspect's possession**.

Probably the most important advice for a DRE who wants maximum support from the lab is: **talk to the chemists**. Find out what kinds of specimens (blood, urine or whatever) they prefer to receive. This will vary from lab to lab, and possibly from case to case. Ask the chemists for instruction. Find out if they would like to receive a copy of your report along with the specimen. Make sure you understand what the laboratory report means. Establish a regular dialogue with the lab is essential for maintaining the support system this program demands.

Finally, DREs need to be aware of and sympathetic to the laboratory's limitations. DREs are not infallible, and neither are laboratories. All labs have "chemical blind spots", i.e., drugs for which no routine detection procedures or suitable instruments are available. Many labs, for example, find it very difficult to detect or confirm THC in blood specimens, or to find LSD in either urine or blood. In addition, most laboratories are not well equipped to screen for certain anti-psychotic drugs or for some of the narcotic analgesics. DREs need to know that these limitations are a fact of life. They should not be a cause for antagonism between the DRE and the lab.

Topics for Study

1. Give three important reasons for conducting drug evaluation and classification examinations in a standardized fashion.
2. What are the twelve major components of the drug recognition expert process?
3. How many times is pulse rate measured during the drug evaluation and classification examination?
4. Are the diameters of a pupillometer's dark circles indicated in centimeters, millimeters or micrometers?
5. What formula expresses the approximate statistical relationship between blood alcohol concentration and nystagmus onset angle?
6. Which of the seven categories of drugs ordinarily do not induce nystagmus?
7. How many heel-to-toe steps is the suspect instructed to take, in each direction, on the Walk and Turn test?
8. What period of time is the suspect required to estimate during the Romberg Balance test?
9. What is systolic pressure?
10. What is the name of the instrument used to measure blood pressure?
11. Name the four validated clues of the One Leg Stand test.
12. Name the eight validated clues of the Walk and Turn test.
13. Suppose you have two hypodermic needles, one is 14 gauge, the other is 20 gauge. Which needle has the smaller inside diameter?

SESSION V

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

HS 172 R4/93

SESSION V

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

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

- o State the purposes of various eye examinations in the drug evaluation and classification process.
- o Describe the administrative procedures for the eye examinations.
- o Describe the clues of interest in each eye examination.
- o Conduct the eye examinations and note the cues that come to light.
- o Prepare complete, clear and accurate records of the eye examinations.

In this session, you will have an opportunity to observe demonstrations of the various eye examinations of the drug evaluation and classification process. And, you will have opportunities to practice administering those examinations.

The eye examinations include:

- o Horizontal Gaze Nystagmus
- o Vertical Nystagmus
- o Lack of Convergence
- o Pupil Size Estimation
- o Pupil Reaction to Light

The following summarizes the results that generally can be expected when these eye examinations are administered to persons under the influence of the various categories of drugs.

	CNS Depressants	CNS Stimulants	Hallucinogens	PCP	Narcotic Analgesics	Inhalants	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 (3)	Dilated (4)
Reaction to Light	Slow	Slow	Normal (2)	Normal	Little or none visible	Slow	Normal

*High dose for that particular individual.

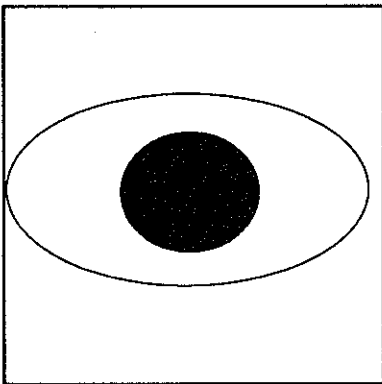
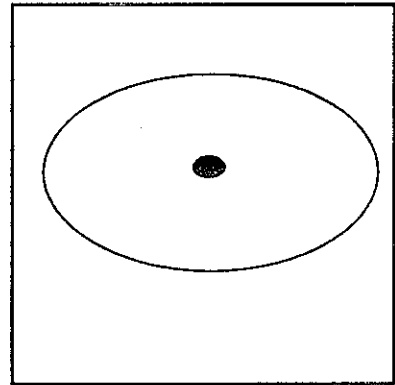
1. SOMA, Quaaludes usually dilate pupils.
2. Certain psychedelic amphetamines.
3. Normal but may be dilated.
4. Pupil size may be normal.

NOTE: The Normal Range of pupil size is 3.0 to 6.5 mm.

BEAR IN MIND that there is a great deal of difference among individual human beings and their individual reactions to drugs. The chart lists what we can expect to find when we examine suspects. But no one can guarantee that we will always find precisely these responses.

SOME KEY TECHNICAL TERMS
REGARDING THE EYES

Miosis means an abnormally small pupil, i.e., a pupil constricted below 3.0mm in diameter.



Mydriasis means an abnormally large or dilated pupil, i.e., a pupil more than 6.5mm in diameter.

Ptosis is the technical term for "droopy eyelids".



SESSION VI

PHYSIOLOGY AND DRUGS: AN OVERVIEW

HS 172 R4/93

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

- o Explain in layman's terms the general concept of human physiology.
- o Explain in layman's terms the purpose and functions of major systems in the body (nervous system, circulatory system, respiratory system, etc.).
- o Explain in layman's terms how drugs work in the body.
- o Explain in general terms how the drug evaluation is used to detect signs or symptoms indicative of drug impairment.
- o Correctly answer the "topics for study" questions at the end of this Section.

Physiology and Drugs: An Overview

The purpose of this session is to provide a brief overview of how the human body functions in a "normal" state and thus lay a foundation for comparison when drugs are introduced into the body. At best, students will acquire a general working knowledge and will by no means become a qualified medical specialist.

The Drug Recognition Expert can be compared to the operator of an evidential chemical test device...while it is beneficial to understand the general principles involved in the operation of the device, it is not necessary for each operator to be able to explain every detail of its operation. Rather, if the operator follows the operational instructions the device will produce accurate and reliable results. The same is true of the drug evaluation and classification procedure...if each DRE conducts the evaluation as instructed, and accurately records the test results and other observations, then the totality of information gathered during the evaluation will enable the DRE to predict the cause of impairment with a high degree of accuracy. The DRE's opinions of the cause of impairment will be limited to the seven categories of drugs, or some combination thereof, and/or a known or unknown medical or other condition that may produce similar signs or symptoms. It is not necessary to become a medical specialist or technician in human physiology. However, a general working knowledge of how the body functions is very helpful.

Physiology is the branch of biology dealing with the functions and vital processes of living organisms or their parts and organs.¹ In this session, we will focus on the chief functions of the organ systems. This approach should provide a general overview of the intricate workings of the body and its larger parts.

A. Body Systems

Our simple concept of human physiology focus on ten major systems of the body. We can help remember their names by using the somewhat gruesome but easy-to-recall phrase "MURDERS, INC.". Each of those letters stands for the name of a body system:

- M is for the Muscular System
- U is for the Urinary System
- R (the 1st R) is for the Respiratory System
- D is for the Digestive System
- E is for the Endocrine System
- R (the 2nd R) is for the Reproductive System
- S is for the Skeletal System

- I is for the Integumentary System
- N is for the Nervous System
- C is for the Circulatory System

¹ Webster's New World Dictionary, Second College Edition, 1980.

The last two (Nervous and Circulatory) are the most important systems to a DRE, but several of the others also come at least indirectly into play when we conduct a drug influence evaluation. Each of the ten systems is briefly discussed below.

Muscular System: The body has three kinds of muscles: (1) the heart; (2) the smooth muscles (which control involuntary movements); and, (3) the striated muscles (which control voluntary movements). The brain controls the operation of all these muscles through the nervous system.

Urinary System: The urinary apparatus consists of two kidneys connected by long tubes (urethras) to a storage device, the bladder, plus a third tube, the urethra, which leads from the bladder to the outside. Many of the waste products are filtered out of the blood as it passes through the kidneys and these wastes are then removed from the body in the urine.

Since drugs are removed from the blood in the kidneys and passed out of the body in the urine, the urinary system plays a key role in producing evidence of drug use.

Respiratory System: The chief organs of the respiratory system are the diaphragm and the lungs. The diaphragm is a muscular sheet that separates the thoracic cavity from the abdominal cavity, and draws fresh air into the lungs and forces used air out. The transfer of oxygen from the air to the blood and of carbon dioxide from the blood to the atmosphere occurs in the lungs. Oxygen must be supplied to all the body cells, and carbon dioxide must be removed from them in order for life to exist. The voice and, therefore all verbal communication is largely the responsibility of the respiratory system.

Digestive System: The digestive system consists chiefly of the tongue and teeth, esophagus (food tube), stomach, intestines, liver and pancreas. The digestive system is responsible for reducing large food particles to a size and chemical nature that can be absorbed (taken from the digestive system into the blood) and thereby utilized by the body cells for energy, growth and tissue repair.

The digestive system plays a key role in introducing drugs that are swallowed (pills, alcohol, etc.) into the blood. It also plays a role in determining onset of effects, depending upon the contents of the stomach and the type(s) of drug involved.

Endocrine System: The endocrine system consists of the thyroid, parathyroid, pituitary, and adrenal glands, plus portions of the pancreas, testes, and ovaries, in conjunction with certain other hormone-producing tissues. The endocrine system produces powerful chemical substances - hormones - that exert great influence on the growth and development of the individual, and aid the nervous system in the regulation of numerous body processes. The hormones released by the endocrine system travel through the bloodstream, and reach other tissues and organs that they help to control.

Reproductive System: The functions of the reproductive system fall into two categories: cell-producing (cytogenic) and hormone-producing (endocrinic). We are primarily concerned with hormone-production since the hormones produced by the reproductive system aid the nervous system in its regulatory role.

Skeletal System: The skeletal system consists of bones, cartilage and the ligaments that hold bones together. The skeletal system gives the body support and protection, permits movement, provides for muscle attachment, forms blood cells, stores minerals, and removes certain poisons from the blood.

While the drug evaluation does not directly examine the skeletal system, we must be aware that injuries or other conditions can affect performance of psychomotor tests.

Integumentary System: The integumentary systems consists of the skin and its accessory structure, hair and nails. The skin is well supplied with blood vessels, nerves, sweat and oil glands. The chief functions of the skin include protection of the body, helping to maintain a constant body temperature and water content, excretion of wastes and perception of changes in the environment (sensation).

The skin can provide several clues during the drug evaluation. For example, pale or flushed appearance, skin temperature, presence or absence of sweat, lack of sensation, etc.

Nervous System: The nervous system consists of the brain, spinal cord, and nerves, each of which is made up of nerve cells (neurons) and supporting tissues. The nervous system keeps the body apprised of changes in the environment by enabling sight, hearing, smell, taste and through sensations of temperature, touch, pressure and pain. The nervous system also enables reasoning, memory and emotions. It sends impulses that cause muscles to contract and glands to secrete, and it works with all body systems to integrate all physiological processes so that normal functions can be maintained. Much of the activity of the nervous system is reflex in character; that is, it is carried out below the level of consciousness.

Circulatory System: The circulatory system consists of the heart, blood vessels and blood. The heart pumps blood throughout the body, transporting food, water, hormones, antibodies, oxygen, carbon dioxide, and many other substances to or from the body cells as required. Body temperature regulation is a partial responsibility of the circulatory system, since warm blood is constantly moved throughout the body.

The circulatory system plays a key role in transporting drugs to the brain, where most of the drugs' effects are exerted. The circulatory system also transports the drugs to the liver and other organs, where the drugs are metabolized.

B. The Concept of Homeostasis

Homeostasis: The internal environment of the body consists of those fluids that bathe the body cells (intercellular or tissue fluid, blood and lymph). Many years ago it was discovered that although oxygen, foods, water and other substances are constantly leaving the body fluids to enter cells, and carbon dioxide and other wastes are constantly leaving cells and entering these fluids, the chemical composition of the fluids remains within remarkably narrow limits. This phenomenon was given the name "homeostasis".

By definition, homeostasis is the dynamic balance or steady state involving levels of salts, water, sugars and other materials in the body fluids. Homeostasis is a dynamic, rather than a static (stationary) equilibrium because the composition of body fluids is in a state of flux. Within limits, no matter what we eat, how much or how little we exercise, or what daily stresses and strains the body is subjected to, it retains homeostatic equilibrium of the body fluids. The rhythm of the heart and that of breathing, the 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.

Every organ system plays some role in the maintenance of homeostasis. The circulatory system keeps the body fluids well mixed; the respiratory system constantly brings in oxygen and eliminates carbon dioxide; the digestive system takes in food and water and eliminates solid wastes; the skin and kidneys eliminate watery wastes; the skeletal system forms blood cells; the nervous system integrates the functioning of the other systems; and so on.

When drugs are introduced into the body the resultant interactions can cause the body to speed up, to slow down, or to become confused. During the drug evaluation we examine bodily functions and attempt to determine the cause of the impairment that is observed.

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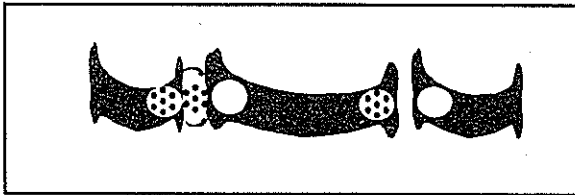
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C. A Simplified Concept of the Nervous System

The Nervous System is one of the body's major control mechanisms. The other major control mechanism is the endocrine system. The endocrine system uses "chemical messengers", called hormones, to control the various tissues and organs. The Nervous System uses a combination of electrical and chemical "messengers" to transmit its signals.

Nerves are sometimes depicted as wires, similar to telephone or telegraph wires, that carry electric signals from the brain to the muscles and from the eyes, ears, etc. back to the brain. That is not a very accurate representation, and it is not suitable for our purposes.

A better model is one that imagines that a nerve consists of a series of broken wire segments, where the segments are separated by short spaces, or gaps. In this model, each segment of "wire" is a nerve cell, also known as a **neuron**. The space between two cells is called a **synapse**, or synaptic gap.



We can imagine a message running along a "wire segment" in much the same manner that electrical signals travel along telephone lines. When the message reaches the end of a segment, it must somehow "jump across the synapse" to reach the next piece of

wire. Nerves use chemical messengers to jump the gap. When the signal reaches the end of the neuron, it triggers the release of a special chemical called a **neurotransmitter**. The neurotransmitter flows across the synapse and contacts the next neuron, where it is received. The reception of the chemical triggers an "electrical impulse" in that neuron, causing the signal to travel along the neuron until it reaches the next gap, where the release of the chemical is once again triggered. In this way, the signal moves along the entire nerve, in a series of electrical impulses and chemical transfers.

Neurons, or nerve cells, contain a number of different neurotransmitters, or chemical messengers. Each neurotransmitter carries a particular message.

The neuron has three main parts:

- o The **cell body**.
- o The **Axon** is the part of the neuron that **sends out** the neurotransmitter. The Axon is the "pitcher" of neurotransmitters.
- o The **Dendrite** is the part that **receives** the neurotransmitter. The Dendrite is the "catcher" of neurotransmitters.

Types of Nerves

Some nerves carry messages away from the brain, for example, commands from the brain to the heart, telling it to beat faster or more slowly; or, commands from the brain to the eyes, telling them to dilate or constrict the pupils; or, from the brain to the muscles in the arm, telling them to raise or lower the hand; or, many other commands of this type. These nerves that carry messages away from the brain are called the **Motor Nerves**, or the Efferent Nerves. If something interferes with the messages that the brain sends out along the Motor Nerves, the brain's control over the body's organs and muscles will be disturbed. As a result, the heart might beat faster than it should, the pupils might constrict when they shouldn't, the arms and legs might not move exactly as the brain intends.

Other nerves carry messages to the brain, for example, signals from the eyes, the ears, the body's pain sensors, the inner ear, etc. The brain decodes the signals that come to it along these nerves, and forms "pictures" of the outside world and of the body's internal condition. These nerves that carry messages to the brain are called the **Sensory Nerves**, or the Afferent Nerves. If something interferes with the messages that the brain receives through the Sensory Nerves, the brain's perception of what is happening to the body and to the outside world will be distorted. As a result, the brain might "smell an odor" when it ought to hear a sound, or might "see an object" that doesn't really exist, or might feel no pain despite a severe injury.

This, very basically, is how drugs work: they interfere with the messages that the brain transmits along the Motor (Efferent) Nerves, and they interfere with the messages that the brain receives along the Sensory (Afferent) Nerves.

The Motor Nerves divide into two subsystems:

- (1) One subsystem is made up of the **Voluntary Motor Nerves**; they carry messages from the brain to the striated muscles, i.e., the muscles that we consciously control. The Voluntary Motor nerves carry the commands that cause us to move our arms and legs, smile or frown, turn our heads, etc.
- (2) The other subsystem is made up of the **Autonomic Motor Nerves**; they carry messages from the brain to the heart and to the smooth muscles. The Autonomic Motor Nerves carry the commands that cause our pupils to dilate, our lungs to inhale and exhale, our heartbeat to slow, etc. In other words, the Autonomic Motor Nerves send commands to the muscles and organs we do not consciously control.

The Autonomic Motor Nerves are further divided into two groups, the **Sympathetic Nerves** and the **Parasympathetic Nerves**. The Sympathetic Nerves command the body's automatic responses in reaction to fear, stress, excitement, etc. Through the Sympathetic Nerves, the brain sends "wake up calls" and "fire

alarms" to the heart and the smooth muscles. The Sympathetic Nerves carry the messages that cause the pupils to dilate; the blood pressure and pulse rate to rise; the sweat glands to activate; the hair to stand on end; the blood vessels of the skin to constrict; etc. In short, the messages transmitted along the Sympathetic Nerves excite or stimulate the body. The Sympathetic Nerves act as the body's "gas pedal".

The Parasympathetic Nerves have exactly the opposite function. They carry messages that produce a relaxed state in the body, and that promote tranquil activities. The brain sends its "at ease" and "all clear" messages along the Parasympathetic Nerves. Those messages cause the pupils to constrict; heartbeat to slow; blood pressure to drop; peripheral blood vessels to dilate; digestion to proceed; etc. The Parasympathetic Nerves act as the body's "brake pedal".

Naturally, neurotransmitters, or chemical messengers, are involved in carrying signals along both the Sympathetic and Parasympathetic nerves. Some drugs mimic the action of certain neurotransmitters. When taken into the body, these drugs come into contact with dendrites (receptor ports) of nerves and cause messages to be transmitted along Sympathetic or Parasympathetic Nerves.

Drugs that mimic neurotransmitters that are associated with Sympathetic Nerves are called **sympathomimetic** drugs. They artificially cause the excitement and stimulation associated with the brain's natural "wake up calls". CNS Stimulants and Hallucinogens are considered to be sympathomimetic drugs;

Cannabis, PCP and the Inhalants have sympathomimetic characteristics, to some degree.

Drugs that mimic neurotransmitters associated with the Parasympathetic Nerves are called **parasympathomimetic**. They induce the transmission of messages that cause lowered blood pressure, drowsiness, muscle relaxation, etc; Narcotic Analgesics and CNS Depressants are considered to be parasympathomimetic.

The primary neurotransmitters in the brain are norepinephrine (noradrenaline), acetylcholine, dopamine, serotonin and gamma amino butric acid (GABA)

D. A Simple View of the Heart and the Circulatory System

You have often heard that the heart is a pump, and that it works in pretty much the same way as an old-fashioned, hand-operated pump used to draw water from a well. That remains an accurate picture for our purposes.

The heart, of course, pumps blood. The heart has chambers that fill with blood. Then, the heart constricts strongly in response to signals received along the Autonomic Motor Nerves. That constriction sends the blood surging out of the heart. The blood surges out into a group of strong, elastic "tubes" called **arteries**. The arteries carry the blood away from the heart. The arteries divide into smaller and smaller branches, and finally into a network of tiny blood vessels called **capillaries**, which pervade the body's tissues and organs.

After the heart completes its strong contraction that sends the blood surging into the arteries, the heart begins to expand again. This expansion is also in response to signals received along Autonomic Motor Nerves. As the heart's chambers expand, blood pours into them. This returning blood is carried by another network of "tubes" called **veins**. The veins collect the blood seeping back from the tissues and organs, and carry it back to the heart.

One very special artery is connected to the right side of the heart. This is the Pulmonary Artery. This is the artery that the heart uses to send blood to the lungs. The blood that surges into the Pulmonary Artery has little or no oxygen in it. But when the blood reaches the lungs it picks up a fresh supply of oxygen. The newly-oxygenated blood then returns to the left side of the heart, via the four Pulmonary Veins. On the next contraction of the heart, the newly-oxygenated blood is sent surging into the network of arteries that connect to the left side of the heart; through those arteries the blood is carried to all other organs and tissues. The blood deposits its oxygen in the organs and tissues and then seeps back from those organs and tissues through a network of veins that connect to the right side of the heart. On the next contraction, this oxygen-depleted blood is sent surging into the Pulmonary Artery and over to the lungs, and the process continues.

Every time the heart contracts, blood rich in oxygen rushes out of the left side of the heart, into a network of arteries. At the same time, blood depleted of oxygen surges out of the right side of the heart, through the one special artery called the Pulmonary Artery. Every time the heart expands, blood that has just received a fresh supply of oxygen from the lungs pours back into the left side of the heart via the Pulmonary Veins. At the same time, blood that has given up its oxygen to the tissues and organs pours back into the right side via the many other veins.

The special nature of the Pulmonary Artery is now clear: **it is the only artery that carries blood depleted of oxygen**. All other arteries connect to the left side of the heart, and carry blood rich in oxygen. By the same token, the Pulmonary Veins are special, too. They are the only veins that carry oxygenated blood.

The normal heart beats regularly, and keeps on beating, and beating, and beating...never resting for more than a small fraction of a second. The rate of heartbeat is regulated by the Autonomic Motor Nerves. Sympathetic Nerve fibers insure that the heart beats fast enough to maintain circulation during any activity. Parasympathetic Nerve fibers send signals to slow the heart. This coordination of nerve signals insures that the heart beats neither too fast nor too slowly. And the coordination works, unless something...such as drugs...interferes with the signals.

E. How Drugs Work

In simple terms, drugs work by artificially introducing into the body chemicals that mimic the body's natural hormones and neurotransmitters. Therapeutic doses of legitimate prescriptive drugs and over-the-counter medications are designed to produce carefully controlled simulations of natural hormones or neurotransmitters, to make up for a deficiency in the body's natural supply. A common example of this is the first-thing-in-the-morning cup of coffee that is a ritual for many people. When the alarm clock forces us to awake, against our will, our Parasympathetic Nerves are operating in high gear and we are flooded with hormones that induce sleep and relaxation. We use the stimulant caffeine to overcome the body's natural chemicals, so that we can get started on the day's work. An entirely different, but also common example, occurs when we find ourselves worried and anxious at the end of the day, because of problems on the job, at home or wherever. This is stress, and our brains react to stress by activating the Sympathetic Nerves: we're too "keyed up" to sleep. That is when many people reach for the glass of wine, or the Xanax or Valium tablet, to overcome the body's natural stimulation.

But we pay a price when we do these things. When we introduce these chemicals, we disrupt the body's natural balance. The body is going to react, because it must preserve homeostasis. And the body's reaction will try to alter its own supply of natural chemicals to accommodate the ones we have introduced.

One way in which the body may react to the presence of a drug is by producing hormones and neurotransmitters that tend to **counteract** the effects of the drug. For example, if a person snorts cocaine, his or her brain might react to the resulting stimulation by sending commands along the Parasympathetic Nerves to depress bodily functions, and by commanding the endocrine system to release hormones that also will produce depression. This can lead to an interesting situation: the drug may metabolize, i.e., react with oxygen and other chemicals in the body, and dissipate so that its effects no longer are present; but in the mean time, the brain has caused the body to be flooded with natural hormones and neurotransmitters designed to counteract the drug, and they may still be exerting their effects.

Cocaine, for example, metabolizes fairly quickly, so that its effects may disappear in a relatively short time. But the hormones and neurotransmitters that the brain dispatched to counteract the cocaine will probably still be around, and will still be trying to depress the body's systems. As a result, when the cocaine wears off, the user may look and act very much like someone who is under the influence of a CNS Depressant, just the opposite of how he or she looked and acted when under the influence of the cocaine.

We call this situation the **downside of a drug**. When a person is experiencing the **downside**, he or she is no longer under the active influence of the drug, because the drug has largely dissipated from the body. Instead, the person is exhibiting the effects of the natural chemicals that the body produced to try to offset the effects of the drug.

It is not uncommon for a DRE to encounter someone on the downside of a drug. When the arresting officer apprehends a suspect, the effects of a particular drug might be very evident. But by the time the DRE is summoned and arrives on scene, the effects may have worn off. As a DRE, you are called upon to give your best professional opinion concerning what is affecting the suspect at the time of your examination. You must never attempt to infer or estimate what the suspect's state or nature of impairment may have been at some time prior to your contact with him or her.

There is another way in which the body may react to drugs, especially when the drug is routinely used over a period of time. Because the drug is artificially simulating the actions of certain hormones and neurotransmitters, the body may come to rely on the drug to supply those actions, and may simply cease producing those natural chemicals. We call this phenomenon **Negative Feedback**. It simply means that the brain accommodates the routine presence of a drug by turning off the supply of natural chemicals that correspond to the drug. Another way in which the body may compensate is by developing increased tolerance to the drug, meaning that the same dose of the drug will produce diminishing effects. To express this another way, a steadily stronger dose of the drug will be needed to produce the same effects. Another effect is physical dependence, or **addiction to the drug**; because the natural chemicals are no longer available, the body needs the drug to provide the functions those natural chemicals used to perform. Evidence suggests that this Negative Feedback clearly occurs in users of heroin and cocaine, to cite just two examples. The bodies of cocaine and heroin users apparently cease producing the hormones and neurotransmitters needed for proper pain relief, stress reduction, mental stability and motivation. Very quickly, the user simply can't cope without the drug.

F. Medical Conditions Sometimes Confused With Drug Impairment

There are numerous medical conditions and injuries that may cause their victims to appear to be under the influence of alcohol or other drugs. Some of the more common of these are listed and discussed below.

Head Trauma

A severe blow or bump to the head may injure the brain and create disorientation, confusion, lack of coordination, slowed responses, speech impairment and other gross indicators of alcohol or drug influence. Because the injury usually affects one side of the brain more than the other, disparities usually will be evident in the subject's eyes. Look at the pupils, and observe whether they are obviously different in size. Check the eyes' tracking ability, and see whether they are dissimilar, e.g., one eye moving smoothly while the other jerks noticeably. Check the eyelids to see if one droops while the other appears normal.

Stroke

A stroke will usually produce many of the same effects and indicators associated with head trauma. Stroke victims often will have pupils that are markedly different in size. One pupil may remain fixed and exhibit no visible reaction to light, while the other reacts normally.

Diabetes

A diabetic is most likely to be confused with a person impaired by alcohol or drugs when he or she has taken too much insulin, so that the blood sugar level becomes dangerously low. This condition is called **insulin shock**. A diabetic in insulin shock may appear very confused, may be non-responsive, sweat profusely and exhibit elevated pulse rate and blood pressure. If you suspect that you may be dealing with insulin shock, give the subject a glass of orange juice, a bite of candy or simply a spoonful of sugar; that should rapidly produce a noticeable improvement in his or her condition.

Conjunctivitis

This is an inflammation of the mucous membrane that lines the inner surface of the eyelids giving a red, bloodshot appearance of the conjunctiva of the eyes. At first glance, this may appear similar to the bloodshot conditions associated with impairment by alcohol or Cannabis.

Shock

Shock victims often will appear dazed, uncoordinated and non-responsive.

Multiple Sclerosis

Victims of Multiple Sclerosis (MS) and other degenerative muscular disorders may exhibit severe incoordination, gait ataxia, tremors, slurred or garbled speech and many of the other gross indicators of intoxication. However, they will usually appear alert.

Topics for Study

1. What is a neurotransmitter? What is a hormone?
2. What is a dendrite? What is an axon? What is a synapse?
3. Do arteries carry blood toward the heart or away from the heart?
4. What is unique about the Pulmonary Artery?
5. What are the two types of nerves that make up the Autonomic Nervous Subsystem?
6. Is cocaine sympathomimetic or parasympathomimetic? What about heroin?
7. Explain the concept of the "downside of a drug". Explain the concept of "Negative Feedback".
8. What do we call the nerves that carry messages away from the brain? What do we call the nerves that carry messages toward the brain?

SESSION VII
EXAMINATION OF VITAL SIGNS

HS 172 R4/93

SESSION VII EXAMINATION OF VITAL SIGNS

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

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

A. Concepts and Procedures for Measuring Pulse Rate

Some important definitions:

Pulse is the expansion and relaxation of an artery generated by the pumping action of the heart.

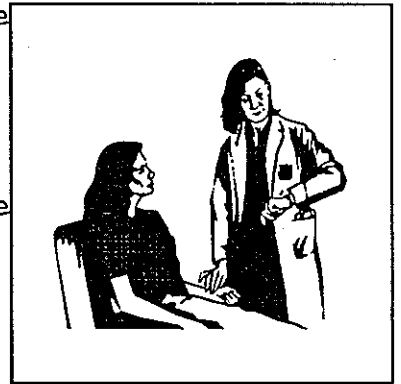
Pulse rate is the number of pulsations in an artery in one minute.

An artery is a strong, elastic blood vessel that carries blood from the heart to the body tissues.

A vein is a blood vessel that carries blood back to the heart from the body tissues.

When the heart contracts, it squeezes blood out of its chambers, and sends the blood surging into the arteries. The surging blood pushes against the walls of the arteries, causing them to expand. If you know where to locate an artery (for example, in the crease of your wrist, just below the base of the thumb) and you press your finger tips onto the skin just above the artery, you will feel the artery expand each time blood surges through it. If you keep your finger tips on the artery and count the pulses that occur in one minute, you will determine your pulse rate.

The radial artery provides a convenient pulse point. 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. To use the radial artery pulse point, have the subject hold his or her arm straight out, with the palm of the hand facing down. Place the tips of your index and middle fingers into the crease of the subject's wrist, near the base of the thumb, and exert a slight pressure. Allow the subject's hand to droop down from gravity; this will tighten the pressure on your finger tips and aid you to feel the pulse.



The brachial artery provides another useful pulse point. It 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.

The carotid artery can also provide pulse points. The carotid artery can be located in the neck, on either side of the Adam's apple.

Key points to keep in mind about measuring pulse rate:

- o Don't use your thumb to feel someone's pulse. There is an artery in the thumb. If you apply pressure with the thumb, the "beat" you feel may be your own pulse, and not the subject's.
- o If you use the carotid artery pulse point, don't apply pressure to both sides of the Adam's apple. Doing so can cut off the supply of blood to the brain.
- o When measuring pulse rate, count the beats for 30 seconds, then multiply by two.

Some technical terms associated with pulse rate:

- o Tachycardia: Abnormally rapid heart rate.
- o Bradycardia: Abnormally slow heart rate.
- o Arrhythmia: Abnormal heart rhythm.

B. Concepts and Procedures for Measuring Blood Pressure

Some important definitions:

Blood pressure is the force that the circulating blood exerts on the walls of the arteries. The blood pressure changes from instant to instant, as the heart contracts and relaxes.

Systolic pressure is the maximum or highest blood pressure. The blood pressure reaches its systolic value when the heart contracts and sends the blood surging into the arteries.

Diastolic pressure is the minimum or lowest blood pressure. The blood pressure reaches its diastolic value when the heart is fully expanded.

A sphygmomanometer is a device for measuring blood pressure. The major parts or components of a sphygmomanometer include:

- o the compression cuff, which can be wrapped securely around the arm and which contains a rubber bladder that can be inflated with air. There are different cuffs designed for children, adults and people with extra-large arms; these cuffs have different sized bladders.
- o the pressure bulb, which can be squeezed to inflate the rubber bladder with air.

- o the pressure control valve, which controls the inflation or deflation of the rubber bladder. To inflate the bladder, the pressure control valve must be twisted all the way to the right (clockwise); then, the pressure bulb can be squeezed to pump air into the bladder. To deflate the bladder, the pressure control valve must be twisted to the left (counter-clockwise); the more the valve is twisted to the left, the faster the bladder will deflate.
- o the manometer, or pressure gauge, which displays the air pressure in the bladder.
- o tubes, connecting the pressure cuff to the manometer and to the pressure bulb.

Some technical terms associated with blood pressure:

- o Hypertension: Abnormally high blood pressure.
- o Hypotension: Abnormally low blood pressure.

Blood Pressure is measured in units of millimeters of mercury. Sometimes this is abbreviated as "mmHg", where "mm" represents "millimeters" and "Hg" is the chemical symbol for the element mercury (from "Hydrargyrum", the latin word for "mercury"). When the manometer or pressure gauge indicates that the pressure in the bladder is 120 mmHg, that means that the air in the bladder, if forced into a glass tube containing liquid mercury, would push the mercury up the tube to a height of 120 millimeters. Some sphygmomanometers actually have pressure gauges that consist of glass tubes containing mercury, with a ruler alongside the tube marked off in millimeters. Usually, however, aneroid pressure gauges are used. ("Aneroid" means "without fluid".)

When you measure and record blood pressure, it is not necessary to use the symbols "mmHg". Simply record the numbers.

The principles involved in measuring blood pressure are easy to understand. When the pressure cuff is wrapped around the upper arm (e.g., around the bicep) and inflated with air, the air pressure exerts a force on the arm. When the pressure in the bladder gets high enough, the arteries in the arm will be squeezed shut, and no blood will flow through the arteries. In this respect, the pressure cuff works just like a tourniquet.

When the pressure control valve is twisted to the left, air starts to escape from the bladder and the pressure on the arm (and on the artery) starts to drop. However, as long as the air pressure on the artery remains higher than the blood pressure in the artery, the artery will remain squeezed shut and no blood will flow.

Consider this question: what will happen when the air pressure on the artery drops to the point where it just equals the blood pressure in the artery?

At that point, the heart will again be able to push the blood through the artery, so the flow of blood will resume.

But the blood pressure is constantly changing, from instant to instant. At one instant, the pressure will be at its maximum, or systolic value. Then the blood pressure drops, and a very short time later it will reach its minimum or diastolic level. Then it climbs again, and repeats the cycle over and over.

When the air pressure in the bladder drops to the point where it equals the systolic blood pressure, blood will be able to spurt through the artery each time the heart contracts. But an instant later, as the heart starts to expand and the blood pressure drops, the artery will squeeze shut again and the flow will stop.

If the air is allowed to continue to escape from the bladder, the air pressure eventually will fall to the point where it reaches the diastolic level. At that point, the blood pressure in the artery always will be equal to or higher than the air pressure on the artery, so the artery will stay open and blood will flow steadily.

So the basic idea is simple:

To measure blood pressure, start by pumping up the bladder until the artery is squeezed completely shut and no blood flows.

Let the air pressure drop slowly until the blood just begins to spurt through the artery. When that happens, the pressure shown on the gauge will be equal to the systolic pressure.

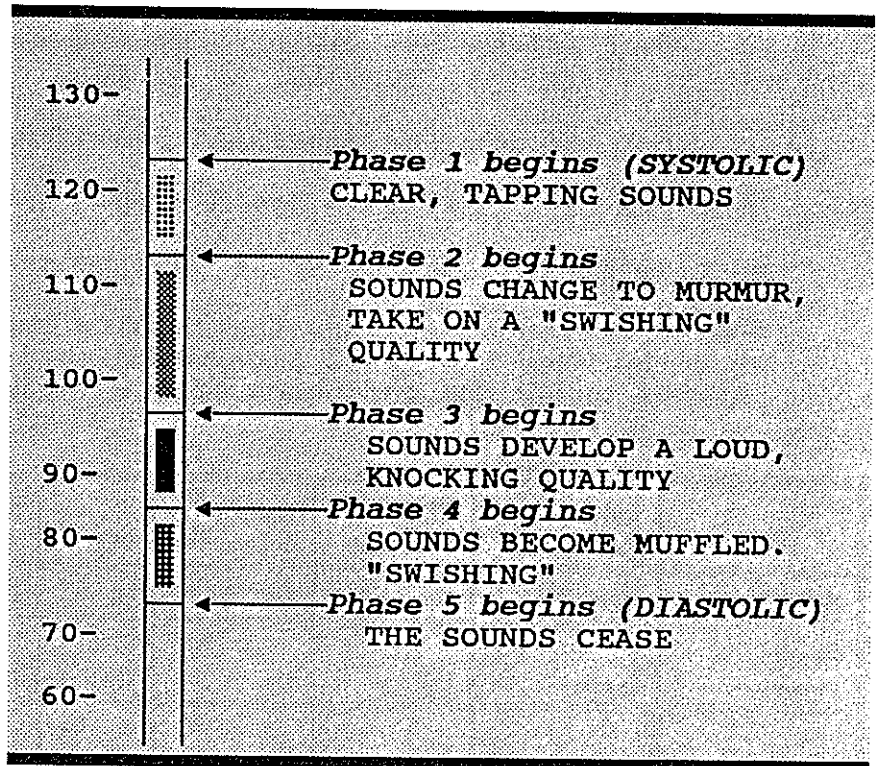
Continue to let the air pressure drop until the blood finally flows steadily through the artery. The pressure showing on the gauge at that time will be the diastolic pressure.

To determine when the blood starts to spurt, and when it starts to flow steadily, a stethoscope is needed.

The stethoscope should be applied to the skin, directly above the artery. For example, with the blood pressure cuff wrapped around the bicep, the stethoscope can be applied to the brachial artery pulse point.

When no blood is flowing through the artery, you will hear nothing through the stethoscope. But when the air pressure in the cuff falls to the systolic level, you will hear the blood begin to spurt. The sound you will hear starts as a clear tapping. This is the first phase of what are called the Korotkoff Sounds, a distinct series of sounds that are heard as the air pressure in the cuff drops from the systolic to the diastolic level.

As you continue to allow the air to escape from the cuff, the spurts of blood through the artery become steadily longer and the sounds change. They become fainter, and take on a swishing quality. They pass through a "knocking" phase, and then suddenly become muffled. Eventually, when the air pressure drops to the diastolic level, the blood flows steadily and all sound ceases.



Step-by-step procedures for measuring blood pressure

- (1) Position the cuff on the bicep so that the tubes extend down the middle of the arm.
- (2) Wrap the cuff snugly around the bicep.
- (3) Clip the manometer to the subject's sleeve, or to some other convenient location, so that you can observe the gauge easily.
- (4) Twist the pressure control valve all the way to the right.
- (5) Put the stethoscope earpieces in your ears. Make sure the earpieces are turned forward.
- (6) Apply the stethoscope to the brachial artery pulse point.
- (7) Rapidly inflate the bladder to a level high enough to squeeze the artery shut. Usually, a pressure of 180 will be sufficient.
- (8) Twist the pressure control valve slightly to the left to allow the air to escape from the bladder slowly (2 mmHg per second).
- (9) Keep your eyes on the pressure gauge and listen for the Korotkoff Sounds.

- a. Record the systolic pressure when the first sound (clear, tapping) is heard.
- b. Record the diastolic pressure when the sounds cease.

C. Concepts of Temperature Measurement

An electronic thermometer is used to orally measure temperature.

The following summarizes the results that generally can be expected when the vital signs examinations are administered to persons under the influence of the various categories of drugs.

	CNS Depressants	CNS Stimulants	Halluci- nogens	PCP	Narcotic Analgesics	Inhalants	Cannabis
Pulse	Down (1)	Up	Up	Up	Down	Up	Up
Blood Pressure	Down	Up	Up	Up	Down	Up/Down (2)	Up
Temperature	Normal	Up	Up	Up	Down	Up/Down/ Normal	Normal

1. Quaaludes and Etoh may elevate.
2. Down with Anesthetic gases, up with volatile solvents and aerosols.

NOTE: "Normal" systolic blood pressure 120-140
 "Normal" diastolic blood pressure 70-90
 "Normal" pulse (adult male) 60-90
 "Normal" temperature 98.6 plus or minus 1 degree, Fahrenheit

Topics for study

1. Where is the radial artery pulse point?
2. Why should you never attempt to feel a subject's pulse with your thumb?
3. Does an artery carry blood to the heart or from the heart?
4. What does the symbol "Hg" represent?
5. What is diastolic pressure?
6. When do the Korotkoff Sounds begin?
7. Name and describe the major components of a sphygmomanometer.
8. Which of the seven categories of drugs generally will cause blood pressure to be elevated?

SESSION VIII

DEMONSTRATIONS OF THE EVALUATION SEQUENCE

SESSION VIII DEMONSTRATIONS OF THE EVALUATION SEQUENCE

Upon successfully completing this session, the participants will be able to describe the sequence in which examinations and other activities are performed in the drug evaluation and classification process.

In this session, you will have an opportunity to observe demonstrations of the entire drug evaluation and classification process. Your instructors will conduct some of these demonstrations "live", in the classroom. There will also be a video taped demonstration.

Your instructors will make the video tape available for reviewing, after normal class hours. You should make an effort to view the tape at least a second time before the completion of this course.

SESSION IX

CENTRAL NERVOUS SYSTEM DEPRESSANTS

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

- o Explain a brief history of the CNS Depressant category of drugs.
- o Identify common drug names and terms associated with this category.
- o Identify common methods of administration for this category.
- o Describe the symptoms, observable signs and other effects associated with this category.
- o Describe the typical time parameters, i.e., on-set 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.

A. Overview of CNS Depressants

Central nervous system depressants slow down the operations of the brain. They first affect those areas of the brain that control a person's conscious, voluntary actions. As dosage increases, depressants begin to affect the parts of the brain controlling the body's automatic, unconscious processes, such as heartbeat and respiration.

Alcohol is the model for the CNS depressant category of drugs. Alcohol is the most familiar, and most widely abused, depressant. With some exceptions, all depressants affect people in much the same way as does alcohol.

Some major subcategories of CNS depressants other than alcohol include:

- o Barbiturates
(Derivatives of barbiturate acid)
- o Non-barbiturates
(Synthetic compounds with a variety of chemical structures)
- o Anti-anxiety Tranquilizers
(Frequently prescribed and frequently abused)
- o Anti-depressants
(It may seem to be a contradiction in terms to call a subcategory of Depressants the anti-depressants; but in this case, we simply mean that these drugs are prescribed to combat psychological depression. For that reason, the anti-depressants are sometimes known as the "mood elevators".)
- o Anti-psychotic tranquilizers
(Also known as the "major tranquilizers", to distinguish them from the anti-anxiety tranquilizers, or "minor tranquilizers".)
- o Combinations of the other five subcategories.

Some examples of specific drugs included in each subcategory are given in the table on pages IX-3 and IX-4.

Most users of CNS depressants ingest these drugs orally. However, although the practice is not common, some barbiturate abusers inject their drugs intravenously. The injection paraphernalia used by barbiturate abusers are similar to those used by heroin addicts, although a wider-gauge hypodermic needle is used, because the barbiturate solution is thicker than the heroin solution. The injection sites on the skin of a barbiturate abuser exhibit large swellings, and may develop ulcerations resembling cigarette burns.

B. Possible Effects of CNS Depressants

Once again, alcohol is the model here. Other depressants generally affect people in much the same way as does alcohol.

- o reduced social inhibitions
- o impaired ability to divide attention
- o slowed reflexes
- o impaired judgment and concentration
- o impaired vision and coordination
- o slurred, mumbled or incoherent speech
- o a wide variety of emotional effects, such as euphoria, depression, suicidal tendencies, laughing or crying for no apparent reason, etc.

In general, a person under the influence of a CNS depressant will look and act as though he or she were drunk on alcohol.

EXAMPLES OF CNS DEPRESSANTS

BARBITURATES	NON-BARBITURATES	ANTI-ANXIETY TRANQUILIZERS
<u>Secobarbital</u> Common trade name: "Seconal" Common street names: "reds"; "red devils"; "RDs"; "fender benders"; "F-40s"	<u>Chloral Hydrate</u> Common trade names: "Felsule"; "Noctec" Common street names: "Mickey Finn"; "Knock-out Drops"	<u>Chlordiazepoxide</u> Trade name: "Librium"
<u>Pentobarbital</u> Common trade name: "Nembutal" Common street names: "yellows"; "yellow jackets"	<u>Glutethimide</u> Trade name: "Doriden"	<u>Diphenhyldantoin</u> <u>Sodium</u> Trade name: "Dilantin"
<u>Amobarbital</u> Common trade name: "Amytal" Common street names: "blues"; "blue heavens"	<u>Methyprylon</u> Trade name: "Noludar"	<u>Flurazepam</u> Trade name: "Dalmane"
<u>Amosecobarbital</u> A combination of amobarbital and secobarbital Common trade name: "Tuinal" Common street names: "rainbows"; "Christmas trees"	<u>Methaqualone</u> Trade names: "Parest"; "Quaalude"; "Sopor"; "Optimil"; "Mandrax"; Street name: "Ludes"	<u>Alprazolam</u> Trade name: "Xanax"
<u>Phenobarbital</u> Many trade names Common street name: "pink ladies"	<u>Ethchlorvynol</u> Trade name: "Placidyl"	<u>Triazolam</u> Trade name: "Halcion"
	<u>Ethinamate</u> Trade name: "Valmid"	<u>Lorazepam</u> Trade name: "Ativan"
	<u>Paraldehyde</u> Trade names: "Paral"	<u>Estazolam</u> Trade name: "ProSom"
	<u>Diphenhydramine</u> <u>Hydrochloride</u> Trade names: "Benadryl"; "Somnex"	<u>Temazepam</u> Trade name: "Restoril"
	<u>Carisoprodol</u> Trade name: "Soma"	<u>Oxazepam</u> Trade name: "Serax"

EXAMPLES OF CNS DEPRESSANTS
(CONTINUED)

ANTI-DEPRESSANTS	ANTI-PSYCHOTIC TRANQUILIZERS	COMBINATIONS
<u>Phenelzine Sulfate</u> Trade name: "Nardil"	<u>Lithium Carbonate</u>	<u>Chlordiazepoxide and</u> <u>Amitriptyline</u>
<u>Amitriptyline</u> <u>Hydrochloride</u> Trade names: "Elavil"; "Endep"	<u>Lithium Citrate</u>	Trade name: "Limbitrol"
<u>Desipramine</u> <u>Hydrochloride</u> Trade names: "Norpramin"; "Pertofrane"	<u>Droperidol</u> Trade names: "Inapsine"; "Innovar"	<u>Perphenazine and</u> <u>Amipriptyline</u> <u>Hydrochloride</u> Trade name: "Triavil"
<u>Doxepin Hydrochloride</u> Trade names: "Adapin"; "Sinequan"	<u>Haloperidol</u> Trade name: "Haldol"	<u>Chlordiazepoxide</u> <u>Hydrochloride and</u> <u>Clidinium Bromide</u> Trade name: "Librax"
<u>Fluoxetine</u> Trade name: "Prozac"*	<u>Chlorpromazine</u> Trade name: "Thorazine"	
<u>Impramine</u> Trade name: "Tofranil"		

C. The Onset and Duration of Depressants' Effects

Some CNS depressants act very quickly, and begin to affect their users within seconds. Others act more slowly, sometimes taking one-half hour or more to begin to exert an influence. The quick-acting depressants also tend to be relatively short-acting: in some cases their effects wear off in a matter of minutes. The slow-acting depressants, on the other hand, tend to produce longer-lasting effects.

Depressants fall into four groups, based on how quickly they take effect and how long their effects last.

The ultra-short depressants take effect in a matter of seconds, but their effects dissipate in just a few minutes. They are used medically to provide a momentary sedation of a patient, for example to reduce a psychiatrist's patient's anxieties and inhibitions at the beginning of a counseling session. An example of an ultra-short depressant is thiopental sodium, sometimes call "truth serum". Ultra-short depressants rarely are the drugs of choice for abusers, because their effects don't last long enough to satisfy most abusers.

The short depressants are more attractive to drug abusers. They generally take effect within 10-15 minutes, and their effects last approximately four hours. Medical applications of the short depressants include treatment of insomnia and sedation of patients prior to surgery. An example of a short depressant is secobarbital.

Intermediate depressants may require up to 30 minutes to take effect, but their effects typically last 6-8 hours. They are popular among drug abusers who desire a longer-lasting state of intoxication. The medical applications of intermediate depressants are similar to those of short depressants. Amobarbital is an example of an intermediate depressant.

The drug amosecobarbital (trade name "tuinal", i.e., two-in-all) straddles the border between short and intermediate depressants. It combines amobarbital (an intermediate) with secobarbital (a short). The result is a fairly fast-acting drug with fairly prolonged effects.

The long depressants generally are not the preferred drugs of abusers. This is because they take too long to start producing effects (typically, about one hour). However, their effects usually last 8-14 hours. Long depressants are used medically to control epilepsy and other conditions that can cause convulsions. Barbitol is an example of a long depressant.

D. Signs and Symptoms of Depressant Overdose

Overdoses of CNS depressants produce effects that are essentially identical to those of alcohol overdoses:

- o the person becomes extremely drowsy and may pass out;
- o the heartbeat slows;
- o respiration becomes shallow;
- o the skin may feel cold and clammy;
- o death may result from respiratory failure.

Combinations of depressants can be especially risky. Unfortunately, many people routinely do combine depressants, usually in the form of alcohol and some other depressant. In some cases, the effects that result may be greater than the sum of the effects that the two drugs would produce independently.

E. Expected Results of the Evaluation

When a person under the influence of CNS depressants is examined by a drug recognition expert, the following results can be expected.

Pupil size generally will be normal; however, in the specific cases of methaqualone ("ludes") or soma, pupils usually will be dilated.

Horizontal Gaze Nystagmus usually will be present.

Vertical Nystagmus may be present, especially if the suspect has taken a large dose of the depressant.

Lack of Convergence will be present.

Pupil's reaction to light will be slow.

Pulse rate will be down; however, with Quaaludes and Etoh the pulse rate will be elevated.

Blood Pressure generally will be lowered.

Temperature will be down.

Muscle Tone usually will be normal.

Injection Sites usually will not be found; however, some barbiturate abusers do inject. Their injection sites often will be swollen, and may appear ulcerated.

Topics for study

1. Name the six major subcategories of CNS depressants.
2. Name the four groups of depressants based on onset and duration time factors.
3. To which subcategory of Depressants does Thorazine belong? To which subcategory does Chloral Hydrate belong? To which subcategory does Xanax belong?
4. Name a CNS Depressant that usually causes the pupils to dilate.
5. What is the generic name for the drug that has the trade name "Prozac"?
6. What is a trade name for the generic drug "Alprazolam"?
7. What is the name of the subcategory of CNS Depressants that is also known as the "Minor Tranquilizers"?

EVALUATOR HALL, I

Page 1 of 1 **DRUG INFLUENCE EVALUATION** BOOKING NO 001 OR X-1

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 NOVEMBER 5, 19XX/2120/VBPD BREATH RESULTS Refused Results 0.05% Instrument # 1234 CHEMICAL TEST Urine Blood Both Tests: Refused

MIRANDA WARNING GIVEN Yes No What have you eaten today? When? CHEESBURGER LUNCH TIME What have you been drinking? How much? Time of last drink 9 PM
 Given by LAIRD, C.D. Are you sick or injured? Yes No Are you diabetic or epileptic? Yes No

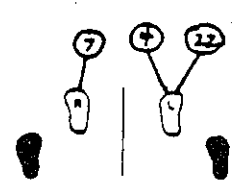
Do you take insulin? Yes No Do you have any physical defects? Yes No Are you under the care of a doctor/ dentist? Yes No

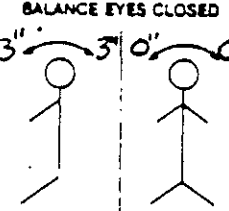
Are you taking any medication or drugs? Yes No ATTITUDE COOPERATIVE COORDINATION POOR - STAGGERING
VALIUM 4 TIMES PER DAY

SPEECH SLURRED - THICK TONGUED BREATH SLIGHT ODOR OF ALCOHOLIC BEV FACE NORMAL

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

PUPIL SIZE Equal Unequal (explain) HGN Present Yes No Able to follow stimulus: Yes No Eyelets: Normal Crooked

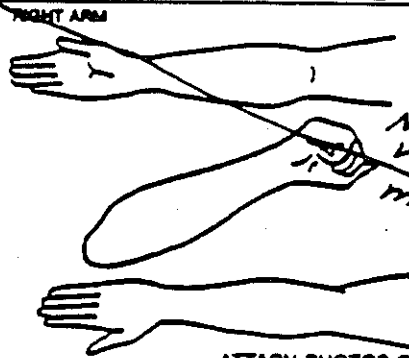
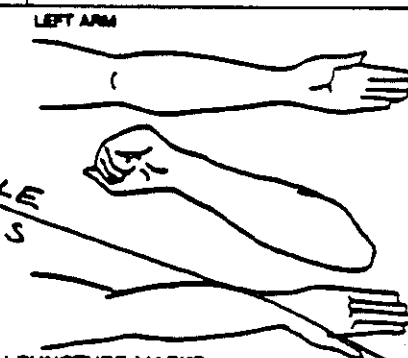
PULSE & TIME	HGN	Left Eye	Right Eye	Vertical Nystagmus?
1. <u>60 / 2130</u>	Lack of Smooth Pursuit	<u>YES</u>	<u>YES</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. <u>60 / 2145</u>	Max. Deviation	<u>YES</u>	<u>YES</u>	Convergence Right Eye <u>92</u> Left Eye <u>←0</u>
3. <u>56 / 2157</u>	Angle of Onset	<u>30°</u>	<u>30°</u>	ONE LEG STAND 

BALANCE EYES CLOSED  WALK AND TURN TEST "RUBBER-LEGGED" WALK
 Cannot keep balance Starts too soon Slope Walking Misses Heel-Toe Steps off Line Raises Arms Actual Steps Taken 9 9
 1st Name CONSTANT 2nd Name CONSTANT Hooping Puts foot down

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

PUPIL SIZE	Room Light	Dartness	Indirect	Direct	NASAL AREA
Left Eye <u>4.5</u>	<u>6.5</u>	<u>5.5</u>	<u>3.5</u>	<u>CLEAR</u>	
Right Eye <u>4.5</u>	<u>6.5</u>	<u>5.5</u>	<u>3.5</u>	<u>CLEAR</u>	

REBOUND DILATION Yes No Reaction to Light SLOW

RIGHT ARM  LEFT ARM 

BLOOD PRESSURE 106 / 66 TEMP 98.6

MUSCLE/TONE Near Normal Flaccid Rigid

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 2100 NOV 5 19XX TIME DRE NOTIFIED 2115 EVAL START TIME 2120 TIME COMPLETED 2205

CONTROL # 1745 EXAMINING OFFICER HALL CERTIFIED DRE SERIAL NO. 8825 DIVISION HTD UNAVAILABLE DATES REVIEWED BY STUDDARD R.

1. LOCATION EXAMINATION OF IMPELLIZZERI, MICHAEL T. TOOK PLACE IN DRE ROOM, VBPB HDQTR.
2. WITNESSES (1) ARRESTING OFFICER - CD LAIRD, #8825 (2) RC STUDDARD, IACP/TAP REPRESENTATIVE
3. BAC : I OBSERVED OFFICER LAIRD ADMIN. GCI TEST TO SUBJ, IMPELLIZZERI AT 2:20 HOURS. I OBSERVED TEST RESULT WAS 0.05%
4. Notification / INTERVIEW I WAS CONDUCTING DRE TRAINING AT VBPB HDQTR AT 2:15 HOURS ON FRIDAY, 5 NOV XX, WHEN MR. RC STUDDARD REQUESTED I OBSERVE SUBJ, IMPELLIZZERI. ARRESTING OFFICER CD LAIRD INFORMED ME THAT HE AND MR. STUDDARD HAD COME UPON SUBJ IMPELLIZZERI SLUMPED IN DRIVER'S POSITION OF VEHICLE STOPPED IN W/R TRAFFIC LANE OF S.R. #175 NEAR INTERSECTION WITH SNOWDEN RIVER PKWY. OFFICER LAIRD AND MR. STUDDARD STATED SUBJ IMPELLIZZERI APPEARED TO BE "VERY DRUNK" AND PERFORMED POORLY ON FIELD SOB TESTS.
5. INITIAL OBSERVATION OF SUBJECT I SAW SUBJ IMPELLIZZERI SEATING IN SLUMPED POSITION IN CHAIR NEXT TO GCI. HE WAS MUMBLING AND SWAYING, AND WAS SLOW TO RESPOND TO MY INITIAL QUESTIONS.
6. MEDICAL PROBLEMS / TREATMENT N/A
7. PSYCHOPHYSICAL TESTS SUBJ IMPELLIZZERI SWAYED APPROX. 3" FORWARDS - BACKWARDS ON ROMBERG'S BALANCE, AND ESTIMATED 50 SECS AS 30. ON WALK/TURN, HE LOST BALANCE TWICE DURING INSTRUCTIONS, STEPPED OFF LINE, MISSED HEEL-TOE, RAISED ARMS AND STAGGERED WHILE TURNING, ON ONE LEG STAND, HE REPEATEDLY SWAYED, RAISED ARMS AND PUT THE FOOT DOWN. ON FINGER/NOSE, HE MISSED TIP OF NOSE ON EVERY TRIAL.
8. CLINICAL SIGNS : SUBJ IMPELLIZZERI EXHIBITED HORIZONTAL GAZE NYSTAGMUS. HIS EYES WERE NOT ABLE TO CONVERGE. PULSE RATE WAS 60, 60 AND 56 BPM -- THE LAST WAS BELOW NORMAL RANGE. BP WAS 106/66, BELOW NORMAL RANGE FOR BOTH SYSTOLIC AND DIASTOLIC. PUPIL SIZE WAS WITHIN NORMAL RANGE UNDER ALL EXAMINATION CONDITIONS.
9. Signs of INGESTION : THERE WAS AN ODOR OF ALCOHOLIC BEVERAGE ON SUBJ'S BREATH.
10. STATEMENTS : SUBJ IMPELLIZZERI 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 AS A CERTIFIED DRE, SUBJ, IMPELLIZZERI IS UNDER THE INFLUENCE OF ALCOHOL AND ANOTHER CNS DEPRESSANT AND IS UNABLE TO OPERATE A MOTOR VEHICLE SAFELY.
12. Toxicological SPECIMEN : SUBJ, IMPELLIZZERI AGREED TO PROVIDE A BLOOD SAMPLE. A/O LAIRD IS A CERTIFIED GMT. HE DREW THE BLOOD FROM SUBJ, IMPELLIZZERI'S LEFT ARM. I OBSERVED THE DRAWING OF THE BLOOD SAMPLE.
13. MISCELLANEOUS SUBJ, IMPELLIZZERI VOLUNTARILY PRODUCED A VIAL CONTAINING WHAT HE STATED WERE HIS VALIUM PILLS. HE STATED THAT HE HAD FILLED THE PRESCRIPTION FOR 50 PILLS TWO DAYS EARLIER. I COUNTED 22 PILLS IN THE VIAL.

EVALUATOR MAYER, RC
 BOOKING NO 002 OR XX-22

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, 19XX/0045/03 DISTRICT BREATH RESULTS: Refused Results 0.00% Instrument # 1234 CHEMICAL TEST: Urine Blood Both Tests Refused

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

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 SULLEN, WITHDRAWN, NON-RESPONSIVE COORDINATION POOR-STUMBLING/STAGGERING

SPEECH SLURRED BREATH NORMAL FACE NORMAL

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

PUPIL SIZE: Equal Unequal (anisocoria) HGN Present: Yes No Able to follow stimulus: Yes No Eyeside: Normal Droopy

PULSE & TIME	HGN	Left Eye	Right Eye	Vertical Nystagmus?	ONE LEG STAND
1. <u>60 0050</u> Lack of Smooth Pursuit		<u>YES</u>	<u>YES</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
2. <u>64 0105</u> Max. Deviation		<u>YES</u>	<u>YES</u>	Convergence Right Eye Left Eye	
3. <u>60 0117</u> Angle of Onset		<u>35°</u>	<u>35°</u>		

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 / 11

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

PUPIL SIZE	Room Light	Darkness	Indirect	Direct	NASAL AREA
	Left Eye	<u>4.0</u>	<u>6.0</u>	<u>4.0</u>	<u>3.5</u>
Right Eye	<u>4.0</u>	<u>6.0</u>	<u>4.0</u>	<u>3.5</u>	<u>CLEAR</u>

HEPPLER: Yes No REBOUND DILATION: Yes No Reaction to Light: SLOW

RIGHT ARM:

LEFT ARM:

BLOOD PRESSURE: 110 / 70 TEMP: 98.5

MUSCLE TONE: Near Normal Flaccid Rigid

Comments: ATTACH PHOTOS OF FRESH PUNCTURE MARKS

What medicine or drug have you been using? I TAKE SOME MEDICINE MY BROTHER GAVE ME - I DON'T KNOW WHAT IT IS Time of use? I DON'T REMEMBER Where were the drugs used? (Location): BROTHER'S HOUSE

DATE/TIME OF ARREST: AUG 6, 19XX / 0015 HRS TIME ONE NOTIFIED: 0035 EVAL START TIME: 0045 TIME COMPLETED: 0125

CONTROL # 1786 EXAMINING OFFICER Robert M. ... SERIAL NO. 321 DIVISION CSP UNAVAILABLE DATES: REVIEWED BY KIIMA J

1. LOCATION DRE EXAM of Carolyn A. Cockroft took place in Intoxilyzer Room, 8th Dist, Troop Hqtrs, CSP.
2. WITNESS: Arresting Officer James Hedlund CSP #0427
3. BAC: I administered Intoxilyzer test to sub Cockroft at 0045 hrs, 6 Aug 88, and obtained result of 0.00%.
4. Notification: Officer Hedlund notified me at 0035 hrs that he had arrested sub Cockroft for DWI, and that he suspected she was "high on something". Officer Hedlund informed me that sub Cockroft was driving at 10 mph on Laciencia Expressway, that she appeared dazed and stuporous and performed field sob. tests poorly. However, she exhibited no odor of alcoholic beverage.
5. Initial Observations: I first saw sub Cockroft in Intoxilyzer Room. She was quiet, withdrawn, and slow to respond to my questions. Upon standing to approach the Intoxilyzer, she stumbled and nearly fell.
6. Medical Problem/Treatment: None evident / N/A
7. Psychophysical Tests: Sub Cockroft swayed throughout Balance test, and kept eyes closed for 16 seconds longer than the 30 seconds instructed. She had difficulty maintaining balance for walk/turn instructions, started too soon, repeatedly missed heel-to-heel stepped off line, raised arms and staggered while turning. She also took 11 rather than 9 steps. On one leg stand, she swayed, raised arms, hopped and put the foot down. On FTN, she missed nose trip every time.
8. Clinical Signs Sub Cockroft exhibited horizontal nystagmus, but not vertical nystagmus. Her eyes were not able to converge. Her pulse was at low end of normal range. Systolic B/P was below normal. Pupil size was within normal limits under all lights. Pupils reacted slowly to light.
9. Signs of Ingestion None evident.
10. Statements: Sub Cockroft admitted to taking "some medicine" that her brother gave her. She stated she didn't know what the medicine was.
11. Opinion: In my opinion as a certified DRE, Carolyn A. Cockroft is presently unable to operate a motor vehicle safely. Her impairment is consistent with CNS depressant influence.
12. Toxicological Specimen: Sub Cockroft provided a urine sample.
13. Miscellaneous

SESSION X

CENTRAL NERVOUS SYSTEM STIMULANTS

SESSION X

CENTRAL NERVOUS SYSTEM STIMULANTS

Upon successfully completing this session, the participants 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., on-set and duration of effects, associated with this category.
- o Explain 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

A. Overview of Central Nervous System Stimulants

CNS stimulants speed up the operation of the brain and spinal cord. It is important to emphasize that "speed up" does not mean "improve" or "enhance". The stimulants definitely do not make the brain work better. Rather, they cause the brain and the rest of the nervous system to work harder, and often to make more mistakes.

The "speeding up" caused by stimulants results in significantly increased heartbeat, respiration and blood pressure, all of which can lead to physical harm to the abuser. In addition, the stimulant user experiences nervousness, irritability and an inability to concentrate or think clearly.

The two major types of abused CNS stimulants are cocaine and the amphetamines.

Cocaine derives from the coca plant, an evergreen native to South America. Cocaine is made from the plant's leaves. There is archaeological evidence that natives of Peru chewed coca leaves 5,000 years ago.

Amphetamines are synthetic (i.e., manufac-tured) drugs. They were first produced near the end of the 19th Century. Amphetamines have a number of legitimate medical applications, including control of narcolepsy; control of certain hyperactive behavioral disorders in children; relief or prevention of fatigue to allow persons to perform essential tasks of long duration; treatment of mild depression; control of appetite; prevention and treatment of surgical shock; treatment of Parkinson's Disease; maintenance of blood pressure during surgery; enhancement of the action of certain analgesic drugs; and, to antagonize the effects of depressant drugs. Numerous pharmaceutical companies manufacture amphetamines that are prescribed for these purposes. But these pharmaceutical amphetamines often are abused, as well.

Examples of common pharmaceutical amphetamines include:

DEXEDRINE
(dextroamphetamine sulfate)
Common street names: "Dexies"; "Hearts"

BENZEDRINE
(amphetamine sulfate)
Common street names: "Bennies"; "Whites"; "Cartwheels"

BIPHETAMINE
(combination of dextroamphetamine and amphetamine)
Common street name: "Black Beauty"

DESOXYN
(methamphetamine hydrochloride, also known desoxyephedrine)

Other relatively common pharmaceutical drugs are combinations of amphetamines and CNS depressants. One is DEXAMYL, which combines dextroamphetamine sulfate with amobarbital, a barbiturate.

Another is ESKATROL, a combination of dextroamphetamine sulfate with prochlorperazine, a non-barbiturate depressant. Persons using either of these drugs would be polydrug users, and would experience and exhibit effects of both depressants and stimulants. However, they might have no idea that they were using different categories of drugs, and might sincerely insist to the drug recognition expert that they had taken only one kind of pill.

Pharmaceutical amphetamines are not the only source of abused amphetamines. Large quantities also are illegally manufactured in clandestine laboratories. The two most common illicit amphetamines are methamphetamine and amphetamine sulfate.

Methamphetamine is also known as methedrine. Its common street names include "speed"; "crank"; "crystal"; "meth"; and "water".



There are various ways in which CNS stimulant abusers ingest their drugs. Cocaine is commonly insufflated (snorted), smoked, injected and taken orally. Snorting may still be the most common method of ingesting cocaine, although smoking has become increasingly popular.

In order to be smoked, a pure form of cocaine is needed. Various chemical processes can be used to "free" the cocaine from other elements to which it is chemically bonded. The pure cocaine sometimes is called "freebase", and the practice of smoking it sometimes is called "freebasing".

One of the processes used to produce "freebase" produces the pure cocaine in the form of small, hard chunks. The chunks are often called "Crack" or "Rock Cocaine". The term "Crack" derives from the cracking sound the chunks produce when they are smoked.

The pharmaceutical amphetamines are produced in the form of tablets, capsules and liquid elixirs, and so they are ingested orally. Illicitly-manufactured amphetamine sulfate usually is produced in tablet form (the tablets sometimes are called "mini beans"), and ingested orally.

Methamphetamine abusers often inject the drug directly into a vein. Methamphetamine can also be snorted or taken orally.

There is a crystalline form of methamphetamine that is known by the street name "Ice". It is abused in much the same way as "Crack", i.e., small bits of "Ice" are placed in the bowl of a pipe and flame from a butane lighter is applied to vaporize the drug; the smoker then draws the vapor into the lungs. Another crystalline form of methamphetamine, known as "crystal meth", is also smoked.

Other non-cocaine and non-amphetamine stimulants include the prescriptive drugs Ritalin, Preludin and Cylert. All have legitimate medical applications, but they also have the potential to be abused.

B. Possible Effects of CNS Stimulants

Cocaine and the amphetamines produce euphoria, a feeling that there are no problems. A feeling of super strength and absolute self-confidence may also be present. With cocaine, but not with the amphetamines, there is also an anesthetic effect, i.e., a dulling of pain.



Stimulant users tend to become hyperactive, e.g., nervous, extremely talkative and unable to stand still. Stimulants also tend to release the user's inhibition, and to impair the user's ability to perceive time and distance. Persons under the influence of stimulants become easily confused and lose the ability to concentrate or to think clearly for any length of time.

C. Onset and Duration of Stimulants' Effects

1. Cocaine

In general, cocaine is a fairly fast-acting, but short duration drug.

When smoked, or "freebased", cocaine goes very quickly to the brain. The smoker almost immediately feels a "rush", or very intense euphoria. However, the effects continue to be felt for only about 5-10 minutes.

When injected, the effects also begin very quickly, usually within just a few seconds, and the onset of effects is very intense. The effects usually continue to be felt for 45-90 minutes.

When insufflated or snorted, the onset of effects is still fairly rapid, although not so fast as with smoking or injection. The user generally feels the onset within about 30 seconds. A "rush" occurs, although it is not quite as intense as when the cocaine is smoked or injected. The user generally continues to feel the effects for 30-90 minutes after snorting the cocaine.

When taken orally, the user generally does not start to feel the effects of the cocaine for 3-5 minutes. And, the effects are not as intense as they are with other methods of ingestion. For these reasons, oral ingestion is the least preferred method of using cocaine. However, the effects of cocaine taken orally may last 15-30 minutes longer than they do when other methods of ingestion are used.

Because cocaine's effects are of relatively short duration, a cocaine user can present some difficulty to a drug recognition expert. The suspect may have been markedly impaired when first contacted by the arresting officer. But by the time the suspect is brought to the DRE, the effects of cocaine may have worn off to the point that the indicators of stimulant influence are no longer apparent. The DRE may be understandably frustrated when this occurs, but his or her conclusions as to the probable categories of drugs involved must reflect the observable evidence gleaned from the drug evaluation and classification examinations. The DRE should never "force" a conclusion as to an impairment that might have existed 30 minutes or an hour ago when he or she has no personal, credible basis for that conclusion.

2. Methamphetamine

Methamphetamine also is a fairly fast-acting drug, and its effects are very similar to cocaine's. However, methamphetamine's effects last a good deal longer.

When injected, methamphetamine's effects begin to be felt within a very few seconds. The user experiences an intense "rush", which lasts at the high level of intensity for 5-30 seconds. Subsequently, the user stays "high" or "wired" for 4-8 hours.

When methamphetamine is snorted or taken orally, the onset of effects is delayed, the "rush" is much less intense and the effects are much briefer.

When "Ice" or "crystal meth" is smoked, the "rush" is very rapid and intense, much like the "rush" produced by "Crack". However, the "Ice" smoker usually will remain impaired for at least several hours.

D. Signs and Symptoms of Stimulant Overdose

The euphoria expected by a stimulant user can be replaced by panic if an overdose is taken. The user may become very confused, and suddenly aggressive. He or she can suffer convulsions, and possibly faint or pass into a coma. Heartbeat will increase, possibly dramatically, and heart arrhythmia (irregular beating) may develop. This may lead to cardiac arrest. Death can also occur from sudden respiratory failure.

Another danger is that subjects or their friends may attempt to counteract a stimulant overdose with barbiturates, possibly leading to an overdose of CNS depressant.

E. Expected Results of the Evaluation

When a person under the influence of CNS stimulants is examined by a drug recognition expert, the following results can be expected.

Horizontal Gaze Nystagmus - none.

Vertical Nystagmus - none.

Lack of Convergence - none.

Pupil Size will be dilated. The pupils will usually appear markedly dilated (mydriasis), possibly even under direct light.

Pupil's reaction to light - slow.

Pulse Rate - up.

Blood Pressure - up.

Temperature - up.

Bruxism (i.e., grinding of the teeth) may be evident.

Muscle Tone may be rigid.

Injection Sites might be found, e.g., on the arms, wrists, neck, etc., especially with methamphetamine users but also with some cocaine users. Other cocaine users who routinely snort their drug may exhibit severe redness in the nasal area, and possibly scarring or erosion of the nasal septum.

Topics for study

1. Why is it sometimes difficult for a drug recognition expert to obtain evidence of stimulant influence when examining a cocaine user?
2. What kinds of illicitly-manufactured amphetamines are most commonly abused?
3. Name two CNS Stimulants other than Cocaine or the Amphetamine compounds.
4. How do stimulants usually affect the blood pressure and pulse rate?
5. True or false: A person under the influence of a CNS Stimulant alone usually will not exhibit horizontal gaze nystagmus?
6. What is "bruxism"?
7. Fill in the blank: "Crack" is to cocaine as is to methamphetamine.

EVALUATOR **MOEN, R. #6762**

Page 1 of 1 **DRUG INFLUENCE EVALUATION** BOOKING NO 003 DR XI-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 19XX/2230/CENTRAL TESTING** BREATH RESULTS: Refused Results 0.00% Instrument # 1234 CHEMICAL TEST: Urine Blood Both Tests Refused

MIRANDA WARNING GIVEN: Yes No What have you eaten today? When? **CANDY BAR AROUND NOON** What have you been drinking? How much? **NOTHING** Time of last one? **N/A**

Given by **ENGLE, R** Are you sick or injured? Yes No Are you diabetic or obese? Yes No

Time now? **8 O'CLOCK** When did you last sleep? How long? **LAST NIGHT / 3 HRS.** 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: Glasses Contacts if so None 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 commands: Yes No Eyeballs: Normal Droopy

PULSE & TIME	HGN	Left Eye	Right Eye	Vertical Nystagmus?	ONE LEG STAND
1. <u>112 - 2240</u>	Lack of Smooth Pursuit	<u>NO</u>	<u>NO</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
2. <u>108 - 2253</u>	Max Deviation	<u>NO</u>	<u>NO</u>	Convergence Right Eye <u>→</u> Left Eye <u>←</u>	
3. <u>100 - 2305</u>	Angle of Onset	<u>NONE</u>	<u>NONE</u>		

BALANCE EYES CLOSED: WALK AND TURN TEST: **HAD DIFFICULTY STANDING STILL DURING INSTRUCTIONS** Cannot keep balance: Starts too soon:

1st Nine: 2nd Nine:

Steps Walking: Misses Heel-Toe: Steps off Line: Raises Arms: Actual Steps Taken: 9 9

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**

PUPIL SIZE	Room Light	Darkness	Indirect	Direct	NASAL AREA WHITE
Left Eye	<u>6.0</u>	<u>8.5</u>	<u>7.5</u>	<u>6.0</u>	BUDER RESIDUE IN NOSE ORAL CAVITY
Right Eye	<u>6.0</u>	<u>8.5</u>	<u>7.5</u>	<u>6.0</u>	CLEAR

HIPPIUS: Yes No REBOUND DILATION: Yes No Reaction to Light: **SLOW**

RIGHT ARM: LEFT ARM: **NO VISIBLE MARKS**

BLOOD PRESSURE: 142 / 96 TEMP: 99.9

MUSCLE TONE: Near Normal Flaccid Rigid Comments: **SOME TENSENESS IN ARMS**

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

DATE/TIME OF ARREST: **JULY 18 19XX / 2200** TIME ONE NOTIFIED: **2220** EVAL START TIME: **2230** TIME COMPLETED: **2310**

CONTROL # Examining OFFICER: **Ron M... CERTIFIED DRF** SERIAL NO: **6762** DIVISION: **1-D** UNAVAILABLE DATES: REVIEWED BY: **PAGE T.**

1. LOCATION : DRUG INFLUENCE EXAM OF JAMES R. HEDLUND WAS AT CENT'Y TEST. STATION, VSP HDQTRS
2. WITNESSES : ARRESTING OFFICER R. ENGLE #9922 VSP , SGT T. PAGE, LAPD #171
3. BAC : OFFICER ENGLE INFORMED ME THAT ALCOSENSOR TEST ADMINISTERED TO SUBJ HEDLUND AT 2215 HRS. RESULTED IN BAC OF 0.00% (NEGATIVE ALCOHOL)
4. NOTIFICATION : OFFICER ENGLE CONTACTED ME AT 2220 HRS. REQUESTED I PERFORM DRUG INFLUENCE EXAM OF SUBJ HEDLUND.
5. INITIAL OBSERVATION : I FIRST SAW SUBJ HEDLUND AT 2230 HRS. HE APPEARED VERY NERVOUS AND FIDGETY. CONSTANTLY ROCKED BACK AND FORTH WHILE SEATED AT BENCH NEAR INTERVIEW TABLE.
6. MEDICAL : NO PROBLEMS EVIDENT. NO TREATMENT REQUESTED.
7. PSYCHOPHYSICAL TESTS : SUBJ HEDLUND ROCKED FRONT-TO-BACK APPROX. 3" ON ROMBERG, AND STATED "THAT'S 30 SECONDS" WHEN ONLY 15 SECONDS HAD PASSED. ON WAT, HE BEGAN WALKING AS I STARTED TO GIVE INSTRUCTIONS, IMMEDIATELY AFTER ACKNOWLEDGING THAT HE WAS TO STAND STILL UNTIL TOLD TO WALK. SUBSEQUENTLY HE LOST BALANCE TWICE DURING INSTRUCTIONS, THEN RAISED ARMS REPEATEDLY WHILE WALKING. HE TURNED IN AN ABRUPT, SWING MOVEMENT NOT AS EXPLAINED AND DEMONSTRATED. ON OLS, HE SWAYED, RAISED ARMS, HOPPED AND PUT THE FOOT DOWN, ON FINGER-NOSE, HE MISSED THE TIP OF NOSE ON EVERY TRIAL WITH THE RIGHT HAND.
8. CLINICAL SIGNS : SUBJ HEDLUND DID NOT EXHIBIT NYSTAGMUS, AND HIS EYES DID CONVERGE. HIS PULSE WAS ABOVE NORMAL ON ALL THREE MEASUREMENTS. HIS BLOOD PRESSURE AND TEMPERATURE WERE ALSO ABOVE NORMAL. HIS PUPILS WERE DILATED BEYOND NORMAL RANGE, BOTH UNDER INDIRECT LIGHT AND NEAR-TOTAL DARKNESS.
9. SIGNS OF INGESTION : SUBJ HEDLUND'S NOSTRILS WERE FILLED TO CONTAIN A RESIDUE OF WHITE POWDER.
10. STATEMENTS : SUBJ HEDLUND DENIED TAKING ANY MEDICINE OR DRUGS. IN RESPONSE TO MY QUESTION "HOW MUCH COKE DID YOU SNOOT TONIGHT" HE REPLIED "I WON'T ANSWER THAT". AT THAT POINT, I CEASED ASKING QUESTIONS OF SUBJ HEDLUND.
11. OPINION : IN MY OPINION, SUBJECT JAMES R. HEDLUND IS UNDER THE INFLUENCE OF A CENTRAL NERVOUS SYSTEM STIMULANT, AND IS UNABLE TO OPERATE A MOTOR VEHICLE SAFELY. I AM A CERTIFIED DRE.
12. TOXICOLOGICAL SPECIMEN = SUBJ HEDLUND AGREED TO SUBMIT TO A BLOOD SAMPLE EXTRACTION.
13. MISCELLANEOUS :

Page 1 of 1 **DRUG INFLUENCE EVALUATION**

EVALUATOR JOHN, C
 BOOKING NO 004 OR XI-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 OCTOBER 10, 19XX/2315/37 DISTRICT BREATH RESULTS Refused Results 0.00% instrument # 1234 CHEMICAL TEST Urine Blood Both Tests Refused

MIRANDA WARNING GIVEN Yes No What have you eaten today? HOT DOG When? 1:00 pm What have you been drinking? How much? NOTHING Time of last drink? N/A

Given by ROBERTS, R Are you sick or injured? Yes No Are you diabetic or epileptic? Yes No
 Time now? MIDNIGHT When did you last sleep? How long? YESTERDAY 4 HRS. 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 RESTLESS COORDINATION POOR - JITTERY, STUMBLING
 I DON'T DO DRUGS SPEECH VERY TALKATIVE BREATH NORMAL FACE NORMAL

RAPID "TRIPPING" OVER WORDS CORRECTIVE LENS Glasses Contacts, if so Hard Soft None Eyes: Normal Bloodshot Watery Blindness: None L Eye R Eye Tracing: Equal Unequal

PUPIL SIZE Equal Unequal (explain) MGN Present Yes No Able to follow stimulus: Yes No Eyeballs: Normal Droopy

PULSE & TIME	MGN	Left Eye	Right Eye	Vertical Nystagmus?	ONE LEG STAND
1 <u>100 / 2320</u>	Lack of Smooth Pursuit	<u>NO</u>	<u>NO</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
2 <u>108 / 2331</u>	Max. Deviation	<u>NO</u>	<u>NO</u>	Convergence Right Eye <input checked="" type="checkbox"/> Left Eye <input checked="" type="checkbox"/>	
3 <u>104 / 2343</u>	Angle of Onset	<u>NONE</u>	<u>NONE</u>		

BALANCE EYES CLOSED WALK AND TURN TEST

Cannot keep balance _____
 Starts too soon _____
 Stops Walking _____
 Misses Heel-Toe _____
 Steps off Line _____
 Raises Arms _____
 Actual Steps Taken 9 9

	1st Nine	2nd Nine
Sways while balancing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Uses arms to balance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hopping	<input type="checkbox"/>	<input type="checkbox"/>
Puts foot down	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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

PUPIL SIZE	Room Light	Darkness	Indirect	Direct	NASAL AREAED, RUNNY / ULCERATION INSIDE NOSE / ORAL CAVITY
	Left Eye	<u>6.5</u>	<u>9.0</u>	<u>8.0</u>	
Right Eye	<u>6.5</u>	<u>9.0</u>	<u>8.0</u>	<u>6.0</u>	

HEPATIC Yes No REBOUND DILATION Yes No Reaction to Light SLOW

RIGHT ARM LEFT ARM

NO VISIBLE MARKS

BLOOD PRESSURE 144 / 104 TEMP 99.8

MUSCLE TONE Near Normal Flaccid Rigid

ATTACH PHOTOS OF FRESH PUNCTURE MARKS

What medicine or drug have you been using? How much? I DON'T USE DRUGS ANYMORE Time of use? N/A Where were the drugs used? (Location) N/A

DATE/TIME OF ARREST OCT 10 19XX/2240 TIME ONE NOTIFIED 2305 EVAL START TIME 2315 TIME COMPLETED 2345

CONTROL # 111111 EXAMINING OFFICER John C SERIAL NO. 7766 DIVISION VTD UNAVAILABLE DATES None REVIEWED BY STUDDARD, R.

1. LOCATION MY EXAMINATION OF KIM J. KOHLHEPP TOOK PLACE IN THE DRE ROOM OF 3RD DIST. HEADQUARTERS ON 10 OCT 19XX. THE EXAMINATION BEGAN AT 2315 HRS. AND ENDED AT 2345 HRS.
2. WITNESS: RONALD ROBERTS, CPD # 2468 (ARRESTING OFFICER)
3. BAC: OFFICER ROBERTS INFORMED ME THAT INTOXILYZER TEST OF SUBJ KOHLHEPP AT 2305 HRS. PRODUCED RESULT OF 0.00%.
4. NOTIFICATION: OFFICER ROBERTS CONTACTED ME IMMEDIATELY AFTER COMPLETING INTOXILYZER TEST OF SUBJ KOHLHEPP. OFFICER ROBERTS STATED KOHLHEPP HAD BEEN APPREHENDED FOR DRIVING 65MPH IN A 30MPH ZONE, FAILING TO STOP AT SIGNALIZED INTERSECTION AND DRIVING WITHOUT HEADLIGHTS.
5. INITIAL OBSERVATION: WHEN I FIRST SAW SUBJ KOHLHEPP (AT 2310 HRS.) HE WAS STANDING NEXT TO OFFICER ROBERTS IN THE DRE ROOM. KOHLHEPP WAS NERVOUS, AGITATE JITTERY. OFFICER ROBERTS ADVISED KOHLHEPP TO SIT DOWN AND BE CALM. SUBJ KOHLHEPP SAT, BUT WITHIN SEVERAL SECONDS STOOD AGAIN, AND FIDGETED FROM FOOT TO FOOT.
6. MEDICAL TREATMENT: NONE REQUESTED OR GIVEN. SUBJ KOHLHEPP DENIED BEING UNDER CARE OF A PHYSICIAN OR DENTIST.
7. PSYCHOPHYSICAL TESTS: SUBJ KOHLHEPP SWAYED 2" SIDE-SIDE ON ROMBERG AND ESTIMATED 12 ACTUAL SECONDS AS 30 SECONDS. ON WALK/TURN HE TWICE STEPPED OFF LINE AND RAISED ARMS THREE TIMES; HE ALSO TURNED ABRUPTLY ("ABOUT FACE"). ON OLS, HE SWAYED, RAISED ARMS, HOPPED AND LOWERED THE FOOT TO THE GROUND. ON FINGER/NOSE, HE MISSED TIP OF NOSE THROUGHOUT THE TEST.
8. CLINICAL SIGNS: SUBJ KOHLHEPP EXHIBITED NO NYSTAGMUS OR LACK OF CONVERGENCE HIS PUPILS WERE DILATED AND REACTED SLOWLY TO LIGHT. HIS BLOOD PRESSURE, PULSE AND TEMPERATURE WERE ALL ELEVATED.
9. SIGNS OF INJECTION: SUBJ KOHLHEPP'S NOSTRILS WERE RED AND ULCERATED.
10. STATEMENTS: SUBJ KOHLHEPP FIRST DENIED EVER USING DRUGS. SUBSEQUENTLY HE SAID "I DON'T USE DRUGS ANYMORE".
11. OPINION: I HAVE BEEN A CERTIFIED DRE SINCE 8 JULY 1977. IN MY OPINION, SUBJECT KIM J. KOHLHEPP IS UNDER THE INFLUENCE OF A CNS STIMULANT, AND IS UNABLE TO OPERATE A MOTOR VEHICLE SAFELY.
12. TOXICOLOGICAL SPECIMEN: SUBJ KOHLHEPP SUBMITTED TO EXTRACTION OF A BLOOD SAMPLE.
13. MISCELLANEOUS: THERE IS AN OUTSTANDING BENCH WARRANT ON SUBJECT KIM J. KOHLHEPP FOR FAILING TO APPEAR ON A CHARGE OF POSSESSION OF METHAMPHETAMINE.

SESSION XI

PRACTICE: EYE EXAMINATIONS

HS 172 R4/93

SESSION XI PRACTICE: EYE EXAMINATIONS

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

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

In this session, you will practice estimating pupil size and assessing pupils' reaction to light. You will work in a team with fellow students, taking turns examining each other's eyes.

When it is not your turn either to administer the eye exams or serve as the examination subject, you should try to monitor the work of your team mate who is administering the exams and coach him or her as appropriate. In this way you can assist each other in developing skills.

To prepare for this session, make sure you can correctly answer the following questions:

1. How can you produce the faint, reddish light needed for the estimation of pupil size under near-total darkness?
2. How should you aim the penlight to examine pupil size under indirect light?
3. How far in front of the subject's eye should the pen light be held during the direct light examination? How long must you shine the light into the subject's eye to evaluate the pupil's reaction to light?

(The information needed to answer these questions can be found in Part F. of Session IV)

4. What is the technical term meaning "constricted pupils"?
5. What is the technical term meaning "dilated pupils"?
6. What is the technical term meaning "droopy eyelids"?

(The information needed to answer these questions can be found in Session V.)

EYE EXAMINATIONS DATA SHEET

Subject's Name _____

Under Room Light

Left Right

Room	Right
Light	
Direct	
Light	

Reaction: _____

Hippus: Yes No

In the Dark Room

Left Right

Near	Right
Total	
Indirect	
Light	
Direct	
Light	

Reaction: _____

Hippus: Yes No

Subject's Name _____

Under Room Light

Left Right

Room	Right
Light	
Direct	
Light	

Reaction: _____

Hippus: Yes No

In the Dark Room

Left Right

Near	Right
Total	
Indirect	
Light	
Direct	
Light	

Reaction: _____

Hippus: Yes No

Subject's Name _____

Under Room Light

Left Right

Room	Right
Light	
Direct	
Light	

Reaction: _____

Hippus: Yes No

In the Dark Room

Left Right

Near	Right
Total	
Indirect	
Light	
Direct	
Light	

Reaction: _____

Hippus: Yes No

SESSION XII

ALCOHOL WORKSHOP

HS 172 R4/93

SESSION XII ALCOHOL WORKSHOP

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

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

In this session, you will have the opportunity to practice administering portions of the drug evaluation and classification examination to persons who are actually under the influence of a drug. The drug involved is alcohol, which undoubtedly is the most familiar and most frequently abused drug in our society. Alcohol belongs to the category of drugs known as central nervous system depressants. The behaviors, signs and symptoms you observe in the volunteer drinkers participating in this session will, in many respects, be similar to what you will observe when you encounter persons under the influence of barbiturates, tranquilizers or other CNS depressants.

Working in a team with fellow students, you will administer the following tests to each volunteer:

- o Horizontal Gaze Nystagmus (including estimation of onset angle)
- o Vertical Nystagmus
- o Lack of Convergence
- o Pupil Size Estimation (in room light)
- o Romberg Balance
- o Walk and Turn
- o One Leg Stand (each volunteer will take this test twice, once on each leg)
- o Finger to Nose
- o Pulse Rate

You will record the results of these tests on the appropriate segments of the Drug Influence Evaluation form.

To prepare for this session, make sure that you know how to administer these tests, and that you know what clues to look for and how to recognize them. It will be a good idea to practice administering these tests (e.g., to fellow students, family members, etc.) to sharpen your skills in preparation for this session.

SESSION XIII

PHYSICIAN'S DESK REFERENCE (PDR)

HS 172 R4/93

SESSION XIII PHYSICIAN'S DESK REFERENCE (PDR)

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

- o Explain how the various sections of the PDR can provide information that will:
 - aid in the drug influence evaluation;
 - aid in courtroom testimony.

- o Use the PDR; 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.

A. The Physician's Desk Reference as a Resource

The Physician's Desk Reference for Prescription Drugs is a very useful reference source for a drug recognition expert. It provides detailed information, including photographs, on virtually every drug available for prescription in the country. Many of these drugs are either CNS depressants or CNS stimulants. Others are narcotic analgesics. Still others are combinations of these. Numerous trade names exist for certain drugs, since many manufacturers offer competing products.

During the course of an arrest and examination of a suspected drug-impaired driver, it is not uncommon to discover pills, tablets, etc. on the suspect's person. Reference to the PDR usually can help to establish the identity and category of these drugs.

The PDR is published annually. Throughout the year, periodic supplements are published as new products come on the market.

B. The Contents of the PDR

The PDR contains the following color-coded sections.

- (1) An index of all manufacturers who provided information on their prescription drugs.
- (2) An index of Product Names (including discontinued products).
- (3) An index of Products by Category of Drugs.
- (4) A Generic and Chemical name index.
- (5) A Product Identification Section, including actual size and full color photographs.
- (6) A Product Information Section, describing the drug's composition, action and uses, administration and dosage, precautions, side effects and contraindications, the form in which it is supplied, etc.
- (7) A Diagnostic Product Information section.
- (8) A listing of the locations and emergency telephone numbers of poison control centers.
- (9) A guide to the management of drug overdoses.

DRUG EVALUATION AND CLASSIFICATION PROGRAM

State Coordinators

(Updated - June 8, 1993)

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(✓) Recently changed information (phone numbers, addresses, etc.)

PLEASE NOTIFY GLENN KARR (202) 366-0350, FOR PERIODIC
UPDATING.

[GK, NRO-20]

SESSION XIV

HALLUCINOGENS

HS 172 R4/93

SESSION XIV HALLUCINOGENS

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

- o Explain a brief history of the Hallucinogen category of drugs.
- o Identify common drug names and terms associated with this category.
- o Identify common methods of administration for this category.
- o Explain the symptoms, observable signs and other effects associated with this category.
- o Explain the typical time parameters, i.e., on-set 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.

A. Overview of Hallucinogens

Hallucinogens are drugs that cause hallucinations. An hallucination is a sensory experience of something that does not exist outside the mind. It may involve hearing, seeing, smelling, tasting or feeling something that isn't really there. Or, it may involve distorted sensory perceptions, so that things look, sound, smell, taste or feel differently from the way they actually are.

Hallucinogenic drugs usually produce so-called pseudo-hallucinations. This means that the user typically knows that what he or she is seeing, hearing, smelling, etc. is not real, but is a product of the drug.

One common type of hallucination produced by these drugs is called synesthesia, a transposing of sensory modes. For example, seeing a particular sight may cause the user to perceive a sound. Hearing a sound may cause him or her to perceive an odor. Thus, a person under the influence of an hallucinogen might hear a telephone ring, and "see" a flash of brilliant color. Or, he or she might look at something colored yellow and "smell" the fragrance of roses. Sometimes hallucinogen users will make statements indicating that they are experiencing synesthesia (examples: "That chair sounds beautiful!" "Look at those fantastic colors!"). Drug recognition experts should be alert for such statements, and be aware that they are significant indicators of this drug category.

Sometimes, the hallucinations can be very frightening to the user. The user may be panic-stricken by what he or she is seeing or hearing, and may become uncontrollably excited, or even try to flee from the terror. Hallucinogen users call these kinds of experiences "bad trips". Users of hallucinogens have been known to be driven into permanent insanity by these experiences.

A terrifying "bad trip" sometimes may be re-experienced as a flashback. Hallucinogen flashbacks apparently do not occur because of a residual quantity of drug in the user's body. Rather, flashbacks apparently are vivid recollections of a portion of a previous hallucinogenic experience. Essentially, flashbacks are very intense, and very frightening, day dreams.

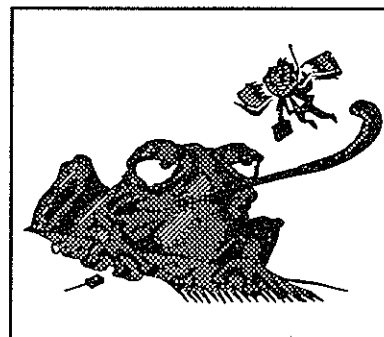
There are three types of flashback; emotional, somatic, and perceptual. The emotional flashback is the most dangerous. It brings back strong feelings of panic, fear and loneliness, and creates an intense and very real recollection of the original "bad trip". A somatic flashback consists of altered bodily sensations, e.g., tremors, weakness, nausea, dizziness, etc. that were part of the original "trip". In a perceptual flashback, the user re-experiences some of the sensory distortions of the original "trip".

Naturally-occurring hallucinogens: some common examples.

Peyote is a small, spineless cactus containing the active hallucinogenic ingredient called mescaline. The crowns, or "buttons", of the cactus can be collected and dried, and eaten. Certain American Indian tribes have used peyote in religious ceremonies for thousands of years. Peyote currently is used legally in religious ceremonies of the Native American church.

Psilocybin is a drug found in a number of different species of mushrooms. An unstable derivative of psilocybin, called psilocin, also has hallucinogenic properties and also is found in these mushrooms. Psilocybin mushrooms also have a long history of use in Indian religious rituals.

Other naturally occurring hallucinogens include nutmeg, jimson weed, morning glory seeds and Bufotenine. The last of those is an hallucinogenic substance found in the glands of certain toads. Bufotenine is toxic; the toad secretes Bufotenine through its skin as a defensive mechanism, to make it too unpleasant for a predator to eat the toad. But you guessed it: there are people who actually lick toads to get high from Bufotenine.



Synthetically-manufactured hallucinogens: some common examples.

LSD probably is the most famous synthetic hallucinogen. "LSD" is an abbreviation of Lysergic Acid Diethylamide.

MDA, MDMA, MMDA, TMA, STP, DET, and DMT are other synthetic hallucinogens. They are sometimes referred to as "psychedelic amphetamines" or "psychotomimetic amphetamines". Their effects are often similar to those of high doses of CNS stimulants.

MDA is an abbreviation for 3,4-Methylenedioxyamphetamine. Its users sometimes refer to MDA as the "Mellow Drug of America". It is normally produced as a clear liquid, or as a white powder in capsule or tablet form. MDA often is mixed with amphetamine, cocaine, methamphetamine, LSD or STP, or occasionally with strychnine. MDA probably is the most widely abused of the "psychedelic amphetamines".

MDMA is an abbreviation for Methylenedioxymethamphetamine. It is perhaps better known by the "street name" Ecstasy. MDMA is chemically very similar to MDA.

MMDA is an abbreviation for 5-Methoxy-3,4-Methylenedioxyamphetamine. Its effects are similar to those of MDA or peyote.

TMA is an abbreviation for 3,4,5-Trimethoxyamphetamine. Its effects are also similar to those of MDA or peyote.

STP is an abbreviation for "Serenity, Tranquility and Peace". It is also known by the chemical name DOM, or 2-Methyl-2,5-Dimethoxyamphetamine.

DET is diethyltryptamine.

DMT is dimethyltryptamine. It is sometimes known as the "businessman's trip" because its effects last only about one hour (i.e., short enough to occupy a "businessman's lunch").

An important fact about many hallucinogens is that they are not addictive. Nevertheless, many hallucinogen abusers frequently use these drugs, because they enjoy the effects.

The most common method of ingesting hallucinogens is orally. Psilocybin mushrooms and peyote "buttons" can be eaten "as is". LSD often is placed on bits of paper, or on sugar cubes, and eaten.

Some hallucinogens, such as LSD, can be put into marijuana or tobacco cigarettes and smoked.

Some MDA users snort that drug.

Some LSD users inject that drug.

B. Possible Effects of Hallucinogens

In general, hallucinogens intensify whatever mood the user is in when the drug is taken. If the user is depressed, the drug will deepen the depression. If the user is feeling pleasant, the drug usually will heighten that feeling. If the user expects that the drug will help him or her achieve new insights or an expanded consciousness, the drug will seem to have that effect. However, use of hallucinogens often uncovers mental or emotional flaws of which the user was unaware. Such flaws can result in the panic and terror of a "bad trip" even though the user was expecting a pleasurable experience.

The most common effect of an hallucinogen is hallucination. The user's perception of reality is severely distorted, often to the point of synesthesia. This makes it virtually impossible for the hallucinogen-influenced person to function in the real world.

C. Onset and Duration of Hallucinogens' Effects

1. Peyote's effects generally begin to be felt within one-half hour after eating the cactus "buttons". The initial effects often include nausea, possible vomiting, mild rise in blood pressure, pulse rate and temperature. And, the pupils dilate.

After about one hour, sensory changes begin. The user experiences visual distortions, accompanied by rich colors. Objects take on new forms and begin to move. Shapes "come alive". The sensory changes reach their peak in about 3-4 hours, with synesthesia occurring at about that time period. After about 10 hours there will be a gradual decline in effects, with near total recovery in about 12 hours.

2. Psilocybin's effects also start to develop in about one-half hour. The user first experiences dizziness, a light-headed feeling, and giddiness. The extremities (hands, feet, etc.) begin to feel very light or very heavy. After about 30-60 minutes, vision blurs. Colors become brighter and leave longer-lasting after-images. Objects take on sharp visual definition and hearing becomes more acute.

Sixty-to-ninety minutes after eating the mushrooms, color patterns and shapes start to develop. The surfaces of objects become wavy. Feelings of euphoria develop. Shortly thereafter, body sensations increase, along with mental perceptions. The user often becomes introspective.



After 2-3 hours, the effects begin to diminish.

3. LSD's effects begin to be felt in 30-45 minutes. Pulse rate, blood pressure and temperature rise. The pupils dilate. The hair starts to stand on end (piloerection). Nausea, dizziness and headache develop. The effects reach their peak in about 4-6 hours. After 7-9 hours, the effects diminish. The user generally feels normal after 10-12 hours.
4. MDA's effects usually begin within 40-60 minutes. The pupils dilate. Pulse rate and blood pressure increase. The effects reach their peak in about 90-120 minutes, and usually have dissipated within 8 hours.

D. Signs and Symptoms of Hallucinogen Overdose

It is unlikely that hallucinogens directly are life-threatening. However, overdoses have often indirectly resulted in death. For example, one LSD user was killed when he attempted to stop a train, bare handed. The extreme panic and agitation of a "bad trip" have been known to lead to suicide, or to accidental deaths as users have tried to flee from their hallucinations.

The most common danger of an hallucinogen overdose is an intense "bad trip", which can result in severe and sometimes permanent psychosis.

There is some evidence 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.

E. Expected Results of the Evaluation

When a person under the influence of an hallucinogen is examined by a drug recognition technician, the following results can be expected.

Horizontal Gaze Nystagmus - none.

Vertical Nystagmus - none.

Lack of Convergence - none.

Pupil size - dilated.

Pupil's reaction to light - normal. However, the psychedelic amphetamines usually will slow the pupils' reaction.

Pulse rate - up.

Blood pressure - up.

Temperature - up.

Muscle Tone may be rigid.

Injection sites generally will not be found. However, some LSD users do inject the drug.

Topics for study

1. What does "synesthesia" mean?
2. What is a "flashback"? What are the three types of "flashback"?
3. Name two naturally-occurring hallucinogens.
4. What is a "bad trip"?
5. What does "psychotomimetic" mean?
6. What is an "illusion"? What is a "delusion"?
7. What is the difference between "hallucinations" and "pseudohallucinations"?
8. What is "piloerection"?

EVALUATOR PAGE, T

Page 1 of 1 **DRUG INFLUENCE EVALUATION** BOOKING NO 005 DA 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 NCPD

DATE EXAMINED, TIME/LOCATION SEPTEMBER 23, 19XX/2030/CENTRAL BREATH RESULTS Refused Results 0.00% Instrument # 1234 CHEMICAL TEST: Urine Blood Both Tests Refused

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

Given by BUONETO, R. Are you sick or injured? MY STOMACH IS UPSET Yes No Are you diabetic or epileptic? Yes No

Time now? 7 PM When did you last sleep? How long? LAST NIGHT / 7 HRS. 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 AND DISTRACTED COORDINATION VERY POOR, CAN BARELY STAND

SPEECH RAPID, STUTTERING BREATH SOUR, RANCID ODOR FACE FLUSHED

CORRECTIVE LENS Glasses Contact (if so) None Hard Soft Eyes: Normal Bloodshot Watery None L Eye R Eye Tracing Equal Unequal

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

PULSE & TIME	HGN	Left Eye	Right Eye	Verbal Nystagmus?	ONE LEG STAND
1 <u>104 / 2040</u>	Lack of Smooth Pursuit	<u>NO</u>	<u>NO</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>TEST STOPPED - SUBJECT UNABLE TO STAND ON ONE FOOT</p> <p><input checked="" type="checkbox"/> Sways while balancing.</p> <p><input type="checkbox"/> Uses arms to balance.</p> <p><input type="checkbox"/> Hopping.</p> <p><input type="checkbox"/> Puts foot down.</p>
2 <u>112 / 2057</u>	Max Deviation	<u>NO</u>	<u>NO</u>	Convergence Right Eye Left Eye	
3 <u>104 / 2112</u>	Angle of Onset	<u>NONE</u>	<u>NONE</u>		

BALANCE EYES CLOSED TEST STOPPED: SUBJECT UNABLE TO STAND

WALK AND TURN TEST TEST STOPPED - SUBJECT UNABLE TO MAINTAIN THE HEEL-TIE POSITION.

Cannot keep balance Starts too soon Steps Wobbling Misses Heel-Toe Steps off Line Raises Arms Actual Steps Taken

INTERNAL CLOCK N/A Estimated as 30 sec. Describe Turn N/A Cannot do Test (explain) COULD NOT STAND HEEL-TOE Type of Footwear MOCCASINS

PUPIL SIZE	Room Light	Darkness	Indirect	Direct	NASAL CAVITY
Left Eye <u>6.0</u>	<u>6.0</u>	<u>8.0</u>	<u>7.0</u>	<u>5.5</u>	<u>CLEAR</u>
Right Eye <u>6.0</u>	<u>6.0</u>	<u>8.0</u>	<u>7.0</u>	<u>5.5</u>	<u>CLEAR</u>

ORAL CAVITY CLEAR

HIPPLE Yes No REBOUND DELATION Yes No Reaction to Light NORMAL

RIGHT ARM LEFT ARM

NO VISIBLE MARKS

BLOOD PRESSURE 148 / 104 / 100.0 TEMP 100.0

MUSCLE TONE Near Normal Flaccid Rigid Comment: 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 AXX/1930 TIME ONE NOTIFIED 2010 EVAL START TIME 2030 TIME COMPLETED 2115

CONTROL # 2741 EXAMINING OFFICER PAGE, T SERIAL NO. 2741 DIVISION UNAVAILABLE DATES REVIEWED BY HAUFERSAT &

1. LOCATION: I, THOMAS E. PAGE, CONDUCTED A DRUG INFLUENCE EVALUATION OF Ms. R.S. HOECKLE AT THE CENTRAL TESTING UNIT, NCPD HQDTRS, ON 23 SEPT XX.
2. WITNESSES: ROBERT BUONETO (ARRESTING OFFICER), EDWARD BRACKEN (ASST. DIST. ATTY)
3. BAC: OFFICER BUONETO REPORTED HE ADMINISTERED BREATHALYZER TEST TO MS. HOECKLE AT 20:00 HRS, AND OBTAINED RESULT OF 0.00%
4. NOTIFICATION: AT 20:10 HRS. OFFICER BUONETO SUMMONED ME TO CONDUCT THE DRUG INFLUENCE EVALUATION OF MS. HOECKLE. OFFICER BUONETO REPORTED HE HAD OBSERVED MS. HOECKLE IN THE DRIVER'S POSITION OF HER CHEVROLET (NY #127 NCG). THE VEHICLE WAS STOPPED ON THE S/B TRAFFIC LANE OF ISLAND DRIVE, AT INTERSECTION WITH HAUPPAGE LANE. OFFICER BUONETO REPORTED TRAFFIC LIGHT WAS GREEN FOR S/B ISLAND DRIVE. HE FURTHER REPORTED THAT UPON APPROACHING MS. HOECKLE, SHE TURNED TO HIM, POINTED TO THE TRAFFIC LIGHT AND STATED "GOD IS LIGHT, AND THE LIGHT IS OF GOD".
5. INITIAL OBSERVATION: MS. HOECKLE WAS SEATED NEXT TO THE BREATHALYZER TABLE AND STARING FIXEDLY AHEAD. SHE SLOWLY TURNED TOWARD ME AND ASKED "ARE YOU OF GOD". I REPLIED THAT MY NAME IS TOM, AND I'D LIKE TO EXAMINE HER, IF SHE WOULDN'T MIND. SHE NODDED, THEN SAID "GOD SENT YOU, SO YOU MUST BE GOOD". HER SPEECH WAS RAPID, AND SHE STUTTERED SLIGHTLY.
6. MEDICAL PROBLEMS/TREATMENT: MS. HOECKLE INDICATED SHE WAS EXPERIENCING A MILDLY UPSET STOMACH. HOWEVER, SHE STATED SHE WAS WILLING TO PARTICIPATE IN THE EXAMINATION, AND WOULD ANSWER MY QUESTIONS. AT THE COMPLETION OF MY EXAMINATION OF MS. HOECKLE, I SUMMONED DR. J.P. MOONEY (ON-CALL DEPART PHYSICIAN) TO EXAMINE HER.
7. PSYCHOPHYSICAL TESTS: MS. HOECKLE WAS UNABLE TO STAND WITHOUT ASSISTANCE, AND I WAS REQUIRED TO TERMINATE THE ROMBERG, W/T AND OLS TESTS VIRTUALLY IMMEDIATELY. I INSTRUCTED HER TO REMAIN SEATED FOR ETN; SHE WIDELY MISSE THE TIP OF NOSE ON ALL TRIALS.
8. CLINICAL SIGNS: MS. HOECKLE HAD NO NYSTAGMUS. HER EYES SUCCESSFULLY CONVERGED. BLOOD PRESSURE, PULSE AND TEMPERATURE WERE ALL ELEVATED. HER PUPILS WERE ABNORMALLY DILATED IN NEAR-TOTAL DARKNESS AND UNDER INDIRECT LIGHT.
9. SIGNS OF INGESTION: MS. HOECKLE'S BREATH HAD A SOUR, RANCID ODOR.
10. STATEMENTS: MS. HOECKLE STATED THAT SHE WAS FASTING FOR RELIGIOUS REASONS, AND THAT HER RELIGION DOESN'T PERMIT ALCOHOLIC BEVERAGES. SHE ALSO STATED THAT HER "MEDIUM" DOES NOT ALLOW HER TO USE DRUGS. SHE INDICATED THAT THE "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: IN MY JUDGMENT AS A CERTIFIED DRE, MS. R.S. HOECKLE IS UNDER THE INFLUENCE OF AN HALLUCINOGEN, AS IS UNABLE TO OPERATE A MOTOR VEHICLE SAFELY.
12. TOXICOLOGICAL SPECIMEN: MS. HOECKLE PERMITTED DR. MOONEY TO EXTRACT A BLOOD SAMPLE.
13. MISCELLANEOUS:

EVALUATOR HAVERSAT, A.

Page 1 of 1 **DRUG INFLUENCE EVALUATION**

ARRESTEE'S NAME LAST FIRST MI: WARBURTON, CINDY T. AGE 32 SEX F RACE W BOOKING NO 006 DR XIV - 2

ARRESTING OFFICER (NAME SERIAL #, DIV.): JACKSON, F 86310 CPD

DATE EXAMINED: TIME / LOCATION: APRIL 25, 19XX / 2300 / 2nd DIST. BREATH RESULTS: Refused Results 0.00% Instrument # 1234 CHEMICAL TEST: Urine Blood Both Tests Refused

MIRANDA WARNING GIVEN: Yes No What have you eaten today? SPAGHETTI LUNCH TIME When? 7 PM What have you been drinking? How much? NOTHING Time of last drink? N/A

Given by: JACKSON, F. Yes No Are you sick or injured? I DON'T THINK SO, BUT I FEEL HOT Yes No Are you diabetic or epileptic? Yes No

Time now? 7 PM When did you last sleep? How long? YESTERDAY 6 HRS. Are you under the care of a doctor/dentist? Yes No

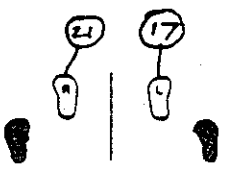


Do you take insulin? Yes No Do you have any physical defects? Yes No

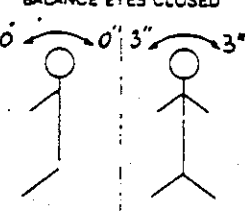
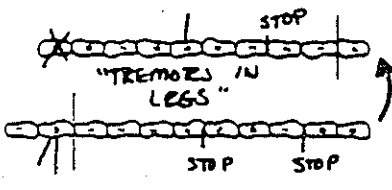
Are you taking any medication or drugs? Yes No ATTITUDE: COOPERATIVE, BUT FEARFUL AND DISTRACTED COORDINATION: POOR - STAGGERING

SPEECH: RAMBLING AND OFTEN INCOHERENT BREATH: NORMAL FACE: PERSPIRING

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

PUPIL SIZE: Equal Unequal (explain) HGN Present: Yes No Able to follow commands: Yes No Eyes: Normal Droopy



PULSE & TIME	HGN	Left Eye	Right Eye	Vertical Nystagmus?	ONE LEG STAND
1. <u>112 - 2310</u>	Lack of Smooth Pursuit	<u>NO</u>	<u>NO</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
2. <u>116 - 2325</u>	Max. Deviation	<u>NO</u>	<u>NO</u>	Convergence Right Eye  Left Eye 	
3. <u>116 - 2340</u>	Angle of Onset	<u>NONE</u>	<u>NONE</u>		

BALANCE EYES CLOSED:  WALK AND TURN TEST:  Cannot keep balance: Starts too soon: Slope Walking: Misses Heel-Toe: Steps off Line: Raises Arms: Actual Steps Taken: 9 8

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

PUPIL SIZE	Room Light	Darkness	Indirect	Direct	NASAL CAVITY
Left Eye	<u>6.0</u>	<u>7.5</u>	<u>7.0</u>	<u>5.5</u>	<u>CLEAR</u>
Right Eye	<u>6.0</u>	<u>7.5</u>	<u>7.0</u>	<u>5.5</u>	<u>CLEAR</u>

HEPPLIS: Yes No REBOUND DILATION: Yes No Reaction to Light: NORMAL

RIGHT ARM:  LEFT ARM:  NO VISIBLE MARKS

BLOOD PRESSURE: 150 / 102 TEMP: 99.8

MUSCLE TONE: Near Normal Flaccid Rigid Comment: ARMS AND LEGS RIGID

What medicine or drug have you been using? How much? NOTHING Time of use? N/A Where were the drugs used? (Location) N/A

DATE/TIME OF ARREST: APR 25 19XX / 2230 TIME ONE NOTIFIED: 2240 EVAL START TIME: 2300 TIME COMPLETED: 2345

CONTROL # 101 EXAMINING OFFICER ... + CERTICEN DRF SERIAL NO. 6630 DIVISION 4TH UNAVAILABLE DATES STUDDARD, R

1. LOCATION: I EXAMINED CINDY T. WARBURTON ON 25 APRIL 19XX AT THE BREATH TESTING ROOM, 2ND DISTRICT HDQTRS, CPD.
2. WITNESS: ARRESTING OFFICER FRANKLIN JACKSON (#6310) OBSERVED ALL SEGMENTS OF THE EXAMINATION EXCEPT THE DARKROOM PROCEDURES.
3. BAC: IN MY PRESENCE, OFFICER JACKSON ADMINISTERED AN INTOXILYZER TEST TO SUBJ. WARBURTON AT 2250 HOURS. RESULT WAS 0.00%
4. NOTIFICATION: I WAS SERVING AS THE ON-DUTY DRE AT 2ND DIST. HDQTRS WHEN I WAS INFORMED BY DISPATCHER THAT OFFICER JACKSON WAS EN ROUTE WITH A SUBJECT, AND HAD REQUESTED A DRUG INFLUENCE EVALUATION. UPON ARRIVAL AT 2ND DIST., OFFICER JACKSON STATED SUBJECT (WARBURTON, C.T.) HAD BEEN APPROXIMATED DRIVING N/B ALONG THE GRAVEL SHOULDER OF THE S/B LAKE OF HIGGENBOTHAM AVENUE. JACKSON FURTHER STATED THAT SUBJ. WARBURTON LATER POINTED AT HIS POLICE BADGE AND EXCLAIMED "MY GOD, THERE'S A HORRIBLE BIG SNAKE HANGING FROM YOUR BELT!" SUBSEQUENTLY, SHE SHOUTED THAT THE BLUE AND RED EMERGENCY LIGHTS ON HIS RPC WERE "BLEEDING INTO YOUR EYES AND SKIN!"
5. INITIAL OBSERVATION: WHEN SHE ENTERED 2ND DIST. WITH OFFICER JACKSON, SUBJ. WARBURTON SEEMED 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?" SUBJ. WARBURTON STATED "7 O'CLOCK"
6. MEDICAL PROBLEMS/TREATMENT: N/A
7. PSYCHOPHYSICAL TESTS: SUBJ. WARBURTON SWAYED SIDE-SIDE 3" ON ROMBERG AND ESTIMATED 10 ACTUAL SECONDS AS 30 SECONDS. AS I GAVE HER THE INSTRUCTIONS FOR WALK+TURN, SHE STARTED WALKING TOO SOON, AND LOST BALANCE TWICE. SUBSEQUENTLY, SHE REPEATEDLY MISSED HEEL-TO-TOE, STOPPED WALKING, STAGGERED WHILE TURNING, RAISED ARMS, STEPPED OFF LINE AND TOOK EIGHT STEPS RATHER THAN THE NINE INSTRUCTED. ON OLS, SHE SWAYED, RAISED ARMS, HOPPED AND PUT THE FOOT DOWN. ON F-N, SHE MISSED THE NOSE TIP ON EVERY TRIAL. AT THE END OF THE F-N TEST, SHE OPENED HER EYES AND SHOUTED "I CAN'T FEEL MY FACE! MY FACE IS MISSING!"
8. CLINICAL SIGNS: SUBJ. WARBURTON HAD: ① NO NYSTAGMUS ② NO LACK/CONVERGENCE ③ DILATED PUPILS ④ ELEVATED PULSE, B/P AND TEMPERATURE.
9. SIGNS OF INGESTION: NONE EVIDENT
10. STATEMENTS: SUBJ. WARBURTON STATED THAT SHE FELT HOT, BUT DENIED ANY DRUG USE.
11. OPINION: I HAVE BEEN A CERTIFIED DRE SINCE 5 NOV 19YY. IN MY OPINION, CINDY T. WARBURTON IS UNDER THE INFLUENCE OF AN HALLUCINOGEN, AND IS UNABLE TO OPERATE A MOTOR VEHICLE SAFELY.
12. TOXICOLOGICAL SPECIMEN: SUBJ. WARBURTON SUBMITTED TO EXTRACTION OF A BLOOD SAMPLE.
13. MISCELLANEOUS: AT THE TIME OF THE EXAMINATION, SUBJ. WARBURTON WORE A T-SHIRT BEARING THE WORDS "LEGALIZE ACID".

EVALUATOR HOHN, R.

Page 1 of 1 **DRUG INFLUENCE EVALUATION** 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 JANUARY 25, 19XX/0115/CENTRAL TEST BREATH RESULTS Results 0.05% Reused Instrument # 1234 CHEMICAL TEST Urine Blood Both Tests Refused

MIRANDA WARNING GIVEN Yes No What have you eaten today? PIZZA When? ABOUT 6 PM What have you been drinking? How much? COUPLE OF BEERS Time of last drink? 8 PM

Given by GREGORY, D. Are you sick or injured? I THINK I MIGHT THROW UP Are you diabetic or epileptic? Yes No

Time now? 10 pm When did you last sleep? How long? LAST NIGHT 3 HRS. 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 BUT COOPERATIVE COORDINATION VERY POOR - STAGGERING

SPEECH DIFFICULTY IN SPEAKING, RAMBLING BREATH NORMAL FACE DAZED APPEARANCE, PERSPIRING HEAVILY

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

PUPIL SIZE Equal Unequal (explain) MGN Present lack of smooth pursuit Able to follow stimulus: Yes No Eyeballs: Normal Droopy

PULSE & TIME	MGN	Left Eye	Right Eye	Verbal Nystagmus?	ONE LEG STAND
1. <u>116, 0130</u>	Lack of Smooth Pursuit	<u>YES</u>	<u>YES</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
2. <u>112, 0147</u>	Max. Deviation	<u>NO</u>	<u>NO</u>		
3. <u>104, 0200</u>	Angle of Onset	<u>NONE</u>	<u>NONE</u>		

BALANCE EYES CLOSED 3" 3" 3" 3" CIRCULAR SWAY

WALK AND TURN TEST TEST STOPPED: SUBJECT COULD NOT MAINTAIN HEEL-TO-TOE STANCE

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

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

PUPIL SIZE	Room Light	Darkness	Indirect	Direct	NASAL AREA
Left Eye	<u>5.5</u>	<u>8.5</u>	<u>7.5</u>	<u>5.0</u>	<u>CLEAR</u>
Right Eye	<u>5.5</u>	<u>8.5</u>	<u>7.5</u>	<u>5.0</u>	<u>CLEAR</u>

HIRSUTY Yes No REBOUND DILATION Yes No Reaction to Light NORMAL

RIGHT ARM NO VISIBLE MARKS LEFT ARM NO VISIBLE MARKS

BLOOD PRESSURE 146 / 102 / 100.5 TEMP 100.5

MUSCLE TONE GOOSE BUMPS ON ARMS Near Normal Flaccid Rigid Comments: ARMS, NECK & FACE RIGID

What medicine or drug have you been using? How much? NOTHING N/A Time of use? N/A Where were the drugs used? (Location) N/A

DATE/TIME OF ARREST JAN 25, 19XX/0040 TIME DUE NOTIFIED 0100 EVAL START TIME 0115 TIME COMPLETED 0205

CONTROL # W.D. #111 EXAMINING OFFICER W.D. #111 SERIAL NO. 2275 DIVISION 448 UNAVAILABLE DATES REVIEWED BY T. J. B. /

1. LOCATION: DRUG INFLUENCE EXAMINATION OF LEW B. BUCHANAN WAS CONDUCTED BY SGT. ROBERT HOWE ON JANUARY 25, 19XX AT THE CENTRAL TESTING UNIT, NCPD.
2. WITNESS: ARRESTING OFFICER (DANIEL GREGORY, #3210)
3. BAC: OFFICER GREGORY INFORMED ME THAT HE ADMINISTERED BREATHALYZER TEST TO MR. BUCHANAN AT 00:55 HOURS, AND OBTAINED RESULT OF 0.05%. MR. BUCHANAN LATER ADMITTED TO ME THAT HE HAD CONSUMED "A COUPLE OF BEERS"
4. NOTIFICATION: I WAS SUMMONED TO CENTRAL TESTING AT 01:00 HRS. OFFICER GREGORY INFORMED ME THAT HE HAD OBSERVED MR. BUCHANAN DRIVING AT 10 MPH ON CROSS ISLAND PARKWAY (LIMIT 55 MPH), DRIFTING FROM LANE TO LANE. OFFICER GREGORY ALSO STATED MR. BUCHANAN PERFORMED DIVIDED ATTENTION TESTS VERY POORLY, BUT EXHIBITED ONLY SLIGHT NYSTAGMUS
5. INITIAL OBSERVATION: I FIRST SAW MR. BUCHANAN AT 01:10 HRS. HE WAS SWAYING SLIGHTLY AS HE STOOD, AND APPEARED DAZED AND DISORIENTED. HE RESPONDED SLOWLY TO MY GREETINGS, BUT THEN WAS GENERALLY COOPERATIVE AND RESPONSIVE TO MY QUESTIONS. I ASKED "ABOUT WHAT TIME DO YOU THINK IT IS RIGHT NOW?" HE REPLIED "ABOUT 10 O'CLOCK". IT WAS IN FACT 01:15 HOURS.
6. MEDICAL PROBLEMS / TREATMENT. MR. BUCHANAN INDICATED SOME NAUSEA.
7. PSYCHOPHYSICAL TESTS: MR. BUCHANAN EXHIBITED 3" CIRCULAR SWAY ON ROMBERG AND ESTIMATED 35 ACTUAL SECONDS AS 30 SECONDS. HE WAS UNABLE TO KEEP HEEL-TOE BALANCE FOR WAT INSTRUCTIONS. HE WAS UNABLE TO STAND ON ONE FOOT. ON FINGER-TO-NOSE, HE WIDELY MISSED TIP OF NOSE ON ALL TRIALS.
8. CLINICAL SIGNS: MR. BUCHANAN EXHIBITED ONLY THE "LACK / SMOOTH PURSUIT" CLUE OF HORIZONTAL GAZE NYSTAGMUS; HE HAD NO VERTICAL NYSTAGMUS; HIS EYES WERE NOT ABLE TO CONVERGE -- THESE INDICATIONS ARE CONSISTENT WITH HIS BAC OF 0.05%. IN ADDITION, MR. BUCHANAN'S PUPILS WERE DILATED AND HIS BLOOD PRESSURE, PULSE AND TEMPERATURE WERE ALL ELEVATED.
9. SIGNS OF INGESTION: NONE EVIDENT
10. STATEMENTS: MR. BUCHANAN DENIED ANY DRUG USE.
11. OPINION: IN MY OPINION AS A CERTIFIED DRE, LEW B. BUCHANAN PRESENTLY IS UNABLE TO OPERATE A MOTOR VEHICLE SAFELY. HIS IMPAIRMENT IS CONSISTENT WITH A COMBINATION OF ALCOHOL AND AN HALLUCINOGEN.
12. TOXICOLOGICAL SPECIMEN: MR. BUCHANAN AGREED TO SUPPLY A BLOOD SAMPLE.
13. MISCELLANEOUS:

SESSION XV

PRACTICE: TEST INTERPRETATION

HS 172 R4/93

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

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

In this session, you will have an opportunity to review some drug evaluation and classification report forms. These "exemplars" are not based on examinations of actual suspects, but the "findings" they display are realistic simulations of what you will observe when you examine suspected drug-impaired drivers in the future.

Your task is to review the forms, consider all of the "evidence" they provide, and decide what category of drugs -- if any -- is involved in each case. Naturally, since we have only covered three categories thus far in our training, the "exemplars" only reflect those categories. Also, to make this practice session relatively easy, no combinations of categories have been included in these "exemplars".

In subsequent practice sessions of this type, you will be exposed to "exemplars" reflecting additional drug categories and combinations of categories.

SESSION XVI

PHENCYCLIDINE (PCP)

HS 172 R4/93

SESSION XVI PHENCYCLIDINE (PCP)

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

- o Explain a brief history of PCP.
- o Identify common drug names and terms associated with PCP.
- o Identify common methods of administration for PCP.
- o Explain the symptoms, observable signs and other effects associated with PCP.
- o Explain the typical time parameters, i.e., on-set and duration of effects, associated with PCP.
- 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 PCP.
- o Correctly answer the "topics for study" questions at the end of this Section.

A. Overview of PCP

The formal chemical name for this drug is Phenyl Cyclohexyl Piperidine, from which the initials PCP are derived. "Phencyclidine" is simply a contracted form of the actual chemical name.

PCP, or Phencyclidine, is a single drug that forms a distinct category of its own, because the effects it produces are unlike those of any other category. In some respects, PCP acts like an hallucinogen; and, it is frequently classed as an hallucinogen in medical texts and scientific/research reports. In other respects, it acts like a stimulant, and in still other respects it is similar to a depressant.

PCP was first developed in the 1950's as an intravenous anesthetic. It was patented and marketed in 1963 under the trade name Sernyl. Within a few years, as evidence of PCP's very undesirable side effects accumulated, its use as an anesthetic for humans was discontinued. In 1968, it was repatented as a veterinary anesthetic under the trade name Sernylan.

Although we speak of PCP as forming a separate category of drugs all by itself, there actually are more than one hundred slightly different drugs that belong to this category. These drugs are the analogs of PCP. In this case, an analog is a "chemical first cousin" of PCP, i.e., a drug that has a slightly different molecular structure from that of PCP but that has properties indistinguishable from PCP's. A person under the influence of PCP likewise cannot be distinguished from someone who is under the influence of a PCP analog. When a DRE concludes that a suspect is impaired by Phencyclidine, his or her report should state that "...the subject is under the influence of PCP or an analog of PCP".

One of the better-known analogs of PCP is Ketamine, a drug used as an anesthetic in pediatric surgery. Not all laboratories that perform blood and urine analyses are capable of detecting all of the known analogs of PCP; in fact, some of the analogs can be detected by few if any laboratories. Thus, a DRE should not be surprised if a negative toxicological report comes back for a suspect the DRE believed was impaired by Phencyclidine. It is possible that the suspect had used an analog that the particular lab couldn't detect.

Among PCP's least desirable side effects are delirium, visual disturbances and hallucinations and, occasionally, violence. Some evidence of long term memory disorders and psychological disturbances resembling schizophrenia has also been linked to PCP.

PCP is relatively easy to manufacture, using readily available chemicals. The formula for producing PCP has been widely publicized. However, although easy to make, it is also dangerous to make. A lack of caution in the production process could

release the same deadly gas that is used for executions in gas chambers. Also, liquid PCP is especially dangerous because it can be absorbed through the skin.

PCP has numerous "street names". The chart at the bottom of the page lists some of the more common "street names" for PCP.

Many PCP users ingest their drugs by smoking. PCP can be applied in either liquid or powder form to a variety of vegetable or leafy substances, such as mint leaves, parsley, oregano, tobacco or marijuana. The substances then can be smoked in a pipe or cigarette. Because PCP smoke is very hot and can irritate the mouth and tongue, many smokers prefer to use mint leaves and similar material to cool the smoke. For the same reason, PCP smokers who adulterate commercial cigarettes prefer to use mentholated brands, such as "Kools" and "Shermans".

Powdered PCP can also be snorted or taken orally. Liquid PCP can be injected, or administered directly to the eyes, via an eyedropper.

B. Possible Effects of PCP

PCP produces impairments and other observable effects on the human mind and body that are a combination of effects produced by depressants, stimulants and hallucinogens.



- o Slow, slurred speech
- o Disorientation
- o Loss of memory
- o Agitation, excitement
- o Blank stare
- o Passivity -- but the user may abruptly turn violent if confronted with a threatening situation.
- o Non-communicative
- o Muscle Tone - rigid
- o Loss of a sense of personal identity
- o Sensory distortions
- o Auditory hallucinations
- o A feeling of extreme heat, profuse perspiration.
- o Increased pain threshold.

SOME COMMON STREET NAMES FOR PCP

ACE	CRYSTAL	MONKEY DUST	ELEPHANT TRANQUILIZER
AMOEBA	KRYSTAL	GREEN	HORSE TRANQUILIZER
TRANK	CRYSTAL JOINT	GREEN LEAVES	ANIMAL TRANQUILIZER
JET FUEL	KJ (or CJ)	KOOLS	SUPER WEED
JUICE	EMBALMING FLUID	SUPER KOOLS	ZOMBIE WEED
DUST	TIC TAC	SHERMS	PEACE WEED
ANGEL DUST	PEACE	SUPER GRASS	MINT WEED
DEVIL DUST	PAZ	KILLER WEED	LOVELY
MAGIC DUST	PEACE PILL		

As with many other drugs, regular users of PCP may have developed a tolerance to the drug that masks some of the observable signs of PCP's effects.

PCP has been called a "dissociative anesthetic". That is to say, it cuts off the brain's perceptions of the senses. PCP users often feel that their heads are physically separated from their bodies. They sometimes report feeling that they are dead, and that their heads are floating away.

C. Onset and Duration of PCP's Effects

When smoked or injected, PCP's effects generally are felt within 1-5 minutes. When snorted, the onset occurs in about 2-3 minutes. The effects reach their peak in about 15-30 minutes. The effects generally last 4-6 hours, but they can last somewhat longer.

D. Signs and Symptoms of PCP Overdose

One possible result of PCP overdose is bizarre, violent and self-destructive behavior. The following are extreme, but not unique, examples:

- o One young man methodically pulled out his own teeth, with a pair of pliers.
- o Another drank rat poison, hoping to kill the rats that he imagined were infesting his body.
- o A third suffered hallucinations of unbelievably grotesque monsters, and gouged out his own eyes to avoid seeing the monsters.
- o A 26-year-old nude woman in Washington, DC repeatedly plunged a butcher knife into her own eye, chest, groin and abdomen. She then threatened a police officer with the knife and was shot to death. (Washington Post, March 7, 1988)

PCP can also produce extreme physical, as well as psychological distress:

- o A deep coma, lasting for up to 12 hours.
- o Seizures and convulsions.
- o Respiratory depression.
- o Possible cardiac problems.

E. Expected Results of the Evaluation

When a person under the influence of PCP is examined by a drug recognition expert, the following results can be expected.

Horizontal Gaze Nystagmus will be present, generally with a very early angle of onset.

Vertical Nystagmus will be present.

Lack of Convergence will be present.

Pupil size will be normal.

Pupil's reaction to light will be normal.

Pulse rate will be up.

Blood pressure will be up.

Temperature will be up. It is not uncommon for persons under the influence of PCP to remove most or all of their clothing in an effort to cool down.

Muscle tone will be rigid, and usually will be very easily observable.

Injection sites usually won't be found, although some PCP users do inject the drug.

Topics for study

1. What was the original purpose for which PCP was first patented and marketed?
2. Why do many PCP smokers prefer to adulterate mentholated cigarettes with PCP?
3. What is Ketamine?
4. What does the term "dissociative anesthetic" mean?
5. "Phencyclidine" is a contraction of what three words?

EVALUATOR GEORGE MARK

Page 1 of 1 **DRUG INFLUENCE EVALUATION** BOOKING NO 013 OR XVI-1

ARRESTEE'S NAME LAST FIRST MI ROSS ROBERT H. AGE 22 SEX M RACE HISP. ARRESTING OFFICER (NAME, SERIAL #, DIV.) BROWN A #1932 NYSP

DATE EXAMINED, TIME, LOCATION DECEMBER 8, 19XX / 2145 / 4th DISTRICT BREATH RESULTS Refused Results 0.00% Instrument # 1234 CHEMICAL TEST Urine Blood Both Test Refused

MIRANDA WARNING GIVEN Yes No What have you eaten today? When? FRIED CHICKEN 6 AM What have you been drinking? How much? NOTHING Time of last drink? N/A

Given by BROWN, A Are you sick or injured? Yes No Are you diabetic or epileptic? Yes No

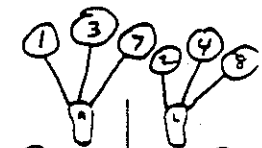
Time now? 8 O'CLOCK! When did you last sleep? How long? YESTERDAY 6 HRS. Do you take insulin? Yes No Do you have any physical defects? Yes No Are you under the care of a doctor/ dentist? Yes No

Are you taking any medication or drugs? Yes No ATTITUDE PASSIVE BUT COOPERATIVE COORDINATION POOR - STAGGERING

SPEECH SLURRED, SLOW AND LOW BREATH CHEMICAL ODOR FACE FLUSHED AND SWEATY

COORRECTIVE LENS Glasses Contacts, if so Hard Soft Eyes: Normal Bloodshot Watery None L Eye R Eye Tracing: Equal Unequal

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

PULSE & TIME	HGN	Left Eye	Right Eye	Vertical Nystagmus?
1. <u>100 / 2150</u>	Lack of Smooth Pursuit	<u>YES</u>	<u>YES</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2. <u>108 / 2204</u>	Max. Deviation	<u>YES</u>	<u>YES</u>	Convergence Right Eye <u>→</u> Left Eye <u>←</u>
3. <u>100 / 2217</u>	Angle of Onset	<u>IMMEDIATE</u>	<u>IMMEDIATE</u>	ONE LEG STAND 

BALANCE EYES CLOSED 3" 3" 3" 3" WALK AND TURN TEST STOP

CIRCULAR SWAY STOP

Cannot keep balance Starts too soon Stops Walking Misses Heel-Toe ALL 9 STEPS Steps off Line Raises Arms Actual Steps Taken 9 10

1st Nine 2nd Nine

TEST STOPPED TEST STOPPED
Foot down 3 TIMES

Cannot do Test (explain) N/A Type of Footwear TENNIS SHOES

INTERNAL CLOCK 45 Estimated as 30 sec. Describe Turn SWIVELED IN ONE ABRPT MOTION & LOST BALANCE

PUPIL SIZE	Room Light	Darkness	Indirect	Direct	IRIAL AREA
Left Eye	<u>4.0</u>	<u>6.0</u>	<u>5.5</u>	<u>3.5</u>	<u>CLEAR</u>
Right Eye	<u>4.0</u>	<u>6.0</u>	<u>5.5</u>	<u>3.5</u>	<u>CHEMICAL</u> <u>ONE ON BREATH</u>

HOPPLAS Yes No REBOUND DILATION Yes No Reason to Light NEAR NORMAL

RIGHT ARM NO VISIBLE MARKS LEFT ARM

BLOOD PRESSURE 146 / 100 / 99.8 TEMP 99.8

MUSCLE TONE ARMS VERY Near Normal Flaccid Rigid Comments: RIGID & TENSE

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 DEC 8 19XX / 2100 TIME DATE NOTIFIED 2120 EVAL START TIME 2145 TIME COMPLETED 2220

CONTROL # 7654 EXAMINING OFFICER Mark J. ... CERTIFIED DRE DIVISION CTD UNAVAILABLE DATES REVIEWED BY BOSTROM, R.

1. LOCATION I CONDUCTED A DRUG INFLUENCE EXAMINATION OF MR. ROBERT H. ROSS IN THE DRE ROOM OF 4TH DIST. HDQTS, NYSP, TARRYTOWN. THE EXAMINATION TOOK PLACE BETWEEN 2145 AND 2220 HOURS, DEC. 8, 19XX.
2. WITNESS ARRESTING OFFICER ALAN BROWN #1832
3. BAC OFFICER BROWN INFORMED ME HE ADMINISTERED INTOXILYZER TEST TO MR. ROSS AT 2135 HRS AND OBTAINED RESULT OF 0.00%.
4. NOTIFICATION OFFICER BROWN CONTACTED ME BY RADIO AT 2120 HRS. AND REQUESTED I MEET HIM AT 4TH DIST FOR PURPOSE OF CONDUCTING DRE EXAM. ON ARRIVAL, BROWN INFORMED ME HE HAD OBSERVED ROSS DRIVING S/R IN MEDIAN DIVIDER OF NYS THROUGHWAY, AT APPROX. 10 MPH. BROWN STATED ROSS APPEARED DAZED AND COULD NOT STATE WHERE HE WAS OR WHERE HE HAD COME FROM.
5. INITIAL OBSERVATION AT 2140 HRS, ROSS APPEARED DAZED AND DISORIENTED. HE HAD A FIXED STARE. HE RESPONDED VERY SLOWLY (DELAY OF 5-10 SECONDS TO ALL OF MY QUESTIONS AND INSTRUCTIONS).
6. MEDICAL PROBLEMS/TREATMENT NONE INDICATED.
7. PSYCHOPHYSICAL TESTS ROSS EXHIBITED 3" CIRCULAR SWAY THROUGHOUT ROMBERG TEST AND ESTIMATED 45 ACTUAL SECONDS AS 30 SECONDS. ON WAT, ROSS STARTED WALKING IMMEDIATELY, LOST BALANCE DURING INSTRUCTIONS, TWICE STEPPED OFF LINE, TWICE STOPPED WALKING, REPEATEDLY RAISED ARMS AND NEVER TOOK HEEL TO TOE. HE ALSO TURNED ABRUPTLY AND TOOK 10 STEPS RATHER THAN 9. ROSS WAS UNABLE TO COMPLETE OLS ON EITHER FOOT. HE REPEATEDLY MISSED THE TIP OF NOSE ON FINGER-NOSE TEST, AND HIS ARM MOVEMENTS WERE VERY RIGID.
8. CLINICAL SIGNS ROSS EXHIBITED HORIZONTAL NYSTAGMUS WITH IMMEDIATE ONSET; VERTICAL NYSTAGMUS, AND LACK OF CONVERGENCE. HIS BLOOD PRESSURE, PULSE AND TEMPERATURE WERE ELEVATED BEYOND NORMAL RANGES. HIS PUPIL SIZE WAS WITHIN NORMAL UNDER ALL ILLUMINATION.
9. SIGNS OF INGESTION THERE WAS A STRONG CHEMICAL ODOR ON ROSS' BREATH.
10. STATEMENTS ROSS DENIED TAKING ANY MEDICATION OR DRUGS.
11. OPINION I AM A CERTIFIED DRE. IN MY JUDGMENT, AT THE TIME OF MY EXAMINATION OF HIM, ROBERT H. ROSS WAS UNDER THE INFLUENCE OF PHENCYCLIDINE OR AN ANALOG OF PHENCYCLIDINE AND WAS NOT ABLE TO OPERATE A MOTOR VEHICLE SAFELY.
12. TOXICOLOGICAL SPECIMEN MR. ROSS SUBMITTED TO EXTRACTION OF A BLOOD SPECIMEN AT 2230 HOURS.
13. MISCELLANEOUS THREE DISCOLORED FILTERED CIGARETTES IN A "KOOL" BOX WERE FOUND IN MR. ROSS' SHIRT POCKET. THEY WERE SENT TO THE STATE CRIME LAB.

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, 19XX/2300/CTD BREATH RESULTS: Refused Results 0.04% Instrument # 1234 CHEMICAL TEST: Urine Blood Both To Refus

MIRANDA WARNING GIVEN Yes No What have you eaten today? PIZZA When? 5 O'CLOCK What have you been drinking? ONE BEER Time or last drink? 5 A

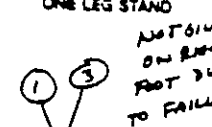
Time now? 8 PM When did you last sleep? LAST NIGHT How long? 6 HRS Are you sick or injured? Yes No Are you diabetic or epileptic? Yes No

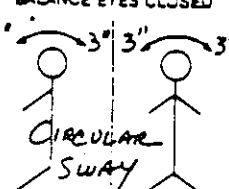
Do you take insulin? Yes No Do you have any physical defects? Yes No Are you under the care of a doctor/dentist? Yes No

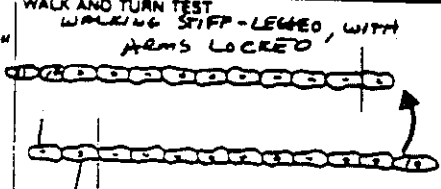
Are you taking any medication or drugs? Yes No ATTITUDE WITHDRAWN, NON-RESPONSIVE PASSIVE COORDINATION POOR - STUMBLING, STAGGERING

SPEECH SLOW, SLURRED - AT TIMES DID NOT RESPOND BREATH CHEMICAL ODOR FACE SWEATY AND FLUSHED

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

PULSE & TIME	MGN	Left Eye	Right Eye	Vertical Nystagmus?	ONE LEG STAND
1. <u>120, 2310</u>	Lack of Smooth Pursuit	<u>YES</u>	<u>YES</u>	<u>VERY DISTINCT</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
2. <u>116, 2326</u>	Max. Deviation	<u>YES</u>	<u>YES</u>	Convergence: <u>NEVER</u> Right Eye Left Eye moves	
3. <u>104, 2338</u>	Angle of Onset	<u>IMMEDIATE</u>	<u>IMMEDIATE</u>	<u>d</u> <u>b</u>	

BALANCE EYES CLOSED: 3" 3" 3" 3"
 CIRCULAR SWAY

WALK AND TURN TEST: WALKING STIFF-LEGGED, WITH ARMS LOCKED


Cannot keep balance Starts too soon Slope Walking Misses Heel-Top Slope off Line Raises Arms Actual Steps Taken: 10 12



1st Nine: ALL STEPS 2nd Nine: CONSTANT ✓

SUBJECT FAIL TEST STOPPED Sways while balancing. Uses arms to balance. Hopping. Puts foot down.

INTERNAL CLOCK: 40 Estimated as 30 sec. Describe Turn: SWIRLED ABRUPTLY STAGGERED TO THE LEFT Cannot do Test (explain): N/A Type of Footwear: LOAFERS

PUPIL SIZE	Room Light	Darkness	Indirect	Direct	NASAL AREA
Left Eye	<u>4.0</u>	<u>6.5</u>	<u>6.0</u>	<u>3.5</u>	<u>CLEAR</u>
Right Eye	<u>4.0</u>	<u>6.5</u>	<u>6.0</u>	<u>3.5</u>	<u>CLEAR</u>

HEPPLIS: Yes No REBOUND DILATION: Yes No Reason to Light: NORMAL

RIGHT ARM:  LEFT ARM: 

NO VISIBLE MARKS

BLOOD PRESSURE: 150, 104 TEMP: 100.5°

MUSCLE TONE: ARMS AND NECK Near Normal Flaccid Rigid

Comments: VERY RIGID

What medicine or drug have you been using? NO RESPONSE How much? N/A Time of use? NO RESPONSE Where were the drugs used? (Location): NO RESPONSE

DATE/TIME OF ARREST: MAY 2, 19XX/2240 TIME ONE NOTIFIED: 2245 EVAL START TIME: 2300 TIME COMPLETED: 2345

CONTROL # 22 EXAMINING OFFICER JO. BLEA DIVISION DPD UNAVAILABLE DATES: 707 REVIEWED BY: BINHAM, E.

1. LOCATION ROBIN C. MAYER WAS THE SUBJECT OF A DRE EVALUATION THAT I CONDUCTED AT DENVER PD HDQTS ON 2 MAY XX.
2. WITNESSES CLIFFORD JOHNSON (ARRESTING OFFICER) - EDWARD BINGHAM (COORDINATOR)
3. BAC I ADMINISTERED INTOXILYZER TEST TO MS. MAYER AT 2300 HRS. RESULT WAS POSITIVE (0.04%). AT THAT TIME SHE ADMITTED SHE HAD CONSUMED SOME BEER.
4. NOTIFICATION LT. BINGHAM SUMMONED ME TO DPD HDQTS AT 2245 HRS., STATING THAT OFFICER JOHNSON WAS EN ROUTE WITH A POSSIBLE PCP SUSPECT. AT HDQTS OFFICER JOHNSON STATED HE HAD APPREHENDED MS. MAYER FOR FAILING TO OBEY STOP SIGN. SHE WAS SMOKING A CIGARETTE THAT GAVE OFF STRONG CHEMICAL ODOR. OFFICER JOHNSON HAD CONFISCATED THE CIGARETTE. IT APPEARED TO CONTAIN TOBACCO, BUT ALSO HAD A THICK STRING IMBEDDED IN IT.
5. INITIAL OBSERVATION WHEN I FIRST SAW MS. MAYER SHE WAS SITTING QUIETLY IN THE DRE ROOM. SHE STARED FIXEDLY AHEAD, AND SEEMED TO TAKE NO NOTICE OF OFFICER JOHNSON, LT. BINGHAM OR ME. I ASKED HER TO LOOK AT ME, AND I HAD TO REPEAT THAT TWICE BEFORE SHE SLOWLY RAISED HER HEAD AND MET MY EYES.
6. MEDICAL PROBLEMS/TREATMENT NONE INDICATED.
7. PSYCHOPHYSICAL TESTS MS. MAYER WAS VERY SLOW IN RESPONDING TO ALL INSTRUCTIONS ON THESE TESTS, BUT DID ATTEMPT TO COMPLY. SHE SWAYED 3 INCHES CIRCULARLY ON ROMBERG AND OVERESTIMATED TIME BY 10 SECONDS. SHE TWICE LOST BALANCE ON WAT INSTRUCTIONS, THEN TOOK 10 HEEL-TOE STEPS WITH ARMS RAISED CONSTANTLY, SWIVELED ABRUPTLY AND STAGGERED THREE STEPS TO THE LEFT. AFTER REGAINING BALANCE, SHE CEASED TAKING HEEL-TOE STEPS, AND SIMPLY TOOK 12 "NORMAL" STEPS. HER LEGS SEEMED VERY STIFF AND RIGID. AFTER 3 SECONDS OF ONE LEG STAND, SHE FELL. ON FINGER-TO-NOSE, SHE REPEATEDLY MISSED TIP OF NOSE AND ON ONE TRIAL MISSED THE NOSE ENTIRELY.
8. CLINICAL SIGNS MS. MAYER HAD IMMEDIATE HORIZONTAL NYSTAGMUS, VERY DISTINCT VERTICAL NYSTAGMUS, AND NO VISIBLE CONVERGENCE OF THE EYES. PULSE, B/P, AND TEMP. WERE ALL ELEVATED. PUPIL SIZE WAS NORMAL.
9. SIGNS OF INGESTION MS. MAYER'S BREATH HAD A CHEMICAL ODOR.
10. STATEMENTS MS. MAYER ADMITTED TO DRINKING "ONE BEER". SHE DID NOT RESPOND TO MY QUESTIONS ABOUT DRUG USE OR ABOUT THE CIGARETTE.
11. OPINION IN MY OPINION AS A CERTIFIED DRE, ROBIN C. MAYER IS UNDER THE COMBINED INFLUENCE OF ALCOHOL AND PCP OR AN ANALOG OF PCP, AND SHE IS UNABLE TO OPERATE A MOTOR VEHICLE SAFELY.
12. TOXICOLOGICAL SPECIMEN MS. MAYER SUBMITTED TO A BLOOD TEST.
13. MISCELLANEOUS THE CONFISCATED CIGARETTE WAS SUBMITTED TO THE COLORADO DEPT OF HEALTH LAB.

SESSION XVII
NARCOTIC ANALGESICS

HS 172 R4/93

SESSION XVII NARCOTIC ANALGESICS

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

- o Explain a brief history of the Narcotic Analgesic category of drugs.
- o Identify common drug names and terms associated with the 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., on-set 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 Explain the procedures to examine for injection sites.
- o Correctly answer the "Topics for Study" questions at the end of the section.

A. Overview of Narcotic Analgesics

There are two sub-categories of Narcotic Analgesics. The first subcategory consists of the Natural Alkaloids of Opium and opium derivatives. An "alkaloid" is a substance that is found in another substance, and that can be isolated from it. For example, Morphine, Codeine and Thebaine are all found naturally in opium.

Unlike the Natural Alkaloids, the Opium Derivatives are not naturally-occurring substances. Rather, they are produced by chemically treating the Natural Alkaloids. Heroin is probably the most famous Opium Derivative, but there are a number of other important drugs that belong to this subcategory. The source for both the Natural Alkaloids and the Opium Derivatives is a particular species of poppy plant, called the "opium poppy", or papaver somniferum (Latin for "the poppy that brings sleep"). Opium is the sap from the seed pods of that plant.

The second subcategory of Narcotic Analgesics, however, has nothing to do with the opium poppy. This subcategory consists of the Synthetic Opiates, which are produced artificially from a variety of non-opiate substances. One of the best-known of these is Methadone, a drug used as a substitute for Heroin in drug treatment programs.

The synthetic Narcotic Analgesics are produced from a variety of non-opiate substances. The synthetics, which do not derive from opium at all, but have similar or identical effects. The synthetic Narcotic Analgesics are produced from a variety of non-opiate substances.

All narcotic analgesics share three distinguishing characteristics:

- o they will relieve pain (this is what "analgesic" means);
 - o they will produce withdrawal signs and symptoms, when the drug is stopped after chronic administration;
 - o their use will suppress the withdrawal signs and symptoms of chronic morphine administration. (This means that the various narcotic analgesics can be substituted for each other to relieve withdrawal symptoms.)
1. The chart on the next page exhibits the names of some Natural Alkaloids and Opium Derivatives and shows their derivation from opium.

Powdered opium, also known as "smoking opium", is not really a derivative, but rather is a simple refinement of raw opium. (In much the same sense, "refined sugar" is still sugar.) Powdered opium is used medically to treat diarrhea. As a medicine, it is taken orally. As a drug of abuse, it is smoked. It remains popular as a drug of abuse among some Asian American communities.

Morphine is the principal Natural Alkaloid of opium. It was first isolated from opium in 1805. Morphine is used medically to suppress severe pain, for example, with terminal cancer patients. It is highly addictive.

Codeine is another Natural Alkaloid of opium, separate from morphine. Codeine was first isolated in 1832. It is used medically to suppress coughing or minor pain. Although codeine is an analgesic, its pain-killing ability is much weaker than morphine's. Codeine definitely is addictive. NOTE: the technical, or generic, name for codeine is Methylmorphine.

Heroin is an Opium Derivative that is produced by chemically treating Morphine. Heroin is the most commonly abused illicit narcotic analgesic. Heroin was first produced in 1874, in the hope that it would prove to be a non-addictive substitute for morphine. Heroin was approved for general use by the American Medical Association in 1906. However, its importation and manufacture have been illegal in this country since 1925. NOTE: The technical, or generic, name for heroin is Diacetyl Morphine.

Dilaudid is another Opium Derivative that also is produced from Morphine. Dilaudid sometimes is called "drug store heroin", because it is commercially available. It is used medically for short term relief of moderate to severe pain, and to suppress severe, persistent coughs. Dilaudid has the same addictive liabilities as does heroin or morphine. NOTE: The technical, or generic, name for dilaudid is Hydromorphone Hydrochloride.

Hycodan is an Opium Derivative that "descends" from the Natural Alkaloid, Codeine. The technical name for Hycodan is Hydrocodone. It is used medically to treat coughs. Sometimes hycodan is abused by addicts who are unable to obtain heroin or morphine.

Percodan is another Opium Derivative that is produced by chemically treating Codeine. The technical name for Percodan is Oxycodone. Percodan is one of the most commonly prescribed narcotic analgesics. It is somewhat less addictive than morphine, but more addictive than codeine. Another prescriptive drug, called "percobarb" is a combination of percodan and barbiturate. Thus, someone who takes percobarb is a polydrug user, and will experience a combination of the effects of narcotic analgesics and CNS depressants.

Metopon derives from thebaine, which is another Natural Alkaloid of opium. Metopon is chemically similar to morphine, and is used to relieve chronic pain (such as terminal cancer).

2. Some common synthetic opiates include the following.

Demerol is one of the most widely used synthetic opiates for relief of pain and for sedation. It was first produced in 1939. The technical name for Demerol is Meperidine. Demerol is the most frequently abused narcotic analgesic among the medical profession.

Methadone was developed in Germany during World War II. Methadone's effects are similar to morphine's, although methadone's effects develop more slowly and last longer. Methadone was developed because of wartime shortages in Germany of morphine. The primary advantage of Methadone is that it cannot be injected, and it has a much longer duration of effects than Heroin. Also, methadone's withdrawal symptoms are slower and milder than are morphine's. It is for these reasons that methadone is used extensively in "maintenance programs" as a substitute for heroin for addicts undergoing treatment. The technical name is Dolophine.

Numorphan is a powerful analgesic with the same addictive properties as morphine. It is used medically for relief of chronic pain. It is sold in ampules (injection) and in suppositories.

The Fentanyls include several hundred "designer drug" analogs of morphine. "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. Fentanyls were first developed in 1965. The principal abused fentanyl is "three-methyl fentanyl". This analog is very powerful, and can be fatal in very small amounts.

MPPP is an illegally manufactured analog of Demerol. MPPP is powerfully addictive, and thus is very dangerous in its own right. What makes it even more dangerous is the fact that the "home chemists" who produce it often make a mistake that causes the MPPP to become contaminated with a substance called MPTP, a chemical that produces a paralysis similar to Parkinson's Disease.

Darvon is a synthetic opiate of relatively low analgesic potency, and relatively low addiction liability. Technical Name is Propoxyphene. It is fairly commonly prescribed.

3. Methods of administration vary from one narcotic analgesic to another. Heroin, and some others, usually are injected. Some are taken orally, some are snorted (taken intranasally), others in the form of suppositories. Others may be smoked.

B. Possible Effects of Narcotic Analgesics

However, the effects that a narcotic analgesic user will experience and exhibit depend on the tolerance that the user has developed for the drug. As a person develops tolerance for a drug, that person will experience diminishing effects if he or she continues to take the same dose of the drug. Conversely, if the person wishes to continue to experience the same effects, he or she will have to take steadily larger doses as tolerance develops.

People develop tolerance to narcotic analgesics fairly rapidly. A narcotic analgesic user who has developed tolerance and who has taken his or her "normal" dose of the drug may exhibit little or no evidence of intellectual or physical impairment. For example, an heroin addict who has injected his or her usual dose may be able to operate a car properly and perform flawlessly on field sobriety tests.

The intellectual and physical effects of narcotic analgesics usually are evident with new users, or with tolerant users who have taken more than their "normal" doses.

One of the most easily observable effects with a new user is a condition known as "on the nod". This is a semi-conscious type of sleep, brought about by the sedative action of the drug. When a user is "on the nod", his or her eyelids will become very droopy (ptosis), and the head will slump forward until the chin rests on the chest. But the user usually can be awakened easily and be sufficiently alert to respond to questions.

In general, the effects of narcotic analgesics include:

- o slowed reflexes
- o slow, low and raspy speech
- o sluggish, "rubber-like" movements
- o slowed breathing
- o cold skin
- o possible vomiting



C. Onset and Duration of Effects of Narcotic Analgesics

Heroin users generally experience certain psychological effects immediately after injection. These include a feeling of pleasure or euphoria; relief from withdrawal symptoms; and, relief from pain. Physical effects, if they are evident at all, typically

will become evident after 5-30 minutes. But remember: physical effects may not be evident if the user is tolerant and has taken a normal dose. With new users, the physical effects include:

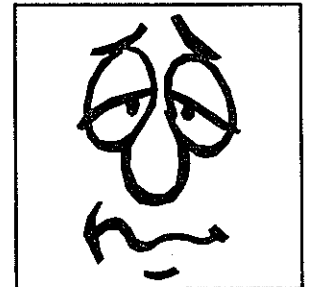
- o "on the nod"
- o poor motor coordination
- o depressed reflexes
- o slow breathing

The physical effects usually will be observable for up to 3-6 hours with new users.

As the physical effects begin to disappear, withdrawal signs and symptoms start to emerge. These withdrawal signs can become very severe, if the user does not inject another dose. However, it is important to keep in mind that when withdrawal signs are evident, the individual is no longer under the influence of the drug.

Withdrawal symptoms usually begin to be felt within 4-6 hours after the last injection of heroin. The addict experiences chills, aches of the muscles and joints, nausea and insomnia.

Outward signs of withdrawal typically start to be observable within 8-12 hours following injection. The addict sweats and has goose bumps on the skin. Reflexes become hyperactive. The addict yawns, may vomit, and his or her nose becomes runny and the eyes tear. At this point, the withdrawal signs and symptoms closely resemble those of the common cold or the 'flu. The withdrawal signs and symptoms intensify from 14-24 hours following injection, and may be accompanied by gooseflesh, slight tremors, loss of appetite and dilation of the pupils.



Approximately 24-36 hours since the last "fix", the addict experiences insomnia, vomiting, diarrhea, weakness, depression and hot/cold flashes. Withdrawal signs and symptoms generally reach their peak after 2-3 days. At this point, the addict usually experiences muscular and abdominal cramps, elevated temperature and severe tremors and twitching. This twitching, especially of the legs, is referred to in the expression "kicking the habit". The addict is very nauseated at this time, may gag and vomit repeatedly, and may lose 10-15 pounds within 24 hours.

D. Signs and Symptoms of Narcotic Analgesic Overdose

Narcotic analgesics depress respiration. The user's breathing becomes slow and shallow, and death can occur from severe respiratory depression. The skin becomes clammy, and the overdosing user may experience convulsions, slip into a coma, lips turn blue, body become pale or blue and extremely constricted pupils (unless there is brain damage in which pupils may be dilated).

The danger of death from an overdose of narcotic analgesic is heightened by the fact that the addict may not know the strength of the drug that he or she is taking.

E. Expected Results of the Evaluation

When a person under the influence of a narcotic analgesic is examined by a drug recognition expert, the following results generally will be obtained.

Horizontal Gaze Nystagmus - none.

Vertical Nystagmus - none.

Lack of Convergence - none.

Pupil size - constricted.

Pupil's usually will exhibit little or no visible reaction to light.

Pulse rate will be down.

Blood pressure will be lowered.

Temperature will be down.

Muscle tone usually will be near normal to flaccid.

Injection sites usually will be found, with heroin users. Injection sites may not be evident with users of other narcotic analgesics.

F. Injection Site Examination

Examination of injection sites can reveal many clues about a users' drug habit. The sites can reveal if the user injects their drugs and if the use was current or in the recent past.

Drugs enter the body through three major tissues of the body - intramuscular, just under the skin or through a vein.

The primary instrument used to inject drugs is a hypodermic syringe. The syringe consists of a hollow needle, tube and a plunger. The inside diameter of the needle or gauge vary in size. The larger the gauge, the smaller the needle.

The user's equipment is commonly referred to as a "hype kit" or "works". The kit consists of a cooker, handle, matches or lighter and a tourniquet.

You will be asked in court to describe the difference between legal and illegal injection marks. A legal injection utilizes the muscle, usually is only mark and sterile needles are used. A illegal injection utilizes veins, will usually be multiple marks in various stages of healing and since the same needle is usually used over and over again the mark will have a barbed or jagged appearance.

A user will frequently use the same spot to inject the drugs to reduce the likelihood of detection. The veins may become hard and thick from continuous use, thus making it difficult to find the vein.

When a needle punctures the skin, a scab is formed. A scab develops within 18 - 24 hours after the puncture wound. After about 14 days a scab usually starts to peel, flake and fall off. The skin is shrivelled and is lighter in color.

There is not exact science to classify the age of puncture wounds. However, there are some general guidelines to follow. A fresh puncture wound is defined as 0 - 12 hours and will be a red dot and have a oozing appearance. An early puncture wound is 12 - 96 hours and will have a light scab, light bruise, reddened border and a crater appearance. A late puncture wound is 5 - 14 days and will have a dark scab, dark bruise and the crater will flatten. A healing puncture wound is over 14 days and the scab will be flaking and falling off with shriveled, light colored skin.

G. Expected Location of Injection Marks

Injection sites can be located anywhere on the users' body. The arms are the most frequently used place. The user may use the ankles, neck, feet or any place where a vein is accessible.

It is necessary to conduct a thorough methodical examination of the suspect's arms. Using a magnifying light examine the left inner arm as it is extended with the palm facing you. Then ask the suspect to contract the arm by grasping their shoulder (this forces the veins to protrude). Beginning at the wrist, examine the arm to the elbow. Examine the outer arm as it is extended palm facing down. Start the exam at the shoulder and move to the wrist. Ask the suspect to extend his or her fingers to examine the fingers. Pay particular attention to the areas between the fingers, under watches and rings. Repeat the examination for the right arm.

Ankles are the next most common injection site, especially the back. Extreme caution should be used when examining the shoes and socks for evidence because syringes and needles are commonly hidden there.

H. Conclusion

The examination may reveal evidence of recent use, however, just the presence of injection sites doesn't mean the person is under the influence or impaired.

A slow methodical examination utilizing a magnifying light is required to obtain evidence for court.

Conducting a thorough examination is a skill and requires practice to become proficient.

Topics for study

1. What are the two subcategories of Narcotic Analgesics?
2. What three distinguishing characteristics do all narcotic analgesics share?
3. Consider this situation:

A heroin addict injects what is, for him, a "normal" dose of the drug. One hour later a drug recognition expert examines the addict and finds that he is not impaired.

What is the most likely explanation for this?

4. What is another, more common, name for the drug call Diacetyl Morphine?
5. What is Thebaine? What is Percobarb? What is MPPP? What is MPTP?

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: AUGUST 15, 19XX / 2120 / 3rd FLOOR BREATH RESULTS: 0.00% Refused Instrument # 123Y CHEMICAL TESTS: Urine Blood Both Tests Refused

MIRANDA WARNING GIVEN: 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

Given by O'DELL S. Time now? MIDNIGHT TODAY 3 HRS. When did you last sleep? How long? 3 HRS. Are you sick or injured? No Are you diabetic or epileptic? No

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

Are you taking any medication or drugs? No ATTITUDE: COOPERATIVE BUT SLEEPY COORDINATION: VERY POOR, LOOSE, STUMBLING

SPEECH: LOW AND RASPY BREATH: NORMAL FACE: NORMAL

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

PUPIL SIZE: Equal Unequal (explain) HGN Present: Yes No Able to follow stimulus: Yes No Eyes: VERY DROOPY Normal Droopy

PULSE & TIME	HGN	Left Eye	Right Eye	Vertical Nystagmus?	Convergence
1. 60, 2125	Lack of Smooth Pursuit	NO	NO	Yes No	Right Eye Left Eye
2. 64, 2140	Max. Deviation	NO	NO		
3. 60, 2153	Angle of Onset	NONE	NONE		

ONE LEG STAND: COUNTED VERY SLOWLY: ONLY REACHED '1018' WHEN 30 SEC. HAD ELAPSED

BALANCE EYES CLOSED: WALK AND TURN TEST: RUBBER-LEGGED, VERY SLOW, DELIBERATE STEPS

Cannot keep balance: Starts too soon: Stops Walking: Misses Heel-Toe: Steps off Line: Raises Arms: Actual Steps Taken: 9 9

1st Nine: 2nd Nine: Sways while balancing: Uses arms to balance: Hopping: Puts foot down

INTERNAL CLOCK: 50 Estimated as 30 sec. Describe Turn: PROPER BUT VERY SLOW Cannot do Test (explain): N/A Type of Footwear: STREET SHOES

PUPIL SIZE	Room Light	Darkness	Indirect	Direct	NASAL AREA
Left Eye	2.5	2.5	2.5	2.5	CLEAR
Right Eye	2.5	2.5	2.5	2.5	CLEAR

HIPPUS: Rebound Dilation: Reaction to Light: NONE OBSERVABLE

RIGHT ARM: LEFT ARM: SCAR TISSUE

SCAR TISSUE: PUNCTURE WOUND WITH RED DOT

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? Time of use? Where were the drugs used? (Location)

1. LOCATION I CONDUCTED THE DRUG INFLUENCE EVALUATION OF JERRY T. VAUGHN IN THE 3RD PCT. DRE ROOM OF THE INDIANAPOLIS POLICE DEPT.

2. WITNESS Col. Stanley O'Dell (#7650) — ARRESTING OFFICER.

3. BAC 0.00% (TEST ADMINISTERED BY O'DELL IN MY PRESENCE, 2115 HOURS)

4. NOTIFICATION I ARRIVED FOR DUTY AT 3RD PCT AT 2100 HOURS AND OBSERVED OFFICER O'DELL WITH ARRESTEE I LATER LEARNED WAS JERRY T. VAUGHN. OFFICER O'DELL TOLD ME HE HAD ARRESTED MR. VAUGHN FOR DUI, AFTER OBSERVING VAUGHN'S VEHICLE WEAVING ACROSS TRAFFIC LANES, AND AFTER ADMINISTERING SEVERAL FIELD SOBRIETY TESTS. OFFICER O'DELL STATED THAT MR. VAUGHN APPEARED TO BE VERY DRUNK, BUT HAD NO ODOR OF ALCOHOLIC BEVERAGE.

5. INITIAL OBSERVATION AT 2100 HOURS, MR. VAUGHN WAS SEATED ON THE BENCH IN THE DRE ROOM. HE APPEARED TO BE ASLEEP: EYES WERE CLOSED, HEAD NODDED FORWARD, BREATHING SLOW. BUT HE RESPONDED TO MY QUESTIONS, AND BECAME MORE ALERT AS WE SPOKE. HIS VOICE WAS LOW AND HIS SPEECH HAD A RASPY QUALITY. HE LICKED HIS LIPS REPEATEDLY.

6. MEDICAL PROBLEMS / TREATMENT IN ACCORDANCE WITH DEPARTMENTAL GENERAL ORDER 44-172, "IV DRUG USERS", BLOOD WAS DRAWN FROM MR. VAUGHN FOR PURPOSES OF AIDS TESTING.

7. PSYCHOPHYSICAL TESTS MR. VAUGHN ESTIMATED 50 SECONDS AS 30, AND SWAYED 3" CIRCULAR ON RUMBERG. LOST BALANCE DURING INSTRUCTIONS OF WALK/TURN, RAISED ARMS SEVERAL TIMES, STOPPED WALKING TWICE, STAGGERED ON TURN, PUT FOOT DOWN SEVERAL TIMES ON LEG STAND, ALSO SWAYED AND RAISED ARMS. MISSED TIP OF NOSE ON ALL TRIALS OF FINGER2 TO NOSE.

8. CLINICAL SIGNS MR. VAUGHN EXHIBITED NO NYSTAGMUS, AND HIS EYES WERE ABLE TO CONVERSE. HIS BLOOD PRESSURE WAS BELOW NORMAL RANGE. PULSE AND TEMPERATURE WERE WITHIN NORMAL RANGES. PUPILS WERE CONSTRICTED BELOW NORMAL UNDER ALL ILLUMINATION, AND SHOWED NO VISIBLE REACTION TO LIGHT. HIS EYELIDS WERE VERY DROOPY.

9. SIGNS OF INGESTION MR. VAUGHN HAD "TRACK"-TYPE SCARS ON BOTH THE LEFT AND RIGHT FOREARMS, AND A FRESH, Oozing PUNCTURE WOUND ON THE BACK OF HIS RIGHT HAND.

10. STATEMENTS MR. VAUGHN DENIED USING ANY MEDICINE OR DRUGS, AND REFUSED TO ANSWER MY QUESTION ABOUT HIS "TRACKS" OR THE FRESH PUNCTURE WOUND. I CEASED INTERROGATING HIM WHEN HE STATED HE DID NOT INTEND TO ANSWER THAT QUESTION.

11. OPINION AT THE TIME OF MY INVESTIGATION, MR. VAUGHN WAS UNDER THE INFLUENCE OF A NARCOTIC ANALGESIC, AND WAS UNABLE TO OPERATE A MOTOR VEHICLE SAFELY.

12. TOXICOLOGICAL SPECIMENS MR. VAUGHN PROVIDED ONLY A URINE SAMPLE AT THE TIME OF HIS ARREST.

EVALUATOR: Toland, Steve

Page of **DRUG INFLUENCE EVALUATION** BOOKING NO. 016 OR XVII-2

ARRESTEE'S NAME (LAST, FIRST, MI) HOLDEN, William J. AGE 39 SEX M RACE W ARRESTING OFFICER (NAME, SERIAL & DIV) BRADLEY, T # 4779 M.P.D.

DATE EXAMINED/TIME/LOCATION NOV 1, 19XX / 1615 / M P D BREATH RESULTS: Refused Results 0.00% Instrument # 1234 CHEMICAL TEST Urine Blood Both T Ref.

MIRANDA WARNING GIVEN: Yes No What have you eaten today? NOTHING When? N/A What have you been drinking? How much? NOTHING Time c last dn N/A

Given by: T. BRADLEY No Yes Are you sick or injured? Yes No Are you diabetic or epileptic? Yes No

Time now? DO NOT KNOW When did you last sleep? How long? LAST NIGHT FEW HRS 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 AND DELIBERATE BREATH NORMAL FACE NORMAL

CORRECTIVE LENS: Glasses Contacts, if so Hard Soft None Eyes: Normal Bloodshot Watery Blindness: None L Eye R Eye Tracing: Equal Uneq

PUPIL SIZE: Equal Unequal (explain) HGN Present: Yes No Able to follow stimulus: Yes No Eyelets: Normal Droc

PULSE & TIME	HGN	Left Eye	Right Eye	Vertical Nystagmus?	ONE LEG STAND
1. <u>60 / 1630</u>	Lack of Smooth Pursuit	<u>NO</u>	<u>NO</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
2. <u>56 / 1642</u>	Max Deviation	<u>NO</u>	<u>NO</u>	Convergence Right Eye Left Eye	
3. <u>60 / 1655</u>	Angle of Onset	<u>NONE</u>	<u>NONE</u>		

BALANCE EYES CLOSED WALK AND TURN TEST Cannot keep balance Starts too soon Stops Walking Misses Heel-Toe Steps off Line Raises Arms Actual Steps Taken

1st Nine	2nd Nine
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

 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

PUPIL SIZE	Room Light	Darkness	Indirect	Direct	NASAL AREA
Left Eye	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>CLEAR</u>
Right Eye	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>CLEAR</u>

HIPPUS: Yes No REBOUND DILATION: Yes No Reaction to Light NONE OBSERVABLE

RIGHT ARM LEFT ARM

BLOOD PRESSURE: 100 / 60 TEMP: 97.0 °

MUSCLE TONE: ARMS AND NECK Near Normal Flaccid Rigid ments: VERY LOOSE RELAXED

...nat 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 OF ENTRY EVAL START TIME TIME COMPLETED

CONTROL # EXAMINING OFFICER SERIAL # DIVISION UNAVAILABLE DATES REVIEWED BY

1. LOCATION: THE D.R.E EVALUATION OF SUBJECT HOLDEN WAS CONDUCTED AT THE MESA P.D. HOLDING FACILITY.

2. WITNESSES: LT. G.T. FOWLER MESA POLICE DEPARTMENT.

3. B.A.C TEST: THE INTOXILYZER 5000 TEST SHOWED A B.A.C. OF 0.00% (TEST ADMINISTERED BY T. BRADLEY)

4. NOTIFICATION: I WAS CALLED OUT AT HOME IN REFERENCE TO A SUBJECT THAT OFFICER BRADLEY HAD ARRESTED FOR D.U.I. THE ARRESTEE WILLIAM HOLDEN HAD BEEN INVOLVED IN A TRAFFIC ACCIDENT AT DOBSON AND MAIN. OFFICER BRADLEY ADVISED THAT HOLDEN WAS IMPAIRED BUT NO ODOR OF ALCOHOLIC BEVERAGE COULD BE SMELLED.

5. INITIAL OBSERVATION: WHEN I FIRST ARRIVED AT THE HOLDING FACILITY HOLDEN WAS SITTING ON A BENCH. HOLDEN WAS SCRATCHING HIS FACE AND HIS NECK. MR HOLDEN'S EYELIDS WERE DROOPY AND HIS VOICE SOUNDED RASPY.

6. MEDICAL PROBLEMS / TREATMENT: MR HOLDEN SAID THAT HE HAD NO MEDICAL PROBLEMS THAT HE WAS AWARE OF.

7. PSYCHOPHYSICAL TESTS: MR HOLDEN EXHIBITED A 3" CIRCUMFERENCE SWAY ON THE RUMBERG TEST AND ESTIMATED 30 SECONDS AS 50 SECONDS ON THE WALK AND TURN TEST STOPPED WALKING TWICE, RAISED HIS ARM TWICE ON THE FIRST NINE STEPS AND ONCE ON THE SECOND NINE STEPS. MR HOLDEN SWAYED ON THE ONE LEG STAND, USED HIS ARMS TO BALANCE AND ALSO PUT BOTH HIS LEFT AND RIGHT FOOT DOWN ON THE FINGER TO NOSE TEST MR HOLDEN MISSED THE TIP OF HIS NOSE FIVE TIMES.

8. CLINICAL SIGNS: MR HOLDEN EXHIBITED NO NYSTAGMUS AND WAS ABLE TO CONVERGE HIS EYES. MR HOLDEN HAD CONSTRICTED PUPILS IN ALL LIGHTING CONDITIONS AND NO REACTION TO LIGHT. MR HOLDEN HAD DROOPY EYELIDS. MR HOLDEN'S BLOOD PRESSURE AND TEMPERATURE WERE BELOW NORMAL.

9. SIGNS OF INGESTION: MR HOLDEN HAD THREE PUNCTURE WOUNDS ON THE RIGHT FOREARM AND FOUR PUNCTURE WOUNDS WITH SCARS ON THE LEFT FOREARM.

10. STATEMENTS: MR HOLDEN INVOKED HIS MIRANDA RIGHTS

11. OPINION: IT IS MY OPINION AS A CERTIFIED DRE THAT MR HOLDEN IS UNDER THE INFLUENCE OF A NARCOTIC ANALGESIC AND WAS UNABLE TO OPERATE A MOTOR VEHICLE SAFELY.

12. TOXICOLOGICAL SPECIMENS: TWO TUBES OF BLOOD WERE DRAWN FROM MR. HOLDEN.

Page <u> </u> of <u> </u> DRUG INFLUENCE EVALUATION				EVALUATOR TETZLAFF, G. #726	
ARRESTEE'S NAME (LAST, FIRST, MI) KURRUS, ROGER J.				AGE 40	SEX M
DATE EXAMINED, TIME/LOCATION 3/17/XX 2200 PARKER CNTR JAIL DIVISION				RACE W	BOOKING NO 032
MIRANDA WARNING GIVEN Given by TETZLAFF, G.				ARRESTING OFFICER (NAME, SERIAL #, DIV.) PAGE, T #725 TCS	DA 042-34-3093
BREATHE RESULTS Results 0.00%		CHEMICAL TEST <input checked="" type="checkbox"/> Urine <input checked="" type="checkbox"/> Blood		<input type="checkbox"/> Both Tests Refused	
What have you eaten today? When? "I HAVEN'T EATEN FOR SIX YEARS"		What have you been drinking? How much? "I DON'T DRINK"		Time of last drink? N/A	
Time now? ABOUT 5:00 O'CLOCK THIS MORNING		When did you last sleep? How long? 4 HRS		Are you sick or injured? <input checked="" type="checkbox"/> No	
Do you take insulin? "I DON'T TAKE ANYTHING"		Do you have any physical defects? "I'M THE PICTURE OF HEALTH"		Are you diabetic or epileptic? <input checked="" type="checkbox"/> No	
Are you taking any medication or drugs? <input checked="" type="checkbox"/> No		ATTITUDE SARCASTIC AND SULLEN		COORDINATION POOR - STUMBLING AND STAGGERING	
SPEECH LOW, MUMBLED AND RASPY		BREATH NORMAL		FACE PALE	
CORRECTIVE LENS <input checked="" type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> L. Eye <input type="checkbox"/> R. Eye	
PUPIL SIZE <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		HGN Present <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PULSE & TIME		HGN		Vertical Nystagmus?	
1. 60, 2210		Lack of Smooth Pursuit		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
2. 58, 2221		Max. Deviation		Convergence Right Eye Left Eye	
3. 58, 2230		Angle of Onset			
BALANCE EYES CLOSED		WALK AND TURN TEST		ONE LEG STAND	
INTERNAL CLOCK 55 Estimated as 30 sec.		Describe Turn PROPER BUT VERY SLOW		Cannot do Test (explain) N/A	
Type of Footwear WINGTIPS		PUPIL SIZE		NASAL AREA	
Right <input type="checkbox"/> Left <input type="checkbox"/>		Room Light		CLEAR	
Draw lines to spots touched		Darkness		ORAL CAVITY	
		Indirect		CLEAR	
Left Eye 1.5		Direct		HIPPLUS	
Right Eye 1.5		Reaction to Light		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
RIGHT ARM		REBOUND DILATION		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
		LEFT ARM			
BLOOD PRESSURE 110, 70		TEMP 97.9		PHOTO AREA	
MUSCLE TONE <input type="checkbox"/> Near Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		ATTACH PHOTOS OF FRESH PUNCTURE MARKS			
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 USE"	
DATE/TIME OF ARREST 2/17/XX 2130		TIME DRE NOTIFIED 2145		Where were the drugs used? (Location) "SO HAVE A HEART ATTACK"	
EVAL START TIME 2200		TIME COMPLETED 2235			

Page <u> </u> of <u> </u>	DRUG INFLUENCE EVALUATION	BOOKING NO	OR	032
1. LOCATION: EVALUATION OF SUBJECT KURRUS WAS CONDUCTED IN THE DRE ROOM, JAIL DIVISION, PARKER CENTER.				
2. WITNESSES: SGT. T. PAGE (ARRESTING OFFICER). MR. JACK OATES (US DEPT TRANS WASHINGTON)				
3. BAC: AT 2220 HOURS, I ADMINISTERED A BREATH TEST TO SUBJECT KURRUS AND OBSERVED THAT HIS BAC WAS 0.00%.				
4. NOTIFICATION: ON 3/17/XX, AT 2145 HOURS, THIS OFFICER (TETZLAFF, 6 * 726) WAS NOTIFIED BY SGT. T. PAGE * 725 THAT HE HAD ARRESTED ONE KURRUS, RT FOR OPERATING UNDER THE INFLUENCE OF ALCOHOL AND/OR DRUGS. SGT. PAGE REQUESTED THAT I CONDUCT A DRUG INFLUENCE EXAMINATION OF SUBJECT KURRUS. SGT. PAGE INFORMED ME THAT SUBJECT KURRUS' VEHICLE WAS OBSERVED MOVING WESTBOUND ON LONGLOUK LAKE AT APPROXIMATELY 15 MPH. VEHICLE MAINTAINED SPEED AS IT PASSED STOP SIGN AT INTERSECTION WITH THUNDER HILL ROAD. SGT. PAGE ACTIVATED LIGHTS/SIREN. SUBJECT VEHICLE RESPONDED SLOWLY, COMING TO FULL STOP IN TRAFFIC LANE APPROX. 800 FT. PAST POINT WHERE LIGHTS/SIREN WERE ACTIVATED. SUBJECT KURRUS REPORTEDLY APPEARED TO BE ASLEEP WITH EYES CLOSED, CHIN ON CHEST. SUBJECT OPENED EYES AS SOON AS SGT. PAGE TAPPED ON DRIVER'S SIDE WINDOW.				
5. INITIAL OBSERVATION: I FIRST SAW KURRUS, ROBERT, AT 2200 HOURS IN THE DRE ROOM HE WORE A 3-PC BUSINESS SUIT WITH NO NECKTIE. SUBJECT WALKED SLOWLY, STAGGERED AND STUMBLING. HE SWAYED CONSTANTLY WHEN STANDING STILL, AND HIS HEAD NODDED FORWARD REPEATEDLY. SUBJECT SPOKE SLOWLY IN A LOW, RASPY VOICE.				
6. MEDICAL PROBLEMS/TREATMENT: PER DEPT' POLICY "INCARCERATION OF SUSPECTED IV DRUG USERS", SUBJECT KURRUS BLOOD WAS DRAWN (DR. MOGGE) FOR HIV ANTIBODIES SCREENING.				
7. PSYCHOPHYSICAL TESTS: KURRUS SWAYED 2" FRONT-BACK ON ROMBERG AND OVERESTIMATED TIME BY 25 SECS. ON WAT, HE LOST BALANCE TWICE DURING INSTRUCTIONS, STEPPED OFF LINE, AND REPEATEDLY RAISED ARMS AND MISSED HEEL-TOE. ON OLS, HE REPEATEDLY SWAYED, RAISED ARMS AND PUT THE FOOT DOWN. ON FTN, HE MISSED TIP OF NOSE ON EVERY TRIAL AND USED THE WRONG HAND ON THE 3 RD TRIAL.				
8. CLINICAL SIGNS: KURRUS HAD SOME INDICATIONS OF NYSTAGMUS, BUT NO ONSET OF JERKINESS WITHIN 50°. Pupils were constricted under all illumination. Systolic blood pressure was below normal range. Pulse was below normal on two measurements. Eyelids were very droopy.				
9. SIGNS OF INGESTION: SUBJECT'S LEFT ARM HAD 3 RECENT PUNCTURE WOUNDS AND A ONE-INCH "TRACK MARK" SCAR.				
10. STATEMENTS: SUBJECT DENIED USING DRUGS. RESPONDED "DO I LOOK LIKE I DO DUPE". ASKED TO INDICATE WHERE HE HAD MOST RECENTLY SHOT UP, RESPONDED "SO HAVE A HEART ATTACK".				
11. OPINION: IN MY JUDGMENT AS A CERTIFIED DRE, ROBERT T. KURRUS IS UNDER THE INFLUENCE OF A NARCOTIC ANALGESIC AND IS UNABLE TO OPERATE A MOTOR VEHICLE SAFELY.				
12. TOXICOLOGICAL SPECIMENS: KURRUS SUBMITTED TO BLOOD AND URINE TESTS.				
13. MISCELLANEOUS: I OBSERVED THAT SUBJECT KURRUS APPEARS TO BE RIGHT HANDED.				

MID-COURSE REVIEW

SESSION XVIII
PRACTICE: TEST INTERPRETATION

HS 172 R4/93

This session is similar to Session XV. You will once again review some drug evaluation and classification report "exemplars", consider all of the "evidence" they provide, and decide what categories of drugs -- if any -- are present. Now that we have covered five of the seven categories, you can expect to find any or all of those five involved in these "exemplars". And, do not be surprised if you find that one or more "exemplars" involve combinations of drug categories.

Page <u> </u> of <u> </u> DRUG INFLUENCE EVALUATION				EVALUATOR WARNER, WAYNE																															
ARRESTEE'S NAME (LAST, FIRST, MI) FOXX, JAMES F.				AGE 30	SEX M	RACE W	BOOKING NO. 017	DA 173-XX-18																											
DATE EXAMINED/TIME/LOCATION 2/22/XX 2330 TROOP T ALBANY				BREATH RESULTS Results 0.00% Instrument # 1234		CHEMICAL TEST <input checked="" type="checkbox"/> Urine <input type="checkbox"/> Blood <input type="checkbox"/> Both Tests Refused																													
MIRANDA WARNING GIVEN Given by WARNER, W. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				What have you eaten today? NOTHING When? N/A		What have you been drinking? How much? NOTHING N/A Time of last drink? N/A																													
Time now? NO ANSWER		When did you last sleep? How long? NO ANSWER		Are you sick or injured? "IT'S LATE"		Are you diabetic or epileptic? "NOT SICK"																													
Do you take insulin? "NOT SICK"		Do you have any physical defects? "NOT SICK"		Are you under the care of a doctor/dentist? NO ANSWER																															
Are you taking any medication or drugs? "NOT SICK"		ATTITUDE NON-RESPONSIVE AND PASSIVE		COORDINATION POOR - STAGGERING AND UNSTEADY																															
SPEECH SLOW, SLURRED		BREATH CHEMICAL ODOR		FACE BLANK STARE																															
CORRECTIVE LENS <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input checked="" type="checkbox"/> None <input type="checkbox"/> Hard <input type="checkbox"/> Soft				Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> L Eye <input type="checkbox"/> R Eye		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal																											
PUPIL SIZE <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		HGN Present <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy																													
PULSE & TIME		HGN		Left Eye		Right Eye		Vertical Nystagmus?		ONE LEG STAND																									
1. 104 / 2340		Lack of Smooth Pursuit		YES		YES		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																											
2. 108 / 2356		Max. Deviation		YES		YES		Convergence Right Eye Left Eye																											
3. 104 / 0010		Angle of Onset		30°		30°																													
BALANCE EYES CLOSED		WALK AND TURN TEST		Cannot keep balance <input checked="" type="checkbox"/>		Starts too soon <input checked="" type="checkbox"/>		Stops Walking		Type of Footwear																									
		"MOONWALKING" LEGS AND ARMS RIGID 		<table border="1"> <tr><th>1st Nine</th><th>2nd Nine</th></tr> <tr><td><input checked="" type="checkbox"/></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>		1st Nine	2nd Nine	<input checked="" type="checkbox"/>																<table border="1"> <tr><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr> </table>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	LOAFERS	
1st Nine	2nd Nine																																		
<input checked="" type="checkbox"/>																																			
<input type="checkbox"/>	<input checked="" type="checkbox"/>																																		
<input type="checkbox"/>	<input type="checkbox"/>																																		
<input type="checkbox"/>	<input type="checkbox"/>																																		
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																																		
INTERNAL CLOCK 30 Estimated as 30 sec.		Destable Turn TURNUED BACKWARDS STOPPED FOR 10 SECONDS AFTER TURN		Cannot do Test (explain) N/A																															
<input type="radio"/> Right <input type="radio"/> Left Draw lines to spots touched				PUPIL SIZE		Room Light		Darkness		Indirect		Direct		NASAL AREA																					
				Left Eye		4.5		6.0		5.5		4.0		CLEAR																					
				Right Eye		4.5		6.0		5.5		4.0		CLEAR																					
				HIPPIUS		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		REBOUND DILATION		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light		NORMAL																					
				RIGHT ARM				LEFT ARM																											
BLOOD PRESSURE		TEMP		MUSCLE TONE																															
140 / 90		99.4°		<input type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid																															
Comments: ARMS VERY TENSE																																			
What medicine or drug have you been using? How much? NO ANSWER		Time of use? NO ANSWER		Where were the drugs used? (Location) "NOTHING"																															
DATE/TIME OF ARREST 22 FEB 19XX 2:300 HRS		TIME DNE NOTIFIED 2300		EVAL START TIME 2330		TIME COMPLETED 0015 / 2/22																													

1. LOCATION THE EXAMINATION OF FOXK, JAMES F. TOOK PLACE IN THE DRE ROOM, TROOPT HDQTRS, NYSP, ALBANY NY
2. WITNESSES EXAMINATION WAS OBSERVED BY MS. ROBIN MAYER, NNTIA, AND MR. GUYK PELTIER, IACP
3. BAC I ADMINISTERED INTOXILYZER TEST TO MR. FOXK AND OBTAINED RESULT OF 0.00%
4. NOTIFICATION/INTERVIEW I PERSONALLY ARRESTED MR. FOXK.
OF ARRESTING OFFICER
5. INITIAL OBSERVATION I FIRST SAW MR. FOXK WHILE HE WAS SEATED IN DRIVER'S POSITION
OF SUSPECT OF 19XX OLDSMOBILE NY # 277 BRX. VEHICLE WAS STATIONED IN NORTH'D LANE OF HANNOVER AVE, AT INTERSECTION WITH HUGENOT ST., ALBANY. TRAFFIC LIGHT WAS GREEN IN NORTH'D LANE. OTHER VEHICLES WERE DIVERTING AROUND FOXK VEHICLE.
6. MEDICAL PROBLEMS/TREATMENT N/A
7. PSYCHOPHYSICAL TESTS MR. FOXK SWAYED APPROX. 3 IN. LEFT-TO-RIGHT ON REEBG BALANCE ON W-A-T, TWICE (LAST BALANCE DURING INSTRUCTIONS), STOPPED AFTER 5TH STEP, TURNED BACKWARDS (I.E. TOWARD RIGHT), TOOK 10 STEPS AFTER TURNING; ALSO, PAUSED APPROX. 10 SEC'S AFTER TURNING, AND EXHIBITED NOTICEABLE RIGIDITY IN ARMS/LEGS THROUGHOUT TEST. ON O-L-S, FOXK TWICE PUT FOOT DOWN WHILE STANDING ON LEFT FOOT, AND TWICE USED ARMS FOR BALANCE. ON RIGHT FOOT, FOXK PUT FOOT DOWN THREE TIMES WITHIN 1ST 4 SEC'S, STAGGERED AND NEARLY FELL - TEST WAS STOPPED. ON F-T-N, FOXK MISSED TIP OF NOSE ONCE WITH LEFT FINGER AND ALL THREE TIMES WITH RIGHT FINGER.
8. CLINICAL SIGNS PULSE RATE WAS ELEVATED (104, 108, 104). BLOOD PRESSURE WAS AT HIGH EXTREME OF NORMAL RANGE (140/90); TEMP. WAS AT HIGH PORTION OF NORMAL RANGE (99.4°F). HOR. + VERT. NYSTAGMUS AND LOC.
9. SIGNS OF INGESTION MR. FOXK EXHIBITED A CHEMICAL ODOR.
10. STATEMENTS MR. FOXK REMAINED VERY PASSIVE THROUGHOUT THE EVALUATION, AND WAS VERY SLOW IN RESPONDING TO QUESTIONS. HE REPEATEDLY ANSWERED "NOT SICK" TO QUESTIONS CONCERNING USE OF MEDICATION OR DRUGS. HE FAILED TO RESPOND AT ALL TO SEVERAL QUESTIONS.
11. OPINION OF EVALUATOR IN MY OPINION AS A CERTIFIED DRUG RECOGNITION EVALUATOR, MR. FOXK IS
12. TOXICOLOGICAL SPECIMEN I REQUESTED AND OBTAINED A URINE SPECIMEN FROM MR. FOXK. I FORWARDED THE SPECIMEN TO MR. MARK LEWIS OF THE STATE CRIME LABORATORY.
13. MISCELLANEOUS

DRUG INFLUENCE EVALUATION				EVALUATOR CLARK, KEN	
Page ___ of ___		BOOKING NO 018	DR 92-XX-50		
ARRESTEE'S NAME (LAST, FIRST, MI) GROVES, ROBERT G.		AGE 27	SEX M	RACE W	ARRESTING OFFICER (NAME, SERIAL #, DIV.) DELLAVECCHIO, JOSEPH J. 172 VSP
DATE EXAMINED, TIME/LOCATION 8/15/XX 0100 VIRGINIA BEACH PD		BREATH RESULTS <input type="checkbox"/> Refused Results 0.00%		CHEMICAL TEST <input type="checkbox"/> Both Tests Refused <input checked="" type="checkbox"/> Urine <input type="checkbox"/> Blood	
MIRANDA WARNING GIVEN		What have you eaten today? When? FRIED CHICKEN 6:00PM		What have you been drinking? How much? Time of last drink? NOTHING N/A N/A	
Given by CLARK, K.		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Time now? MIDNIGHT When did you last sleep? How long? LAST NIGHT 4 HRS		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor/dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No I HAD A DENTIST APPT TODAY	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		ATTITUDE COOPERATIVE		COORDINATION POOR - WOBBLY, STUMBLING	
Are you taking any medication or drugs? CODINE FOR BACK PAIN ONLY WHEN I NEED IT		BREATH NORMAL ODOR		FACE NORMAL	
SPEECH SLOW AND MUMBLED		BREATHING SLOW AND SHALLOW			
CORRECTIVE LENS <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> L Eye <input type="checkbox"/> R Eye	
PUPIL SIZE <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain) 2.0MM		HGN Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PULSE & TIME		HGN		Vertical Nystagmus? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
1. 60 10110		Lack of Smooth Pursuit		Right Eye NO	
2. 60 10127		Max. Deviation		Left Eye NO	
3. 60 10137		Angle of Onset		None NONE	
BALANCE EYES CLOSED		WALK AND TURN TEST		ONE LEG STAND	
		SLOW, DELIBERATE STEPS 			
		Cannot keep balance <input checked="" type="checkbox"/>		COUNTED SLOWLY I STOPPED TEST AT "1022" Always while balancing.	
		Starts too soon <input type="checkbox"/>		Uses arms to balance.	
		Stops Walking <input checked="" type="checkbox"/>		Hopping. <input type="checkbox"/>	
		Misses Heel-Toe <input checked="" type="checkbox"/>		Puts foot down. <input checked="" type="checkbox"/>	
		Steps off Line <input type="checkbox"/>			
		Raises Arms <input checked="" type="checkbox"/>			
		Actual Steps Taken		1st Nine 9 2nd Nine 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	
		PUPIL SIZE		NASAL AREA	
		Room Light		CLEAR	
		Darkness		ORAL CAVITY	
		Indirect		CLEAR	
		Direct			
		Left Eye 2.0			
		Right Eye 2.0			
		MIPPLUS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		REBOUND DILATION <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
				Reaction to Light NONE OBSERVABLE	
		RIGHT ARM		LEFT ARM	
				NO VISIBLE MARKS	
BLOOD PRESSURE		TEMP		ATTACH PHOTOS OF FRESH PUNCTURE MARKS	
106 / 64		97.8			
MUSCLE TONE					
<input type="checkbox"/> Near Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> 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 14 JUN 19XX 2345 HRS		TIME DUE NOTIFIED 7/15/XX 0025		EVAL START TIME 0100	
				TIME COMPLETED 0145	

1. LOCATION THE EXAMINATION OF GROVES, ROBERT G. TOOK PLACE IN THE CENTRAL BOOKING UNIT OF THE 3RD PRECINCT, VIRGINIA BEACH PD.
2. WITNESS OFFICER J.J. DELLAVECCHIO OBSERVED THE EXAMINATION.
3. BAC I OBSERVED OFFICER DELLAVECCHIO ADMIN. THE GCI TEST TO SUBJ. GROVES. I OBSERVED THE TEST RESULT WAS 0.00%.
4. NOTIFICATION / INTERVIEW I RECEIVED A RADIO CALL FROM 7TH TROOP DISPATCHER REQUESTING THAT I ASSIST OFFICER DELLAVECCHIO AT 3RD PCT, VRPD. CALL CAME AT 0025 HRS ON 15 JULY XX. MET WITH OFFICER D'VECCHIO AT 0055 HRS. AFTER HE ADMINISTERED GCI TEST TO SUBJ. GROVES, D'VECCHIO INFORMED ME THAT GROVES HAD BEEN OPERATING HIS PICKUP TRUCK AT 15 MPH IN 45 MPH SPEED ZONE, AND DRIFTED ACROSS CENTER LINE. OFFICER D'VECCHIO ALSO STATED THAT SUBJ. GROVES LATER ADMITTED TAKING "PAIN PILLS".
5. INITIAL OBSERVATION OF SUSPECT SUBJ. GROVES INITIALLY APPEARED SLEEPY: EYES CLOSED. HEAD NODDED FORWARD. HE WAS COOPERATIVE THROUGHOUT THE EXAMINATION.
6. MEDICAL PROBLEMS / TREATMENT SUBJ. GROVES STATED THAT HE HAD TAKEN CODEINE PILLS TO ALLEVIATE BACK PAIN, AND THAT HE HAD AN APPOINTMENT WITH HIS DOCTOR EARLIER IN THE DAY. HOWEVER, IN RESPONSE TO MY QUESTIONS, HE DENIED HAVING ANY PHYSICAL DEFECTS, AND STATED THAT HE WAS NOT PRESENTLY EXPERIENCING PAIN.
7. PSYCHOPHYSICAL TESTS SUBJ. GROVES SWAYED SIDE TO SIDE AND FRONT TO BACK ON ROMBERG TEST AND ESTIMATED 53 ACTUAL SECONDS AS 30 SECONDS. ON WALK & TURN, HE TOOK LOST THE HEEL-TOE POSITION DURING INSTRUCTIONS, MISSED HEEL-TOE ON THREE STEPS, AND LOST HIS BALANCE ON TURNING. ON ONE LEG STAND, HE DROPPED HIS FOOT TWICE ON EACH TRIAL AND REPEATEDLY SWAYED AND RAISED ARMS. ON FINGER-NOSE, HE MISSED TIP OF NOSE ON EVERY TRIAL.
8. CLINICAL SIGNS SUBJ. GROVES BP WAS BELOW NORMAL RANGES, BOTH SYSTOLIC & DIASTOLIC (106/64). PULSE WAS AT EXTREME LOW END OF NORMAL RANGE ON ALL TRIALS (60). TEMP. WAS NEAR LOW END OF NORMAL RANGE (97.8). NO NYSTAGMUS OR LOC PRESENT.
9. SIGNS OF INGESTION NONE OBSERVED
10. STATEMENTS SUBJ. GROVES STATED TAKING "A COUPLE OF PILLS FOR MY BACK". HE ALSO INDICATED THE PILLS CONTAINED CODEINE.
11. OPINION OF EVALUATOR IN MY OPINION AS A CERTIFIED DRUG RECOGNITION TECHNICIAN, SUBJ. GROVES IS
12. TOXICOLOGICAL SPECIMEN SUBJ. GROVES PROVIDED A URINE SPECIMEN, WHICH I FORWARDED TO THE STATE POLICE CRIME LAB.
13. MISCELLANEOUS

EVALUATOR **Klima, Joseph**

Page of **DRUG INFLUENCE EVALUATION** BOOKING NO **019** OR **62-XX-20**

ARRESTEE'S NAME (LAST, FIRST, MI) **HATOS, STEPHEN H.** AGE **52** SEX **M** RACE **W** ARRESTING OFFICER (NAME SERIAL #, DIV.) **UNSWORTH, JAMES 1811 PHOENIX PD**

DATE EXAMINED: TIME/LOCATION **11/25/XX 2330 MARICOPA COUNTY JAIL** BREATH RESULTS Refused Results **0.04%** Instrument # **1234** CHEMICAL TEST Both Tests Urine Blood Refused

MIRANDA WARNING GIVEN Yes No What have you eaten today? When? **ROAST BEEF DINNER 2 HRS AGO** What have you been drinking? How much? Time of last drink? **A GLASS OF RED WINE 2 HRS AGO**

Given by **Klima J** Are you sick or injured? Yes No Are you diabetic or epileptic? Yes No

Time now? **11:00 PM** When did you last sleep? How long? **LAST NIGHT 8 HRS** 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: **LSP ONLY** Able to follow stimulus: Yes No Eyelids: Normal Droopy

PULSE & TIME	HGN	Left Eye	Right Eye	Vertical Nystagmus?	ONE LEG STAND
1. 100 / 2340	Lack of Smooth Pursuit	YES	YES	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
2. 104 / 2349	Max. Deviation	NO	NO	Convergence Right Eye Left Eye	
3. 108 / 2358	Angle of Onset	NONE	NONE		

BALANCE EYES CLOSED WALK AND TURN TEST **WALKED VERY QUICKLY**

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

Sways while balancing. Uses arms to balance. Jiggling. Puts foot down.

INTERNAL CLOCK **20** Estimated as 30 sec. Describe Turn **PROPER** Cannot do Test (explain) **N/A** Type of Footwear **LOAFERS**

PUPIL SIZE	Room Light	Darkness	Indirect	Direct	NASAL AREA REDNESS AND IRRITATIONS IN NOSE
Left Eye	6.0	8.5	8.0	5.5	REDNESS AND IRRITATIONS IN NOSE
Right Eye	6.0	8.5	8.0	5.5	

ORAL CAVITY **CLEAR**

REFLEXES Yes No REBOUND DILATION Yes No Reaction to Light **SLOW**

RIGHT ARM LEFT ARM

NO VISIBLE MARKS

BLOOD PRESSURE **146 / 100** TEMP **99.2°**

MUSCLE TONE Near Normal Flaccid Rigid

Comments: **ATTACH PHOTOS OF FRESH PUNCTURE MARKS**

What medicine or drug have you been using? How much? **NONE** Time of use? **I DIDN'T DO ANY** Where were the drugs used? (Location) **"I DIDN'T SMOK ANYTHING"**

DATE/TIME OF ARREST **25 NOV XX 2250HRS** TIME ONE NOTIFIED **2310** EVAL START TIME **2330** TIME COMPLETED **11/26/XX 0010HRS**

1. LOCATION EXAMINATION OF STEPHEN H. HATOS WAS CONDUCTED IN DRE ROOM, MARICOPA JAIL.
2. WITNESS ARRESTING OFFICER (UNSWORTH, J, #1811)
3. BAC A.O. INFORMED ME THAT HE ADMIN. BREATHALYZER TEST TO MR. HATOS AT 2320 HRS, 11/25/XX AND OBTAINED RESULT OF 0.04%
4. NOTIFICATION / INTERVIEW REC'D RADIO CALL TO MEET A.O. AT MC JAIL. CALL OF ARRESTING OFFICER CAME AT 2310 HRS. MET A.O. AT 2330 HRS, AT WHICH TIME A.O. INFORMED ME MR. HATOS HAD BEEN DRIVING AT EXCESSIVE SPEED, FAILED TO STOP AT RED TRAFFIC LIGHT. A.O. STATED MR. HATOS APPEARED NERVOUS AND PERFORMED POORLY ON SFSTs.
5. INITIAL OBSERVATION MR. HATOS WAS VERY TALKATIVE, REPEATEDLY SHIFTED WEIGHT OF SUSPECT FROM FOOT TO FOOT, EXHIBITED NERVOUS, ABRUPT MOVEMENT OF HANDS, WHEN NOT SPEAKING, HE APPEARED TO GRIND HIS TEETH. I NOTED AN ODOR OF ALCOHOLIC BEVERAGE ON HIS BREATH.
6. MEDICAL PROBLEMS / TREATMENT N/A
7. PSYCHOPHYSICAL TESTS MR. HATOS PERFORMED ALL TESTS IN A STUMBLING, JERKY FASHION. SWAYED SIDE-SIDE ON RUMBERG AND ESTIM. 20 ACTUAL SECS AS 30. LOST BALANCE, TWICE STOPPED, AND THREE TIMES RAISED ARMS ON WAT. SWAYED AND RAISED ARMS ON OLS AND ONCE PUT FOOT DOWN. REPEATEDLY MISSE TIP OF NOSE ON FTN, AND USED WRONG HAND ON LAST TWO TRIALS.
8. CLINICAL SIGNS PULSE AND BP ELEVATED ABOVE NORMAL RANGES. ^{PUPILS} DILATED
9. SIGNS OF INGESTION MR. HATOS' NOSTRILS APPEARED RED AND ULCERATED, WITH NO VISIBLE NASAL HAIR.
10. STATEMENTS MR. HATOS ADMITTED TO DRINKING "A GLASS OF RED WINE" BUT DENIED THAT HE WAS DRUNK. HE ALSO STRONGLY DENIED USING ANY OTHER DRUGS. IN RESPONSE TO MY QUESTION "WHAT ELSE HAVE YOU DONE TONIGHT" HE ANSWERED "I DIDN'T SMOK ANYTHINGS"
11. OPINION OF EVALUATOR IN MY OPINION AS A CERTIFIED DRUG RECOGNITION EXPERT, MR. HATOS IS
12. TOXICOLOGICAL SPECIMEN I REQUESTED MR. HATOS TO PROVIDE A URINE SAMPLE AND HE COMPLIED. I FORWARDED THE SAMPLE TO MR. GENE ADLER OF THE STATE CRIME LAB.
13. MISCELLANEOUS

EVALUATOR **POFF MEL**

Page of **DRUG INFLUENCE EVALUATION** BOOKING NO **020** DR **201-XX-07**

ARRESTEE'S NAME (LAST FIRST MI) **INGRAHM, ROBERT I** AGE **31** SEX **M** RACE **B** ARRESTING OFFICER (NAME SERIAL & DIV.) **POFF, MEL 1901 HPD**

DATE EXAMINED/TIME/LOCATION **1/17/XX 2200 HCSO** BREATH RESULTS Refused Results **0.00%** Instrument # **1234** CHEMICAL TEST Urine Blood Both Tests Refused

MIRANDA WARNING GIVEN Yes No What have you eaten today? When? **CHINESE FOOD LUNCHTIME** What have you been drinking? How much? Time of last drink? **JUST WATER N/A N/A**

Given by **POFF, M** Are you sick or injured? Yes No Are you diabetic or epileptic? Yes No

Time now? **ABOUT 8:00PM** When did you last sleep? How long? **LAST NIGHT 2HRS** Do you take insulin? Yes No Do you have any physical defects? Yes No Are you under the care of a doctor/dentist? **DOCTOR - FOR STRESS** Yes No

Are you taking any medication or drugs? **VALIUM 10mg TWICE/DAY** Yes No ATTITUDE **COOPERATIVE/DETACHED** COORDINATION **POOR, STUMBLING, STAGGERING!**

SPEECH **THICK AND STURRED 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	Vertical Nystagmus?	ONE LEG STAND
1. 92 / 2210	Lack of Smooth Pursuit	YES	YES	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
2. 92 / 2225	Max. Deviation	YES	YES	Convergence Right Eye Left Eye 	
3. 94 / 2235	Angle of Onset	30°	30°		

BALANCE EYES CLOSED WALK AND TURN TEST **HAD TO REPEAT INSTRUCTIONS** Cannot keep balance Starts too soon Stoops Waiting Misses Heel-Toe Steps off Line Raises Arms Actual Steps Taken **9 10**

INTERNAL CLOCK **46** Estimated as 30 sec. Describe Turn **TURNUED BACKWARDS** Cannot do Test (explain) **N/A** Type of Footwear **RUNNING SHOES**

PUPIL SIZE	Room Light	Darkness	Indirect	Direct	NASAL AREA
Left Eye	4.5	6.0	5.5	4.0	CLEAR
Right Eye	4.5	6.0	5.5	4.0	ORAL CAVITY GREENISH COATINGS ON TONGUE

HEPUS Yes No REBOUND DILATION Yes No Reaction to Light **NORMAL**

VERY RIGID ARM MOVEMENTS

NO VISIBLE 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? Time of use? Where were the drugs used? (Location) **JUST MY PILLS TWO-A-DAY YESTERDAY I DIDN'T DO ANYTHING ELSE**

DATE/TIME OF ARREST **17 JAN XX 2120** TIME DRS NOTIFIED **N/A (PERSONALLY ARRESTED)** EVAL START TIME **2200** TIME COMPLETED **2240**

1. LOCATION I CONDUCTED THE DRE EXAMINATION OF MR. ROBERT I. INGRAHAM AT THE DRE ROOM, HQDTRS, HARRIS COUNTY S.O.
2. WITNESS MR. JOHN MCKAY (TEXAS DECP COORD.) WAS PRESENT THROUGHOUT EXAM.
3. BAC MR. INGRAHAM TESTED AT 0.00% BAC ON INTOXIMETER (I ADMIN. TEST)
4. NOTIFICATION / INTERVIEW I PERSONALLY ARRESTED MR. INGRAHAM
5. INITIAL OBSERVATION OF SUSPECT SEE MY A.R. # 201-XX-1927 (ATTACHED)
6. MEDICAL PROBLEMS / TREATMENT N/A
7. PSYCHOPHYSICAL TESTS MR. INGRAHAM SWAYED 2 IN. CIRCULAR ON ROMBERG'S AND ESTIMATED 46 SECS AS 30 SECS. ON WAT, INGRAHAM TWICE LOST BALANCE DURING INSTRUCTIONS, TWICE STOPPED WALKING, ONCE STOPPED OFF LINE, REPEATEDLY MISSED HEEL-TOE AND RAISED ARMS, AND TOOK 10 STEPS RATHER THAN 9 ON THE RETURN WALK. ON OLS, INGRAHAM REPEATEDLY SWAYED AND RAISED HIS ARMS, AND TWICE PUT THE FOOT DOWN; HE DID THIS ON BOTH TRIALS. ON FTN, HIS ARM MOVEMENTS WERE VERY RIGID, AND HE MISSED TIP OF NOSE ON EVERY TRIAL.
8. CLINICAL SIGNS MR. INGRAHAM EXHIBITED HORIZONTAL AND VERT. NYSTAGMUS AND LAC OF CONVERGENCE. PULSE WAS ELEVATED (92, 92, 94). BLOOD PRESS. WAS ELEVATED (144/100). TEMP WAS WITHIN NORMAL RNG. (99.2).
9. SIGNS OF INGESTION MR. INGRAHAM HAD GREENISH COATING ON TONGUE AND CHEMICAL ODOR ON BREATH.
10. STATEMENTS MR. INGRAHAM STATED HE REGULARLY TAKES VALIUM FOR STRESS, BUT SAID HE HAD NOT TAKEN ANY SINCE YESTERDAY. HE DENIED TAKING ANY OTHER DRUGS. WHEN I ASKED "WHAT HAVE YOU BEEN SMOKING?" HE REPLIED "I DIDN'T DO ANYTHING ELSE". WHEN I ASKED HIM WHAT TIME IT WAS, HE SAID "ABOUT 8 O'CLOCK". IT WAS IN FACT 10:00 PM.
11. OPINION OF EVALUATOR IN MY OPINION AS A CERTIFIED DRE, MR. INGRAHAM IS
12. TOXICOLOGICAL SPECIMEN MR. INGRAHAM SUPPLIED A URINE SPECIMEN. I DELIVERED IT TO MR. TIM RAINES OF THE H.C. CRIME LAB.
13. MISCELLANEOUS

EVALUATOR STUDDARD, RICHARD C.

Page of **DRUG INFLUENCE EVALUATION** BOOKING NO 021 DR 1-XX-52

ARRESTEE'S NAME (LAST, FIRST, MI) JACKSON, REGINA J. AGE 33 SEX F RACE W ARRESTING OFFICER (NAME, SERIAL #, DIV) KOCHUBKA, DAVID 732 MPDC

DATE EXAMINED/TIME/LOCATION 3/18/XX 2030 USCP BREATH RESULTS Refused Results 0.00% Instrument # 1234 CHEMICAL TEST Urine Blood Both Tests Refused

MIRANDA WARNING GIVEN Yes No What have you eaten today? When? SOME TOAST THIS MORNING What have you been drinking? How much? Time of last drink? COFFEE N/A N/A

Given by KOCHUBKA, D Are you sick or injured? Yes No Are you diabetic or epileptic? Yes No

Time now? MIDNIGHT When did you last sleep? How long? LAST NIGHT 8 HRS 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 - VERY SLOPPY

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 Tracing: 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	Vertical Nystagmus?	ONE LEG STAND
1. <u>92 / 2038</u>	Lack of Smooth Pursuit	<u>YES</u>	<u>YES</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
2. <u>96 / 2051</u>	Max. Deviation	<u>YES</u>	<u>YES</u>	Convergence Right Eye Left Eye	
3. <u>92 / 2103</u>	Angle of Onset	<u>35°</u>	<u>35°</u>		

BALANCE EYES CLOSED WALK AND TURN TEST WALKED VERY SLOWLY

Cannot keep balance Starts too soon Stops Walking Misses Heel-Toe Steps off Line Raises Arms Actual Steps Taken 9 9

1st Nine 2nd Nine

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

INTERNAL CLOCK 50 Estimated as 30 sec. Describe Turn ABRUPT SWAVEI, FOLLOWED BY STAGGERING Cannot do Test (explain) N/A Type of Footwear NONE; BARE FEET

PUPIL SIZE	Room Light	Darkness	Indirect	Direct	NASAL CAVITY
Left Eye	<u>2.0</u>	<u>2.5</u>	<u>2.0</u>	<u>2.0</u>	<u>CLEAR</u>
Right Eye	<u>2.0</u>	<u>2.5</u>	<u>2.0</u>	<u>2.0</u>	<u>CLEAR</u>

HEPPLIS Yes No REBOUND DILATION Yes No Reaction to Light NONE OBSERVABLE

RIGHT ARM NUMEROUS PUNCTURE WOUNDS WITH SCARS LEFT ARM SCAR TISSUE

PHOTO AREA TWO PUNCTURE WOUNDS WITH RED DOTS, OBTAINING FLUID SCAR TISSUE

BLOOD PRESSURE 130 / 90 TEMP 98.9°

MUSCLE TONE Near Normal Flaccid Rigid

Comments: ATTACH PHOTOS OF FRESH PUNCTURE MARKS

What medicine or drug have you been using? How much? Time of use? Where were the drugs used? (Location)

NO I DIDN'T USE NOTHING I DIDN'T USE IT I DON'T DO IT ANYMORE

DATE/TIME OF ARREST 8 MAR XX 2010 HOURS TIME ONE NOTIFIED 2020 HRS. EVAL START TIME 2030 HRS TIME COMPLETED 2110

1. LOCATION SUBJECT JACKSON, R. J. WAS EXAMINED IN ROOM 602, US CAPITAL POLICE HDQT.
2. WITNESS ARRESTING OFFICER KOCHUBKA, D. MPDC # 732 / USCP OFFICER BIRD, G.
3. BAC OFFICER GEORGE BIRD ADMIN. INTOXINIZER TEST TO SUBJ JACKSON AT 2034 HRS. TEST WAS ADMIN. IN MY PRESENCE. RESULT WAS 0.00%.
4. NOTIFICATION / INTERVIEW I WAS ON DUTY AT USCP HDQT. (ADMINISTERING CERT. TEN KNOWLEDGE EXAM) WHEN OFFICER BIRD INFORMED ME THAT OFFICER KOCHUBKA WAS EN ROUTE WITH A "DRUGEE". I MET OFFICER KOCHUBKA AT THE SALLY PORT. HE INFORMED ME THAT HE HAD OBSERVED SUBJ. JACKSON WALKING ERBOUND ON EAST CAPITOL STREET, STAGGERING AND STUMBLING. OFFICER KOCHUBKA STATED SUBJ JACKSON WAS WEARING SHORTS AND A T-SHIRT. TEMPERATURE AT THE TIME WAS APPROX. 35°F. OFFICER KOCHUBKA STATED SUBJ. JACKSON APPEARED DAZED AND CONFUSED, AND WAS MUMBLING SOFTLY. HE ALSO STATED THAT SHE WAS BAREFOOT. OFFICER KOCHUBKA ALSO STATED THAT HE FAILED TO DETECT ANY ODOR OF ALCOHOLIC BEVERAGE.
5. INITIAL OBSERVATION OF SUSPECT I OBSERVED SUBJ JACKSON WALK FROM THE SALLY PORT ENTRANCE TO THE ELEVATOR, AND SUBSEQUENTLY FROM THE ELEVATOR, ALONG THE 6TH FLOOR CORRIDOR TO ROOM #602. SHE REPEATEDLY STAGGERED AND STUMBLED, EXHIBITED A BLANK STARE, AND APPEARED TO BE UNAWARE OF HER SURROUNDINGS.
6. MEDICAL PROBLEMS / TREATMENT N/A
7. PSYCHOPHYSICAL TESTS SUBJ. JACKSON SWAYED APPROX 3" SIDE-SIDE ON R'BERG TEST AND EST. 50 SEC. AS 30. SHE LOST BALANCE DURING WAT INSTR., STEPPED OFF LINE AND STOPPED ONCE WHILE WALKING, AND REPEATEDLY MISSED HEEL TO TOE AND RAISED HER ARMS - SHE ALSO STAGGERED SEV. STEPS TO RIGHT WHEN TURNING. ON OLS, SHE REPEATEDLY PUT THE FOOT DOWN, SWAYED AND RAISED HER ARMS. DURING FTN SHE HAD TO BE REMINDED SEV. TIMES TO KEEP THE EYES CLOSED, AND CONSISTENTLY MISSED THE TIP OF THE NOSE.
8. CLINICAL SIGNS BOTH HGN AND VERT. NYSTAGMUS WERE PRESENT. EYES WERE NOT ABLE TO CONVERGE. PULSE WAS HIGH (92, 96, 92). BP WAS WITHIN NORMAL RANGE (130/90). TEMP. WAS WITHIN NORMAL RANGE (98.9). PUPILS CONSTRUCTED.
9. SIGNS OF INGESTION SUBJ. JACKSON HAD NUMEROUS STAINS RESEMBLING "TRACK MARKS" ON BOTH THE RIGHT AND LEFT ARM, AND HAD TWO FRESH (003WS) PUNCTURE WOUNDS ON THE RIGHT ARM (SEE ENCLOSED PHOTO).
10. STATEMENTS IN RESPONSE TO MY QUESTION "WHEN DID YOU SHOOT UP TONIGHT?" SUBJ. JACKSON REPLIED "NO - I DIDN'T USE NOTHING". WHEN I ASKED "WHAT HAVE YOU BEEN SHOOTING?" SHE SAID "I DON'T DO IT ANYMORE".
11. OPINION OF EVALUATOR IN MY OPINION
12. TOXICOLOGICAL SPECIMEN OFFICER BIRD OBTAINED A BLOOD SAMPLE . . .
13. MISCELLANEOUS

SESSION XIX

INHALANTS

HS 172 R4/93

SESSION XIX INHALANTS

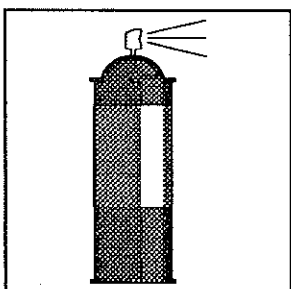
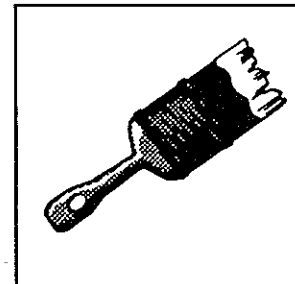
Upon successfully completing this session, the participants will be able to:

- o Explain a brief history of the Inhalant category of drugs.
- o Identify common drug names and terms associated with this category.
- o Identify common methods of administration for this category.
- o Explain the symptoms, observable signs and other effects associated with this category.
- o Explain the typical time parameters, i.e., on-set 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 address the "Topics for Study" questions at the end of this session.

A. Overview of Inhalants

Inhalants include a wide variety of breathable chemicals that produce mind-altering results. There are three major subcategories of inhalants.

The volatile solvents include a large number of readily available substances, none of which is intended by the manufacturer to be used as a drug. The most widely abused volatile solvent is plastic cement, or "model airplane glue". Other frequently abused volatile solvents include paint, gasoline, paint thinners, dry cleaning fluids, typewriter correction fluid and fingernail polish removers. The principal active ingredient in many abused volatile solvents is toluene.



The aerosols are chemicals discharged from a pressurized container by the propellant force of a compressed gas. Commonly abused aerosols include hair sprays, deodorants, insecticides, freon, glass chillers and vegetable frying pan lubricants. Abused aerosols contain various hydrocarbon gasses that produce drug effects.

Most of the people who abuse volatile solvents or aerosols appear to be children between the ages of 10 and 15 years. Male abusers outnumber females by a ratio of 10-to-1. Poor children are significantly over-represented among inhalant abusers.

The third subcategory, the anesthetic gases, includes substances that are less frequently abused than are volatile solvents or aerosols. The anesthetic gases are drugs that abolish pain, and they are used medically for that purpose during surgery. Anesthetic gases that are sometimes abused include ether, chloroform, amyl nitrite, butyl nitrite, isobutyl nitrite and nitrous oxide.

There is an important distinction between the Anesthetic Gases and the other two subcategories of Inhalants. The Volatile Solvents and the Aerosols usually cause elevated blood pressure. But the Anesthetic Gases usually cause blood pressure to become lower than normal. Apparently, this is due to the fact that the Anesthetic Gases restrict the pumping action of the heart, so that the heart cannot constrict as forcibly as it usually does. The result is that blood pressure drops. Pulse rate, however, usually is increased by all three subcategories of Inhalants.

B. Possible Effects of Inhalants

The effects of inhalants vary from one substance to another.

1. Glue and similar volatile solvents typically produce:
 - o inebriation similar to alcohol intoxication
 - o bizarre thoughts
 - o dizziness and numbness
 - o euphoria and grandiosity
 - o floating sensation
 - o distorted perceptions of time and distance
 - o possible hallucinations
 - o antagonistic behavior
 - o intense headaches

2. Gasoline and similar petroleum products typically give rise to:
 - o nausea and excessive salivation
 - o drowsiness and weakness
 - o light headedness
 - o sensation of spinning, moving, floating
 - o distorted space perception
 - o altered shapes and colors

In general, persons under the influence of inhalants will appear confused and disoriented. Their speech usually will be slurred.

C. Onset and Duration of Inhalants' Effects

Inhalants' effects are felt virtually immediately. However, the duration of effects depends on the substance used. For example, glue, paint, gasoline and other commonly abused inhalants usually produce effects that last several or more hours. Nitrous oxide's effects typically last 5 minutes or less. The effects of amyl nitrite and butyl nitrite last from a few seconds to up to 20 minutes.

D. Signs and Symptoms of Inhalant Overdose

Some inhalants will depress the central nervous system to the point where respiration ceases. Others can cause heart failure. Some inhalant overdoses induce severe nausea and vomiting, and the unconscious user may drown in his or her own vomit. Thus, there is a significant risk of death due to inhalant overdose.

In addition, some inhalant users prefer to put the volatile solvents in a plastic bag, then place the bag over their heads to provide a high concentration of fumes. Sometimes, the user will pass out, then suffocate with the bag over the head.

There is evidence that long-term inhalant abuse can cause:

- o permanent damage to the central nervous system
- o liver damage
- o kidney damage
- o bone and bone marrow damage
- o greatly reduced mental and physical abilities

E. Expected Results of the Evaluation

When a person under the influence of inhalants is examined by a drug recognition expert, the following results generally will be found.

Horizontal Gaze Nystagmus - present.

Vertical Nystagmus - present, high dose for that particular individual.

Lack of Convergence - present.

Pupil size - normal, but may be dilated with certain specific inhalants (anesthetic gases).

Pupil's reaction to light - slow.

Pulse rate - up.

Blood pressure - up or down. Volatile Solvents and Aerosols usually will cause elevated blood pressure, while Anesthetic Gases usually will lower the blood pressure.

Temperature - up, down or normal depending on the substance.

Muscle tone usually will be normal.

Topics for study

1. What are the three major sub-categories of inhalants?
2. What is the principal active ingredient in many volatile substances?
3. In what important respect do the effects of Anesthetic Gases differ from the effects of Volatile Solvents and Aerosols?
4. Does any of the subcategories of Inhalants cause pulse rate to decrease?

Page <u> </u> of <u> </u>				EVALUATOR <u>BUSTROM ROB</u>			
DRUG INFLUENCE EVALUATION				BOOKING NO <u>022</u>	OR <u>98-XX-22</u>		
ARRESTEE'S NAME - LAST, FIRST, MI <u>BROWNLEE, MICHAEL M.</u>				AGE <u>18</u>	SEX <u>M</u>	RACE <u>HISP.</u>	ARRESTING OFFICER (NAME, SERIAL #, DIV) <u>BLEA, JOHN 779 DPD</u>
DATE EXAMINED, TIME/LOCATION <u>7/2/XX 2200</u> <u>DPD TRAFFIC DIVISION</u>				BREATH RESULTS Results <u>0.00%</u>		CHEMICAL TEST <input checked="" type="checkbox"/> Urine <input type="checkbox"/> Blood <input type="checkbox"/> Both Tests <input type="checkbox"/> Refused	
MIRANDA WARNING GIVEN Given by <u>BUSTROM, R</u>				What have you eaten today? When? <u>HAMBURGER 6 O'CLOCK</u>		What have you been drinking? How much? Time of last drink? <u>JUST WATER N/A N/A</u>	
Time now? <u>ABOUT 10</u>		When did you last sleep? How long? <u>LAST NIGHT 6 HRS.</u>		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor/doctor? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				ATTITUDE <u>COOPERATIVE BUT DAZED</u>		COORDINATION <u>VERY POOR - COULD BARELY STAND</u>	
SPEECH <u>SURRED MUMBLED</u>				BREATH <u>CHEMICAL ODOR SIMILAR TO PAINT</u>		FACE <u>PAINT SMEEARS ON UPPER LIP AND CHIN</u>	
CORRECTIVE LENS <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft <input checked="" type="checkbox"/> None				Eyes: <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input checked="" type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> L Eye <input type="checkbox"/> R Eye <input type="checkbox"/> Equal <input type="checkbox"/> Unequal	
PUPIL SIZE <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)				HGN Present <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Able to follow commands: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PULSE & TIME		HGN		Left Eye		Right Eye	
1. <u>104 12210</u>		Lack of Smooth Pursuit		<u>YES</u>		<u>YES</u>	
2. <u>102 12224</u>		Max. Deviation		<u>YES</u>		<u>YES</u>	
3. <u>104 12236</u>		Angle of Onset		<u>30°</u>		<u>30°</u>	
BALANCE EYES CLOSED				WALK AND TURN TEST			
				Cannot keep balance <input checked="" type="checkbox"/> Starts too soon <input type="checkbox"/> 1st Nine: <input type="checkbox"/> 2nd Nine: <input type="checkbox"/> Stops Walking: <input type="checkbox"/> Misses Heel-Toe: <input type="checkbox"/> Steps off Line: <input type="checkbox"/> Raises Arms: <input type="checkbox"/> Actual Steps Taken: <input type="checkbox"/>			
INTERNAL CLOCK <u>N/A</u> Estimated as 30 sec.				Describe Turn <u>N/A</u>		Cannot do Test (explain) <u>UNABLE TO STAND HEEL-TO-TOE</u>	
Type of Footwear <u>RUNNING SHOES</u>				NASAL AREA <u>DRIED PAINT ON UPPER LIP.</u>			
ORAL CAVITY <u>ODOR OF PAINT</u>				PUPIL SIZE			
				Room Light		Darkness	
				Indirect		Direct	
				Left Eye		Right Eye	
				<u>4.0</u>		<u>3.5</u>	
				<u>4.0</u>		<u>3.5</u>	
MIPPLIS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				REBOUND DELATION <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light <u>NORMAL</u>	
RIGHT ARM 				LEFT ARM 			
BLOOD PRESSURE <u>140 / 100</u>				TEMP <u>98.6°</u>			
MUSCLE TONE <input checked="" type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid				ATTACH PHOTOS OF FRESH PUNCTURE MARKS			
Comments: <u>TEST ADMINISTERED IN SEATED POSITION</u>							
What medicine or drug have you been using? How much? <u>I SMOKED A LITTLE GOLD NOT TOO MUCH</u>				Time of use? <u>ABOUT 8 O'CLOCK</u>		Where were the drugs used? (Location) <u>IN THE PARK</u>	
DATE/TIME OF ARREST <u>2 JULY XX 2130 HRS.</u>				TIME ONE NOTIFIED <u>2145</u>		EVAL START TIME <u>2200</u>	
						TIME COMPLETED <u>2240</u>	

1. LOCATION I EXAMINED MICHAEL M. BROWNLEE IN THE DRE ROOM, TRAFFIC DIVISION, DENVER POLICE DEPT.
2. WITNESSES ARRESTING OFFICER JOHN BLEA, #779 DENVER PD.
3. BAC OFFICER BLEA ADMINISTERED INTOXLYZER TEST TO SUBJ. BROWNLEE IN MY PRESENCE. TEST RESULT WAS 0.00%.
4. NOTIFICATION/INTERVIEW AT 2145 HRS ON 2 JULY 19XX, I RECEIVED RADIO CALL INSTRUCTING ME TO MEET OFFICER BLEA AT DPD TRAFFIC DIVISION TO CONDUCT DRE EXAM. OFFICER BLEA INFORMED ME THAT HE HAD APPREHENDED SUBJ. BROWNLEE FOR FAILING TO OBEY TRAFFIC CONTROL DEVICE (STOP SIGN) AT COLFAX & 6TH. OFFICER BLEA REPORTED SUBJ. BROWNLEE VERY UNCOORDINATED, UNABLE TO PERFORM SFST, EXHIBITED NYSTAGMUS. OFFICER BLEA ALSO REPORTED CAN OF KRYLON GOLD SPRAY PAINT WAS FOUND ON FRONT SEAT OF SUBJ. BROWNLEE'S VEHICLE, ALONG WITH PAINT-SOAKED RAG.
5. INITIAL OBSERVATION OF SUSPECT I FIRST SAW SUBJ. BROWNLEE SEATED NEXT TO INTOXLYZER HE APPEARED PASSIVE AND DAZED. GOLD-COLORED SMEARs WERE VISIBLE ON HIS HANDS, CHIN AND UPPER LIP.
6. MEDICAL PROBLEMS/TREATMENT N/A
7. PSYCHOPHYSICAL TESTS I ATTEMPTED TO ADMINISTER RBERG, WAT AND OLS TO SUBJ. BROWNLEE, BUT I WAS FORCED TO TERMINATE EACH TEST AFTER SEVERAL SECONDS. HE SIMPLY COULD NOT STAND UNAIDED. I ADMIN. FTN WHILE HE WAS SEATED, BUT HE USED THE PALM OF HIS HAND TO TOUCH THE NOSE ON ALL TRIALS.
8. CLINICAL SIGNS SUBJ. BROWNLEE EXHIBITED HORIZONTAL GAZE NYSTAGMUS AND LACK OF CONVERGENCE. HIS PULSE RATE WAS ELEVATED (104, 102, 104). HE HAD ELEVATED DIASTOLIC BLOOD PRESSURE (100).
9. SIGNS OF INGESTION GOLD-COLORED SMEARs WERE VISIBLE ON SUBJ. BROWNLEE'S FACE AND HANDS. A STRONG ODOR OF PAINT WAS ON HIS BREATH.
10. STATEMENTS I ASKED SUBJ. BROWNLEE "HOW MUCH PAINT DID YOU SNIFF TODAY?" HE REPLIED "I SNIFFED A LITTLE GOLD - NOT TOO MUCH - JUST A LITTLE BIT". I ASKED WHEN AND WHERE HE'D SNIFFED THE PAINT, AND HE REPLIED "ABOUT 8 O'CLOCK, IN THE PARK".
11. OPINION OF EVALUATOR IN MY OPINION AS A CERTIFIED DRE, SUBJ. MICHAEL M. BROWNLEE IS UNDER THE INFLUENCE OF AN INHALANT AND IS UNABLE TO OPERATE A MOTOR VEHICLE SAFELY.
12. TOXICOLOGICAL SPECIMEN OFFICER BLEA AND I OBSERVED SUBJ. BROWNLEE PROVIDE A URINE SPECIMEN. OFFICER BLEA TOOK CUSTODY OF THE SPECIMEN FOR THE PURPOSE OF TRANSPORTING IT TO THE STATE CRIME LAB.
13. MISCELLANEOUS OFFICER BLEA ALSO TOOK CUSTODY OF THE PAINT-SOAKED RAG FOUND IN SUBJ. BROWNLEE'S VEHICLE. OFFICER BLEA STATED THAT HE INTENDS TO TRANSPORT THE RAG TO THE STATE CRIME LAB.

EVALUATOR TIDWELL JERRY

Page of **DRUG INFLUENCE EVALUATION** BOOKING NO 023 DR 27-XX-61

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 12/7/XX 2000HRS STOCKTON PD BREATH RESULTS Refused Results 0.03% Instrument # 1234 CHEMICAL TEST Urine Blood Both Tests Refused

MIRANDA WARNING GIVEN Yes No What have you eaten today? SOME PIZZA When? RIGHT AFTER SCHOOL What have you been drinking? How much? COUPLE OF WINE COOLERS 2 Time of last drink? 7PM

Given by TIDWELL, J. Are you sick or injured? I FEEL DIZZY AND WOZZY Yes No Are you diabetic or epileptic? Yes No

Time now? ABOUT 8PM When did you last sleep? How long? LAST NIGHT 7HRS Do you take insulin? Yes No Do you have any physical defects? Yes No Are you under the care of a doctor/dermat? Yes No

Are you taking any medication or drugs? Yes No ATTITUDE COOPERATIVE BUT VERY SLOW TO RESPOND COORDINATION POOR-STAGGERING, STUMBLING

SPEECH STURRED, SLOW AND LOW BREATH DISTINCT ODOR OF GASOLINE FACE FLUSHED

CORRECTIVE LENS Glasses Contacts, if so Hard Soft None 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	Vertical Nystagmus?	ONE LEG STAND
1. <u>100 / 2010</u>	Lack of Smooth Pursuit	<u>YES</u>	<u>YES</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
2. <u>100 / 2024</u>	Max. Deviation	<u>YES</u>	<u>YES</u>	Convergence Right Eye Left Eye 	
3. <u>100 / 2036</u>	Angle of Onset	<u>35°</u>	<u>35°</u>		

BALANCE EYES CLOSED WALK AND TURN TEST

3" 3" 3" 3"
CIRCULAR SWAY STOMBLIED AND NEARLY FEEL

TEST TERMINATED
STAGGERED SEVERAL STEPS

Cannot keep balance Starts too soon

	1st Nine	2nd Nine
Stops Walking	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Misses Heel-Toe	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Steps off Line	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Raises Arms	<input type="checkbox"/>	<input type="checkbox"/>
Actual Steps Taken	<u>6</u>	

INTERNAL CLOCK 19 Estimated as 30 sec. Describe Turn CANNOT DO TEST (EXAMINER TEST STOPPED WHEN FEEL TEST STOPPED WHEN FEEL TEST STOPPED WHEN FEEL) Type of Footwear TENNIS SHOES

	PUPIL SIZE	Room Light	Darkness	Indirect	Direct	MASAL AREA <u>RUNNY NOSE</u>
	Left Eye	<u>5.0</u>	<u>6.5</u>	<u>6.0</u>	<u>4.5</u>	<u>4.5</u>
Right Eye	<u>5.0</u>	<u>6.5</u>	<u>6.0</u>	<u>4.5</u>	<u>4.5</u>	<u>ODOR OF GASOLINE</u>

HIPPUS Yes No REBOUND DILATION Yes No Reaction to Light NORMAL

RIGHT ARM LEFT ARM

NO VISIBLE MARKS

ATTACH PHOTOS OF FRESH PUNCTURE MARKS

MUSCLE TONE Near Normal Flaccid Rigid

BLOOD PRESSURE 146 / 104 TEMP 98.8°

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 7 DEC 77 1970HRS TIME ONE NOTIFIED 1110 (PERSONALLY) EVAL START TIME 2000HRS TIME COMPLETED 2110HRS

1. LOCATION EXAM OF DERBY, ADELE S. TOOK PLACE AT CENTRAL TESTING UNIT, STOCKTON PD
2. WITNESS MR. ARNIE TROTTER, CALIFORNIA OFFICE OF TRAFFIC SAFETY
3. BAC I ADMINISTERED GCI TEST TO MS. DERBY. RESULT WAS POSITIVE (0.03%)
4. NOTIFICATION/INTERVIEW N/A I PERSONALLY ARRESTED MS. DERBY
5. INITIAL OBSERVATION OF SUSPECT WHEN I FIRST SAW MS. DERBY, SHE WAS WALKING NORTHBOUND IN THE N^{ORTH}BOUND TRAFFIC LANE OF STATE STREET. 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/TREATMENT N/A
7. PSYCHOPHYSICAL TESTS MS. DERBY SWAYED 3" IN A CIRCULAR MANNER WHEN PERFORMING RBERG BALANCE, AND STUMBLER TO THE RIGHT, NEARLY FALLING. SHE ESTIMATED 19 SECONDS AS 30 SECS. I ATTEMPTED TO ADMIN. WALK-TURN, BUT SHE STEPPED OFF THE LINE SEVERAL TIMES, STAGGERED AND NEARLY FELL; I TERMINATED THE TEST OUT OF CONCERN FOR HER SAFETY. SIMILARLY, I TERMINATED ONE LEG STAND TEST AFTER ONLY FOUR (4) SECS, BECAUSE SHE HAD PUT THE FOOT DOWN 3 TIMES, SWAYED AND NEARLY FELL. I ALLOWED MS. DERBY TO REMAIN SEATED FOR FINGER-NOSE. SHE MISSED TIP OF NOSE ON ALL TRIALS AND USED WRONG FINGER ON LAST TWO TRIALS.
8. CLINICAL SIGNS MS. DERBY HAD HORIZ. NYSTAGMUS, AND HER RIGHT EYE FAILED TO CONVERGE. HER PULSE WAS ELEVATED (100). HER BLOOD PRESSURE ALSO WAS ELEVATED (146/104).
9. SIGNS OF INGESTION THERE WAS A NOTICEABLE ODOR OF GASOLINE ON MS. DERBY'S BREATH.
10. STATEMENTS I ASKED MS. DERBY "WHERE DID YOU SNIFF THE GASOLINE TONIGHT", AND SHE REPLIED "I DIDN'T SNIFF ANYTHING - I DON'T DO GAS". I THEN INFORMED HER THAT I COULD SMELL THE GASOLINE ON HER BREATH, AND I ASKED "WHAT TIME DID YOU SNIFF THE GAS". SHE REPLIED "I DIDN'T DO IT TONIGHT".
11. OPINION OF EVALUATOR IN MY OPINION AS A CERTIFIED DRUG RECOGNITION EXAMINER, MS. DERBY IS UNDER THE INFLUENCE OF ALCOHOL AND AN INHALANT AND IS UNABLE TO OPERATE A MOTOR VEHICLE SAFELY.
12. TOXICOLOGICAL SPECIMEN MS. DERBY PROVIDED A URINE SPECIMEN, WHICH I FORWARDED TO THE CHP CRIME LAB.
13. MISCELLANEOUS

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, blood pressure and temperature.
- o Articulate the vital signs examination procedures.
- o Document the results of the vital signs examinations.

In this session, you will have opportunities to practice taking measurements of pulse, blood pressure and temperature. You will work in a team with two or three fellow students, taking turns measuring these vital signs on each other. When it is not your turn to serve either as the test administrator or the test subject, you should closely observe your teammate who is administering the examinations and offer any coaching that seems appropriate.

In preparation for this session, make sure you can do the following:

- o Locate the radial, brachial and carotid artery pulse points.
- o Position the blood pressure cuff properly on a subject's arm.

VITAL SIGNS EXAMINATIONS DATA SHEET

EXAMINER'S NAME _____

DATE ____/____/____

PULSE MEASUREMENTS

BLOOD PRESSURE MEASUREMENTS

SUBJECT'S NAME _____

SUBJECT'S NAME _____

TIME _____

TIME _____

PULSE POINT USED _____

SYSTOLIC _____

BEATS PER MINUTES _____

DIASTOLIC _____

SUBJECT'S NAME _____

SUBJECT'S NAME _____

TIME _____

TIME _____

PULSE POINT USED _____

SYSTOLIC _____

BEATS PER MINUTE _____

DIASTOLIC _____

SUBJECT'S NAME _____

SUBJECT'S NAME _____

TIME _____

TIME _____

PULSE POINT USED _____

SYSTOLIC _____

BEATS PER MINUTE _____

DIASTOLIC _____

SESSION XXI

CANNABIS

HS 172 R4/93

SESSION XXI CANNABIS

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

- o Explain a brief history of Cannabis.
- o Identify common names and terms associated with Cannabis.
- o Identify common methods of administration for Cannabis.
- o Explain the symptoms, observable signs and other effects associated with Cannabis.
- o Explain the typical time parameters, i.e., on-set and duration of effects, associated with Cannabis.
- 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 Cannabis.
- o Correctly answer the "Topics for Study" questions at the end of this session.

A. Overview of Cannabis

"Cannabis" is the category of drugs that derive primarily from various species of Cannabis plants. Two species that supply much of the abused Cannabis are Cannabis Sativa and Cannabis Indica. Some jurisdictions as well as botanists don't recognize Cannabis Indica as a separate species. The active ingredient in these drugs is:

Delta-9 Tetrahydrocannabinol
(abbreviated Δ -9 THC, or simply "THC")

THC is found principally in the leaves and flowers of the plant, especially the female plant, rather than in the stem or branches. Different varieties of Cannabis plants have different concentrations of THC. A variety that has a relatively high concentration of THC is the Sinsemilla plant, a type of Cannabis Sativa having very tiny seeds. ("Sinsemilla" is a Spanish expression for "without seeds".)

Cannabis has some limited medical applications. It lowers intra-ocular pressure, and so can be helpful for glaucoma patients. It suppresses nausea, and sometimes is recommended for cancer patients to relieve the nausea that accompanies chemotherapy.

There are four principal forms of the drug Cannabis.

Marijuana consists of the dried leaves of the plant.

Hashish basically is a concentrated version of marijuana. It is produced by crushing and boiling the leaves of the female plant and allowing them to dry into a semi-solid mass.

Hashish oil is a liquid extracted from hashish. It is also known as Hash Oil.

Marinol (also known as Dronabinol) is a synthetic form of THC that is not derived from Cannabis plants. Marinol is a prescriptive drug. It is sometimes administered to cancer patients to suppress the nausea that may accompany chemotherapy. Nabilone is a synthetic form of THC and is used as an anti-vomiting agent.

Marijuana usually is smoked. Marijuana, hashish and hash oil also can be taken orally, e.g., baked in cookies or brownies and eaten. Marinol is taken orally.

B. Possible Effects of Cannabis

Cannabis appears to interfere with a person's ability or willingness to pay attention. People under the influence of marijuana do not divide their attention very well. When driving, they may attend to certain parts of the driving task but ignore other parts. For example, they may continue to steer the car but ignore stop signs, traffic lights, etc.

Because Cannabis impairs attention, divided attention tests such as Walk and Turn and One Leg Stand are excellent tools for recognizing people who are under the influence of Cannabis. Generally speaking, Cannabis also will:

- o diminish inhibitions
- o impair perception of time and distance
- o create disorientation
- o cause body tremors
- o eyelid tremors
- o marked reddening of the conjunctiva of the eye

C. Onset and Duration of Cannabis' Effects

Persons begin to feel and exhibit marijuana's effects within 8-9 seconds after inhaling the smoke. The effects usually reach their peak within 10-30 minutes, and the effects generally continue for 2-3 hours. The user typically feels "normal" within 3-6 hours after smoking marijuana.

It is important to understand that some blood and urine tests may continue to disclose evidence of the use of marijuana long after the effects of marijuana have dissipated. That is because certain chemical tests do not seek to find THC itself, but instead look for metabolites of THC, or chemical by-products. Some blood tests may disclose marijuana use for at least 3 days after smoking. Some urine tests may indicate the presence of THC metabolites for 28-45 days.

Two important metabolites of THC affect the duration, and the perception, of the effects of Cannabis. One of these metabolites is Hydroxy THC; this causes the user to feel euphoric, so that he or she is aware of the effects. Hydroxy THC usually is eliminated from the blood plasma within about six hours. The other important metabolite is Carboxy THC. This metabolite also causes impairment, but no feeling of euphoria, so the user might not be aware that he or she is still impaired. Carboxy THC may be found in the blood plasma for several days following marijuana use. Therefore, the user may actually be impaired for a good deal of time after his or her perceptions of impairment have ended.

D. Signs and Symptoms of Cannabis Overdose

Excessive use of marijuana can create paranoia and possible psychosis. These same effects may develop from long-term use of the drug, which has also been observed to produce sharp personality changes, especially in adolescent users. Other long-term effects include:

- o lung damage
- o chronic bronchitis
- o lowering of testosterone (male sex hormone)
- o acute anxiety attacks
- o chronic reduction of attention span
- o possible birth defects, still births and infant deaths

E. Expected Results of the Evaluation

When a person under the influence of Cannabis is examined by a drug recognition expert, the following results generally can be expected.

Horizontal Gaze Nystagmus - none.

Vertical Nystagmus - none.

Lack of Convergence will be present.

Pupil size will be dilated, but possibly normal.

Pupil's reaction to light will be normal.

Pulse rate will be up.

Blood Pressure will be up.

Temperature will be normal.

Muscle tone will be normal.

Injection sites usually will not be found.

Topics for study

1. What is the active ingredient in Cannabis?
2. Why are the Walk and Turn test and the One Leg Stand test excellent tools for recognizing persons under the influence of marijuana?
3. What is Marinol? What is Sinsemilla?
4. Name two important metabolites of THC, and describe how they affect the duration and perception of the effects of Cannabis.

Page <u> </u> of <u> </u> DRUG INFLUENCE EVALUATION				EVALUATOR BOLAND HANK	
ARRESTEE'S NAME (LAST, FIRST, MI) WRIGHT, JAMES B.		AGE 40	SEX M	RACE W	BOOKING NO 024
DATE EXAMINED: TIME/LOCATION 2/7/XX 2300 COLONIE PD HDQTS		BREATH RESULTS Results 0.00%	Instrument # 1234	ARRESTING OFFICER (NAME SERIAL # DIV) KENNEDY, B. 8132 NYS	
MIRANDA WARNING GIVEN Given by KENNEDY B		What have you eaten today? When? COUPLE OF BURGERS 7PM	What have you been drinking? How much? NOTHING - I DON'T DRINK	Time of last drink N/A	
When did you last sleep? How long? ABOUT MIDNIGHT LAST NIGHT 9 HRS		Are you sick or injured? I'M JUST FINE	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Do you take insulin? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you under the care of a doctor/dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are you taking any medication or drugs? OF COURSE NOT		ATTITUDE RELAXED CAREFREE GENERALLY COOPERATIVE	COORDINATION POOR - STUMBLING		
SPEECH SLOW AND DELIBERATE		BREATH ODOR OF MARIJUANA	FACE NORMAL		
CORRECTIVE LENS <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery	Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> L. Eye <input type="checkbox"/> R. Eye	Traction: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
PUPIL SIZE <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		HGN Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy
PULSE & TIME		HGN	Left Eye	Right Eye	Vertical Nystagmus? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
1. 108 / 2307		Lack of Smooth Pursuit	NO	NO	
2. 110 / 2318		Max. Deviation	NO	NO	
3. 108 / 2320		Angle of Onset	NONE	NONE	
BALANCE EYES CLOSED 2" 2" 2" 2" CIRCULAR SWAY EYELID TREMORS		WALK AND TURN TEST INSTRUCTIONS HAD TO BE REPEATED TWICE NEVER TOUCHED HEEL TOE WHILE WALKING		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon <input checked="" type="checkbox"/> Stops Walking <input type="checkbox"/> Misses Heel-Toe ALL STEPS ALL STEPS Steps off Line <input type="checkbox"/> Raises Arms <input checked="" type="checkbox"/> Actual Steps Taken 1st Nine: 9 2nd Nine: 9	
INTERNAL CLOCK 51 Estimated as 30 sec.		Describe Turn ABRUPT SWIVEL: "ABOUT FACE"		Cannot do Test (explain) N/A	
<input type="radio"/> Right <input type="radio"/> Left Draw lines to spots touched EYELID TREMORS "CHUCKLING" THROUGHOUT TEST MOVED ARMS VERY SLOWLY		PUPIL SIZE	Room Light	Darkness	Indirect
		Left Eye	6.0	7.5	6.5
		Right Eye	6.0	7.5	6.5
<input type="checkbox"/> Hippus <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		REBOUND DILATION <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Reaction to Light NORMAL	
BLOOD PRESSURE 140 / 96		TEMP 98.8°		MUSCLE TONE <input checked="" type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid	
		NO VISIBLE MARKS			
Comments: "SMOKE? WHO, ME? HAH-HAH-HAH" "OH, SEE, I CAN'T REMEMBER"		ATTACH PHOTOS OF FRESH PUNCTURE MARKS			
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, SEE, I CAN'T REMEMBER"	
DATE/TIME OF ARREST 7 FEB XX 2230		TIME DRG NOTIFIED 2240		EVAL START TIME 2300	
				TIME COMPLETED 2330	

1. LOCATION I EXAMINED SUBJECT JAMES B. WRIGHT IN THE DRE ROOM, COLONIE POLICE DEP.

2. WITNESS ARRESTING OFFICER: TPR BRIAN KENNEDY, NYSP #8132

3. BAC TPR KENNEDY INFORMED ME THAT HE HAD ADMINISTERED BREATHALYZER TEST TO SUBJ. WRIGHT AT 2255 HRS AND OBTAINED RESULT OF 0.00%.

4. NOTIFICATION/INTERVIEW I RECEIVED A RADIO CALL AT 2240 HRS, DIRECTING ME TO MEET TPR KENNEDY AT CPD HOOTS FOR THE PURPOSE OF EXAMINING A SUSPECTED DRUG IMPAIRED DRIVER. I ARRIVED AT THE DRE ROOM AT 2258 HRS. TPR KENNEDY STATED HE OBS. VEHICLE OPERATED BY SUBJ WRIGHT TRAVELING S/B ON STATE RT 22. VEHICLE WAS TRAVELING VERY SLOWLY (15MPH IN 50MPH ZONE). TPR KENNEDY REPORTED THAT, WHEN HE ACTIVATED PATROL VEHICLE'S O/H LIGHTS, SUBJ WRIGHT'S VEHICLE SLOWLY DRIFTED TO LEFT, COMPLETELY ACROSS N/B LANE ACROSS SHOULDER THROUGH A LOW HEDGE ROW, FINALLY COMING TO REST IN THE CORNFIELD. TPR KENNEDY APPROACHED SUBJ VEHICLE, AND OBS. SUBJ WRIGHT HAD EXITED AND WAS STANDING NEXT TO VEHICLE, CHUCKLING.

5. INITIAL OBSERVATION OF SUSPECT I FIRST OBS. SUBJ WRIGHT AT 2258 HRS. HE WAS SEATED ON THE BENCH IN THE DRE ROOM, SMILING AND HUMMING SOFTLY. AS I CONVERSED WITH TPR KENNEDY, SUBJ WRIGHT CALLED OUT "HEY BRIAN TELL THIS GUY ABOUT MY WILD RIDE TONIGHT!" THEN HE CHUCKLED, AND RESUMED HUMMING.

6. MEDICAL PROBLEMS/TREATMENT N/A

7. PSYCHOPHYSICAL TESTS SUBJ WRIGHT SWAYED APPROX 2" CIRCULAR ON R-BALANCE, EXHIBITED EYELID TREMORS, AND EST. 51 SECS. AS 30 SECS. HE TWICE REQUESTED THAT I REPEAT ENTIRE INSTR. FOR WAT; LOST BALANCE DURING WSTR, STARTED WALKING TOO SOON, RAISED ARMS REPEATEDLY AND NEVER TOUCHED HEEL TO TOE. ON OLS HE SWAYED, RAISED ARMS AND PUT THE FOOT DOWN. ON FTN HE MISSED TIP OF NOSE ON ALL TRIALS, EXHIBITED EYELID TREMORS AND CHUCKLED THROUGHOUT TEST.

8. CLINICAL SIGNS SUBJ WRIGHT HAD ELEVATED PULSE (108, 110, 108) AND ELEVATED DIASTOLIC B/P (96). PUPILS DILATED (7.5 IN DARK). RIGHT EYE DID NOT CONVERGE. NO NYSTAGMUS EVIDENT.

9. SIGNS OF INGESTION ODOR OF M/J ON SUBJ WRIGHT'S BREATH. BITS OF GREEN VEGETATION MATERIAL ON HIS TONGUE AND BETWEEN TEETH.

10. STATEMENTS I ASKED "WHEN DID YOU SMOKE THE MARIJUANA" AND SUBJ WRIGHT ANSWERED "WHAT? SMOKE MARIJUANA? WHO ME?" THEY LAUGHED. I INFORMED HIM THAT IT WAS CLEAR HE HAD BEEN SMOKING, AND ASKED WHEN AND WHERE HE HAD USED THE MARIJUANA TONIGHT. HE REPLIED "OH, I DON'T KNOW. OH, SEE, SERIOUSLY I CAN'T REMEMBER"

11. OPINION OF EVALUATOR SUBJ WRIGHT IS UNDER THE INFLUENCE OF CANNABIS AND IS NOT ABLE TO OPERATE A MOTOR VEHICLE SAFELY.

12. TOXICOLOGICAL SPECIMENS AT MY REQUEST, SUBJ WRIGHT PROVIDE A URINE

Page <u> </u> of <u> </u>				DRUG INFLUENCE EVALUATION				EVALUATOR <u>JOHN, CLARK</u>	
ARRESTEE'S NAME (LAST FIRST MI) <u>PELTIER, CHARLES E.</u>				AGE <u>34</u>	SEX <u>M</u>	RACE <u>B</u>	BOOKING NO <u>025</u>	OR <u>62-XX-17</u>	
DATE EXAMINED/TIME/LOCATION <u>9/11/XX 2320 PARKER CTR LAPP</u>				BREATH RESULTS <input type="checkbox"/> Refused Results <u>0.06%</u> Instrument # <u>1234</u>			CHEMICAL TEST <input type="checkbox"/> Both Tests Refused <input checked="" type="checkbox"/> Urine <input type="checkbox"/> Blood		
MIRANDA WARNING GIVEN <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				What have you eaten today? When? <u>CHICKEN CNOU MEIN 3 HRS AGO</u>		What have you been drinking? How much? <u>COUPLE OF GLASSES OF WINE 2</u>		Time of last drink? <u>2 HRS A</u>	
Given by <u>CLARK, J.</u>				Are you sick or injured? <u>NO, AND I'M NOT DRUNK, EITHER</u>		Are you diabetic or epileptic? <u>NO, WHY DON'T YOU LET ME GO</u>		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Time now? <u>I HAVE NO IDEA</u>				When did you last sleep? How long? <u>LAST NIGHT, 5 HRS I THINK</u>		Do you take insulin? <u>I DON'T TAKE ANYTHING</u>		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take any medication or drugs? <u>OF COURSE NOT</u>				ATTITUDE <u>IMPATIENT, ANXIOUS BUT COOPERATIVE</u>		COORDINATION <u>VERY POOR - DISORIENTED, STUMBLING</u>		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
SPEECH <u>SLOW, SLURRED</u>				BREATH <u>ODOR OF ALCOHOLIC BEVERAGE</u>		FACE <u>NORMAL</u>			
CORRECTIVE LENS: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft				Eyes: <u>VERY BLOODSHOT</u>		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> L Eye <input type="checkbox"/> R Eye		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
PUPIL SIZE: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)				HGN Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy	
PULSE & TIME		HGN	Left Eye	Right Eye	Vertical Nystagmus? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		ONE LEG STAND		
1. <u>110 / 2330</u>		Lack of Smooth Pursuit	<u>YES</u>	<u>YES</u>	Convergence		<u>TREMORS IN LEG</u>		
2. <u>112 / 2342</u>		Max. Deviation	<u>NO</u>	<u>YES</u>	Right Eye Left Eye		<u>(25)</u>		
3. <u>110 / 2353</u>		Angle of Onset	<u>NONE</u>	<u>NONE</u>					
BALANCE EYES CLOSED		WALK AND TURN TEST		Cannot keep balance <input checked="" type="checkbox"/>					
<u>3" 3" 3" CIRCULAR SWAY EYELID TREMORS</u>		<u>TREMORS IN LEGS WALKING VERY SLOWLY</u>		Starts too soon <input checked="" type="checkbox"/>					
				Stops Walking <input checked="" type="checkbox"/>					
				Misses Heel-Toe <input checked="" type="checkbox"/>					
				Steps off Line <input checked="" type="checkbox"/>					
				Raises Arms <input checked="" type="checkbox"/>					
				Actual Steps Taken <u>9 9</u>					
INTERNAL CLOCK <u>42</u> Estimated as 30 sec.		Describe Turn <u>STAGGERED TWO STEPS TO THE RIGHT</u>		Cannot do Test (explain) <u>N/A</u>				Type of Footwear <u>RUNNING SHOES</u>	
				PUPIL SIZE	Room Light	Darkness	Indirect	Direct	NASAL AREA <u>CLEAR</u>
				Left Eye	<u>5.5</u>	<u>7.5</u>	<u>6.5</u>	<u>5.0</u>	ORAL CAVITY <u>BROWNISH COATING ON TONGUE</u>
				Right Eye	<u>5.5</u>	<u>7.5</u>	<u>6.5</u>	<u>5.0</u>	
				HIPPUS <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	REBOUND DILATION <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light <u>SLOW</u>		
BLOOD PRESSURE <u>148 / 100</u> TEMP <u>98.4</u>				RIGHT ARM <u>NO VISIBLE MARKS</u>				LEFT ARM <u>NO VISIBLE MARKS</u>	
MUSCLE TONE <input checked="" type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid									
ATTACH PHOTOS OF FRESH PUNCTURE MARKS									
What medicine or drug have you been using? How much? <u>I HAD A FEW GLASSES OF WINE THAT'S ALL</u>				Time of use? <u>(Smiling) CAN'T BS A BS'ER</u>		Where were the drugs used? (Location) <u>OH, COME ON, I'M NOT GOING TO TELL YOU</u>			
DATE/TIME OF ARREST <u>11 SEPT YY 2245 HRS</u>				TIME ONE NOTIFIED <u>2215</u>		EVAL START TIME <u>2320</u>		TIME COMPLETED <u>2258</u>	

1. LOCATION I CONDUCTED A DRUG INFLUENCE EXAMINATION OF CHARLES E. PELTIER IN JAIL DIVISION, PARKER CENTER, LAPD.
2. WITNESS A.O. SGT. GORDON GRAHAM, CHP #703
3. BAC I ADMINISTERED GCI TESTS TO SUBJ PELTIER AND OBTAINED RESULTS OF 0.063% AND 0.062%.
4. NOTIFICATION / INTERVIEW I WAS ON DUTY AT PARKER CENTER TO CONDUCT DRUG INFLUENCE EXAMS. SGT. GRAHAM ARRIVED AT 2315 HRS, AND INFORMED ME THAT HE BELIEVE SUBJ. PELTIER WAS UNDER THE INFLUENCE OF MARIJUANA. SGT. GRAHAM FURTHER STATED THAT HE HAD OBS. A VEHICLE OP'TED BY SUBJ. PELTIER TRAVELING S/B ON SAN DIEGO FWY, EXHIBITING NO HEAD OR TAIL LIGHTS. SGT. GRAHAM STOPPED THE VEHICLE, AND, UPON APPROACHING, WAS INFORMED BY SUBJ. PELTIER "HEY, I CAN SEE FINE. I DON'T NEED ANY FINE LIGHTS, COWBOY!" SGT. GRAHAM ALSO STATED THAT SUBJ. PELTIER COMPLIMENTED HIM ON HIS "CUTE LITTLE BOW TIE -- YOU MUST BE LITTLE BOW PEEP!"
5. INITIAL OBSERVATION OF SUSPECT I FIRST SAW SUBJ. PELTIER WHEN HE WALKED THROUGH THE SALLY PORT ENTRANCE OF PARKER CENTER AT 2315 HRS. HE APPEARED TO BE IMPATIENT, AND SEVERAL TIMES ASKED TO BE "LET GO". HOWEVER, HE WAS GENERALLY POLITE AND COOPERATIVE. HIS SPEECH WAS SLOW AND SLURRED AND HE STUMBLER WHILE WALKING.
6. MEDICAL PROBLEMS / TREATMENT NO APPARENT PROBLEMS.
7. PSYCHOPHYSICAL TESTS SUBJ. PELTIER SWAYED APPROX 3" CIRCULAR ON ROMBERG, SHOW EYELID TREMORS AND EST. 42 SEC FOR 30 SEC. WAS UNABLE TO KEEP BALANCE DURING INSTRUCTIONS OF WALK/TURN, STEPPED OFF LINE, AND STAGGERED WHILE TURNING; ALSO REPEATEDLY MISSED HEEL TO TOE AND RAISED ARMS. SWAYE AND RAISED ARMS REPEATEDLY ON ONE LEG STAND. PUT FOOT DOWN AND SHOWED LEG TREMORS. SHOWED EYELID TREMORS ON FTN AND TWICE MISSED TIP OF NOSE.
8. CLINICAL SIGNS SUBJ. PELTIER HAD DILATED PUPILS (7.5 DARK). ELEVATED PULSE (110, 112, 110); ELEVATED B/P (148/100); NYSTAGMUS CONSISTENT WITH 0.06% BAC; LACK OF CONVERGENCE.
9. SIGNS OF INGESTION SUBJ. PELTIER HAD VERY BLOODSHOT EYES, AND A BROWNISH COATING ON HIS TONGUE.
10. STATEMENTS SUBJ. PELTIER ADMITTED TO DRINKING "A FEW GLASSES OF WINE". WHEN I INFORMED HIM I BELIEVED HE HAD ALSO SMOKED MARIJUANA, HE SMILED AND REPLIED "I GUESS I CAN'T BULLS'T A BULLS'TER, CAN I?" I ASKED HIM WHEN HE HAD SMOKED THE MARIJUANA AND HE SAID "OH, COME ON, I'M NOT GOING TO TELL YOU". HE SMILED THROUGHOUT THIS CONVERSATION.
11. OPINION OF EVALUATOR IN MY OPINION AS A CERTIFIED DRE, CHARLES E. PELTIER IS UNDER THE INFLUENCE OF MARIJUANA AND ALCOHOL.

Page <u> </u> of <u> </u> DRUG INFLUENCE EVALUATION				EVALUATOR <u>GAUNT, STEVE</u>											
ARRESTEE'S NAME (LAST, FIRST, MI) <u>CURRY, JERRY R.</u>				AGE <u>56</u>	SEX <u>M</u>	RACE <u>B</u>	BOOKING NO. <u>026</u>	DR. <u>227-XX-11</u>							
DATE EXAMINED/TIME/LOCATION <u>11/5/XX 2200 MARION CTY S.O.</u>				BREATH RESULTS <u>0.00%</u> Instrument # <u>1234</u>		CHEMICAL TEST <input checked="" type="checkbox"/> Urine <input type="checkbox"/> Blood <input type="checkbox"/> Both Tests Refused									
MIRANDA WARNING GIVEN <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				What have you eaten today? <u>COUPLE OF HURT DOGS</u> When? <u>AROUND 5:00 PM</u>		What have you been drinking? How much? <u>NOTHING AT ALL</u> Time of last drink? <u>N/A</u>									
Time now? <u>ABOUT 10:30P</u> When did you last sleep? How long? <u>LAST NIGHT 6HRS</u>				Are you sick or injured? <u>HELL NO, I FEEL GREAT</u> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <u>NO - ARE YOU?</u> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No									
Do you take insulin? <u>NO AND I DON'T TAKE A LOT OF S/T</u> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				Do you have any physical defects? <u>HELL, I'M ARNOLD FINE SWARTZNEGER</u> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor/dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No									
Are you taking any medication or drugs? <u>DRUGS? HELL NO!</u> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				ATTITUDE <u>BOISTEROUS BUT FAIRLY COOPERATIVE</u>		COORDINATION <u>NEARLY FEEL SEVERAL TIMES</u>									
SPEECH <u>LOUD + BOISTEROUS</u>				BREATH <u>ODOR OF MARIJUANA</u>		FACE <u>FLUSHED AND SWEATY</u>									
CORRECTIVE LENS <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft				Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input checked="" type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> L. Eye <input type="checkbox"/> R. Eye									
PUPIL SIZE <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)				HGN Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No									
PULSE & TIME		HGN		Left Eye		Right Eye		Verbal Nystagmus? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy					
1. <u>106 : 2210</u>		Lack of Smooth Pursuit		<u>NO</u>		<u>NO</u>		Convergence Right Eye Left Eye		ONE LEG STAND					
2. <u>106 : 2227</u>		Max. Deviation		<u>NO</u>		<u>NO</u>				<u>TEST STOPPED</u>					
3. <u>104 : 2240</u>		Angle of Onset		<u>NONE</u>		<u>NONE</u>				<u>NEARLY FEEL</u>					
BALANCE EYES CLOSED <u>6" 6" 6"</u>				WALK AND TURN TEST <u>LESS SHAKING BODY SUBJ NEARLY FEEL.</u>				Cannot keep balance <u> </u>							
<u>TEST TERMINATED AFTER 10 SECS - SUBJ STAGGERED + NEARLY FEEL</u>								Starts too soon: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							
								Stops Walking <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							
								Misses Heel-Toe <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							
								Steps off Line <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							
								Raises Arms <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							
								Actual Steps Taken <u>5</u>							
INTERNAL CLOCK <u>N/A</u> Estimated as 30 sec.				Describe Turn <u>N/A</u>				Cannot do Test (explain) <u>NEARLY FEEL - TEST TERMINATED</u>							
								Type of Footwear <u>LOAFERS</u>							
				PUPIL SIZE		Room Light		Darkness		Indirect		Direct			
				Left Eye		<u>5.5</u>		<u>7.0</u>		<u>6.5</u>		<u>5.0-6.5</u>		NASAL AREA <u>CLEAR</u>	
				Right Eye		<u>5.5</u>		<u>7.0</u>		<u>6.5</u>		<u>5.0-6.5</u>		ORAL CAVITY <u>CLEAR</u>	
				HIPPIUS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		REBOUND DILATION <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Reaction to Light <u>NORMAL</u>							
				RIGHT ARM				LEFT ARM							
BLOOD PRESSURE <u>154 / 106</u> TEMP <u>98.6</u>															
MUSCLE TONE <input checked="" type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid															
Comments:															
What medicine or drug have you been using? <u>DON'T HAISIE ME THIS IS BULLSHIT</u>				How much? <u>NOT MUCH, JUST A LITTLE</u>				Time of use? <u>NO - I AIN'T SAYING NO MORE</u>							
DATE/TIME OF ARREST <u>5 NOV XX 2115 HRS.</u>				TIME ONE NOTIFIED <u>2150 HRS</u>				Where were the drugs used? (Location) <u>N/A</u>							
								EVAL START TIME <u>2200 HRS.</u>							
								TIME COMPLETED <u>2245 HRS</u>							

1. LOCATION DRE EXAM OF SUBJ CURRY, JERRY R. WAS CONDUCTED AT CENTRAL BOOKING HQDQTS, MARION COUNTY SHERIFF'S OFFICE.
2. WITNESS BURSTEN, DAVID #909 ISP (ARRESTING OFFICER)
3. BAC TPR BURSTEN INFORMED ME HE ADMIN. BREATHALYZER TEST TO SUBJ CURRY 2:42 HRS AND OBTAINED RESULT OF 0.00%.
4. NOTIFICATION/INTERVIEW I RE'VD RADIO CALL AT 2:50 HRS INSTRUCT. ME PROCEED MCSO TO MEET TPR BURSTEN TO CONDUCT DRE EXAM. AT ARRIVAL, TPR B. INFORMED ME HE HAD OBS. SUBJ CURRY OPERATING VEHICLE AT HIGH RATE OF SPEED E/B ON PURDUE AVE, WEAVING AROUND SLOWER TRAFFIC. TPR B STATED SUBJ CURRY SEEMED UNCONCERNED ABOUT BEING STOPPED AND READILY ADMITTED DRIVING FAST. "I'M JUST OUT TO ENJOY MYSELF TONIGHT!". HE REPARTEDLY STATED TO TPR B.
5. INITIAL OBSERVATION OF SUSPECT WHEN I FIRST SAW SUBJ CURRY AT CENTRAL BOOKING HE WAS LAUGHING LOUDLY, REPEATEDLY SAYING "THE MACHINE SAYS I'M NOT DRUNK". HE MAINTAINED A JOVIAL, BOISTEROUS ATTITUDE THROUGHOUT THE EXAMINATION.
6. MEDICAL PROBLEMS/TREATMENT NONE
7. PSYCHOPHYSICAL TESTS SUBJ CURRY WAS UNABLE TO STAND WITHOUT STAGGERING AND NEARLY FALLING, SO THAT I WAS REQUIRED TO TERMINATE THE RUMBERG, WALTZ AND ONE LEG STAND TESTS. I HAD HIM SIT FOR FINGER TO NOSE; HE MISSED THE TIP OF NOSE ON ALL TRIALS, AND EXHIBITED EYELID TREMORS.
8. CLINICAL SIGNS SUBJ CURRY HAD NO NYSTAGMUS. HE DID HAVE L.O.C.; HIS PUPILS WERE DILATED (7.0) IN NEAR-TOTAL DARKNESS. HIS PULSE WAS ELEVATED (106, 106, 104). HIS B/P WAS ELEVATED (154/106).
9. SIGNS OF INGESTION SUBJ CURRY'S EYES WERE BLOODSHOT, THERE WAS AN ODOOR OF MARIJUANA ON HIS BREATH.
10. STATEMENTS SUBJ CURRY INITIALLY DENIED USING ANY DRUGS. WHEN I TOLD HIM I BELIEVED HE HAD SMOKED MARIJUANA, HE GIGGLED AND SAID "COME ON, DON'T HASSLE ME: THIS IS BULLS--T". WHEN I ASKED "HOW MUCH POT DID YOU SMOKE TONIGHT" HE REPLIED "NOT MUCH - JUST A LITTLE". I THEN ASKED "WHEN DID YOU SMOKE IT". HE PAUSED, THEN SAID "NO, I AIN'T SAYING NO MORE". AT THAT POINT I CEASED INTERVIEWING SUBJ CURRY.
11. OPINION OF EVALUATOR I AM A CERTIFIED DRUG RECOGNITION TECHNICIAN. IN MY OPINION, JERRY R. CURRY IS UNDER THE INFLUENCE OF CANNABIS AND CANNOT OPERATE A MOTOR VEHICLE SAFELY.
12. TOXICOLOGICAL SPECIMEN AT MY REQUEST SUBJ CURRY PROVIDED A URINE SPECIMEN. TPR BURSTEN TOOK CUSTODY OF THE SPECIMEN FOR THE PURPOSE OF TRANSPORT IT TO THE HEALTH DEPT, LABORATORY.
13. MISCELLANEOUS

SESSION XXII

OVERVIEW OF SIGNS AND SYMPTOMS

SESSION XXII OVERVIEW OF SIGNS AND SYMPTOMS

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

- o Name the possible effects that may be observed in each major indicator of drug impairment.

- o Identify the effects that will most likely be observed with suspects under the influence of each drug category.

SUMMARIZING WHAT WE'VE LEARNED ABOUT THE EFFECTS OF EACH CATEGORY:

AN EXERCISE FOR THE STUDENT.

We have now completed a detailed review of all seven drug categories. In this session, we will summarize what we've learned about the major indicators of drug impairment that DREs rely upon to form their opinions. We will also summarize how each drug category usually "discloses itself" on those major indicators.

The major indicators of impairment consist of eight items:

- o Horizontal Gaze Nystagmus
- o Vertical Nystagmus
- o Lack of Convergence
- o Pupil Size
- o Pupil Reaction to Light
- o Pulse Rate
- o Blood Pressure
- o Body Temperature

As a DRE, you will evaluate each of these indicators for every suspect you examine. What are the possible things that you may observe for each indicator? For example, what are the possible things that you may observe when you check a suspect for Horizontal Gaze Nystagmus? What are the possible things that you may observe when you check the suspect's blood pressure?

With Horizontal Gaze Nystagmus, there are only two possibilities: either it will be **Present** (i.e., the eyes will jerk) or **Not Present** there will be none (i.e., the eyes will move smoothly). Some drugs induce nystagmus, others simply do not; there is no drug that "cures" nystagmus. With Blood Pressure, there are three different things we might observe: it may be up, or it may be down, or it may be normal. Some drugs usually elevate the blood pressure, other usually lower it; if a person has taken two different kinds of drugs, one that raises BP and one that lowers it, it is possible that the two drugs will partly off-set each other, and the BP might wind up normal.

What about the other six major indicators? What are the possible things we may find with each of them? Before you turn to the next page, try to complete the list we've started below:

Horizontal Gaze Nystagmus?	PRESENT or NONE
Vertical Nystagmus?	
Lack of Convergence?	
Pupil Size?	
Reaction to Light?	
Pulse Rate?	
Blood Pressure?	UP, DOWN
Body Temperature?	

How did you do? Your completed list, on the previous page, should look something like this:

<u>Indicator</u>	<u>Possible Effects</u>
Horizontal Gaze Nystagmus?	PRESENT or NONE
Vertical Nystagmus?	PRESENT or NONE
Lack of Convergence?	PRESENT or NONE
Pupil Size?	DILATED or NORMAL or CONSTRICTED
Reaction to Light?	NORMAL, SLOW, or LITTLE OR NONE VISIBLE
Pulse Rate?	UP or DOWN
Blood Pressure?	UP or DOWN
Body Temperature?	UP, DOWN, or NORMAL

Next, your instructors will expect you to be able to state how each category of drugs usually affects each of the eight major indicators. This is information that was first covered in your PRE-School, and covered in even greater detail earlier in this School. In the table below, we've listed what we can usually expect to see in suspects who are under the influence of CNS Depressants. Try to fill in the rest of the table before Session XXII is given in class.

WHAT WILL WE USUALLY SEE IN OUR SUSPECTS?

	Depress	Stimul	Halluc	Phencyc	Narcot	Inhalant	Cannabis
HGN	present						
Vert Nystag	present *(high dose)						
Lack Conv	present						
Pupil	normal (1)						
React Light	slow						
Pulse Rate	down (2)						
Blood Press	down						
Body Temp	normal						

* high dose for that individual

(1)Soma and quaaludes usually dilate pupils

(2)Quaaludes and ETOH may elevate

The attachment, Comparison of DRE Symptomatology With Cross Section of Drug Symptomatology Sources, is a small portion of the available scientific literature addressing drug influence. The Synopsis is consistent with the DRE training.

COMPARISON OF DRE SYMPTOMATOLOGY WITH CROSS SECTION OF DRUG SYMPTOMATOLOGY SOURCES

CNS DEPRESSANTS:

DRE Symptomatology:	
nystagmus	decreased pulse
decreased blood pressure	uncoordinated
disoriented	sluggish
thick slurred speech	drunk-like appearance

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A.; Goodman, I.; MacMillan Publishing Co. 1985, Barbiturates, pages 546-547:

nystagmus	strabismus
difficulty in visual accommodation	
vertigo	ataxia gait
positive Romberg sign	hypotonia
dysmetria	diplopia
sluggishness	difficulty in thinking
slowness, slurring of speech	poor comprehension
poor memory	faulty judgement
emotional lability	

A Primer of Drug Action, Julien, Robert M. W.H. Freeman and Company, New York, 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
unsteady gait

incoordination
impairment in attention
or memory

CNS STIMULANTS:

DRE Symptomatology:
dilated pupils
increased temperature
body tremors
excited
talkative
anxiety
redness to nasal area
loss of appetite
increased alertness

increased pulse rate
increased blood pressure
restlessness
euphoric
exaggerated reflexes
grinding teeth
runny nose
insomnia

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
restlessness
irritability
tremor
diaphoresis
nausea
pallor

hyperreflexia
talkativeness
insomnia
flushing
combativeness
vomiting
dry mucous membranes

Moderate:
hyperactivity
hypertension

confusion
tachypnea

tachycardia
chest discomfort
abdominal pain
mild temperature elevation
repetitive behavior
panic reactions

premature ventricular
contraction
vomiting
profuse diaphoresis
impulsivity
hallucinations

Serious:
delirium
hyperreflexia
hypotension

marked hypertension/
tachycardia
convulsions
coma

Cocaine, page 650-659

Early Stimulation:
euphoria
excitement
irritable behavior
sudden headache
vomiting
twitching of small muscles
tremor
cocaine psychosis
elevation of pulse

garrulity
apprehension
mydriasis
nausea
dizziness
tics
jerks
hallucinations
increased respiration

Advanced:
convulsions
decreased consciousness

hyperreflexia
increased pulse and blood
pressure

Later Stages:
hypotension
dyspnea et al

hypothermia

A Primer of Drug Action, Julien, Robert M. W.H. Freeman and Company, New York, 1992, pages 120-123: Amphetamines and cocaine (CNSS):

dilation of pupils
slight tremor
agitation

increased blood pressure
restlessness
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
elevation of blood pressure
increased body temperature

rapid heart rate
tremor in hands
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
illogical, loose thoughts	motions

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);
euphoria

may cause psychosis
agitation

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 142.

COCAINE:

Maladaptive behavioral changes, e.g., euphoria, fighting, grandiosity, hyper-vigilance, psychomotor agitation, impaired judgment, impaired social or occupational functioning.

pupillary dilation
elevated blood pressure
nausea or vomiting

tachycardia
perspiration or chills
visual or tactile
hallucinations

AMPHETAMINE:

Maladaptive behavioral changes, e.g., fighting, grandiosity, hyper-vigilance, psychomotor agitation, impaired judgment, impaired social or occupational functioning.

pupillary dilation
elevated blood pressure
nausea or vomiting

tachycardia
perspiration or chills

HALLUCINOGENS:

DRE Symptomatology:

dilated pupils
increased blood pressure
dazed appearance
synesthesia
paranoia
nausea
difficulty in speech
poor perception of time/distance

increased pulse rate
increased temperature
body tremors
hallucinations
uncoordinated
disoriented
perspiring

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A.; Goodman, I.; MacMillan Publishing Co. 1985, LSD and Related Drugs, page 564

pupillary dilation
tachycardia
tremor
piloerection
increased body temperature
hypervigilance
loss of boundaries

increased blood pressure
hyperreflexia
nausea
muscular weakness
hallucinations
synesthesia

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
sweating
blurring of vision
incoordination

tachycardia
palpitations
tremors

PHENCYCLIDINE

DRE Symptomatology:

nystagmus
increased blood pressure
perspiring
blank stare
"moon walking"
incomplete responses
repetitive speech
cyclic behavior
hallucinations

increased pulse
increased temperature
warm to the touch
early onset of nystagmus
difficulty in speech
repetitive response
increased pain threshold
confused, agitated
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 blood pressure
staggering gait
numbness of extremities
muscular rigidity
drowsiness
repetitive movements

elevated heart rate
feeling of intoxication
slurred speech
sweaty
blank stare
hostile behavior

Medical Toxicology-Diagnosis and Treatment of Human Poisoning, Ellenhorn, Matthew J., Barceloux, Donald G. Elsevier Science Pub. Co. 1988, PCP 768-777:

nystagmus
depressed light reflexes
diminished pain

miosis
blurred vision
ataxia

tremors	muscle weakness
slurred speech	drowsiness
increased pulse rate	increased blood pressure
amnesia	anxiety/agitation
body image distortion	euphoria
depersonalization	disordered thought
hallucinations	processes

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, MD; 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
automated speech
Nystagmus at rest

disassociation from
environment

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	mood swings
and rotary nystagmus	elevated blood pressure

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 blood pressure
droopy eyelids
drowsiness
low, raspy speech
facial itching
fresh puncture marks

decreased pulse rate
decreased temperature
(ptosis) "on the nod"
depressed reflexes
dry mouth
euphoria

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A.; Goodman, I.; MacMillan Publishing Co. 1985, Opioids page 541-545

Medical Toxicology-Diagnosis and Treatment of Human Poisoning, Ellenhorn, Matthew J., Barceloux, Donald G. Elsevier Science Pub. Co. 1988; Heroin, pages 702-703. See also methadone, demerol, etc.:

A Primer of Drug Action, Julien, Robert M. W.H. Freeman and Company, New York, 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
slurred speech

drowsiness
impairment in attention
or memory

INHALANTS: (Toluene)

DRE Symptomatology:

nystagmus
increased blood pressure
odor on mouth
slurred speech

increased pulse rate
residue around nose
nausea disorientation
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
drowsiness
sneezing runny nose

floating sensation
light sensitivity

Encyclopedia of Drug Abuse, O'Brien, Robert; Cohen, Sydney. M.D. Facts on File, INC New York (1984)

lowered inhibitions
incoordination confusion
nausea

restlessness
disorientation
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

mental dulling
ataxia
irritability
tremors

CNS depression that mimics
narcotic analgesics
blank stare

ataxia
euphoric mood

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in
Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer,
Joseph, M.D.. Ph.D..D Plenum Medical Book Company, New York (1988)

brief euphoria
giddy intoxication, similar to alcohol
CNS depression (volatile solvents/toluene)
dizziness
vertigo

Diagnostic and Statistical Manual of Mental Disorders (Third Ed,
Revised), American Psychiatric Association (1987), p. 149.

Maladaptive behavioral changes, e.g., belligerence,
assaultiveness, apathy, impaired judgment, impaired social or
occupational functioning.

nystagmus
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
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
temporal disintegration
information processing impairment
dry mouth
additive to alcohol

short term memory
impairment
balance and stance
impairment
increased hunger

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,
impairment of motor tasks and	steadiness and muscle
reaction times requires higher	strength
dosages	elective attention
loss of short term memory	stimulated appetite
systematic thinking impaired	dry mouth

A Primer of Drug Action, Julien, Robert M. W.H. Freeman and Company, New York, 1985 : page 178, Marijuana

reddening of conjunctiva	dry mouth
altered sensory perception	increased 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, page 145: Cannabis:

red conjunctiva	euphoria
relaxation	dry mouth
increased heart rate	possibly nystagmus
time distortion	short term memory
impairment in ability to do	tremors
multi-step tasks	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
dryness of mouth and throat	distortions
increased pulse rate	increased heart 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
bloodshot eyes
agitation
hallucinations

faster heartbeat
confusion
incoordination

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
pleasant relaxation
slowed time
apathy
problems with motor coordination

increased appetite
intensification of
sensations
passivity
tachycardia (increased
heart rate)

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
changes in time sense
memory
coordination
balance and stance
elevated systolic pressure affected

increased hunger
short-term memory loss
dry mouth
tachycardia (rapid heart
beat)

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
tachycardia (rapid heart)

increased appetite
dry mouth

SESSION XXIII

RESUME PREPARATION AND MAINTENANCE

SESSION XXIII RESUME PREPARATION AND MAINTENANCE

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

- o Describe and discuss the purpose of the resume.
- o Identify the elements of a drug recognition expert's resume.
- o Prepare a basic resume summarizing his or her relevant training, education, experience and accomplishments to date.
- o Update and extend the resume, as his or her relevant achievements continue to expand.

A. Purpose of the Resume

The principal purpose of the resume is to help establish your qualifications for testifying in court as a drug recognition expert. The resume records the education and training you have received, and the experience you have accumulated, that qualify you to render an opinion concerning drug impairment.

As a general rule, witnesses can testify only to personal knowledge, and cannot offer opinions as testimony. An important exception to this rule is granted to expert witnesses.

Basically, an expert witness is someone who the court decides is a expert. But "experts" usually are persons skilled in some art, trade, science or profession, who have a knowledge of matters not within the knowledge of people of average education, learning and experience. The prosecution or defense will call a witness who, they assert, is a "expert" in some matter. The court will carefully assess the credentials of that witness, i.e., the education, training and experience he or she has had in the matter in question. And the court -- and the court alone -- will decide whether the witness is a expert. If the court rules that the witness is a expert, then the witness may assist the finder of fact (jury or judge) 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.

After you have completed all of the necessary training, the prosecution will begin to call you as an expert witness in drug evaluation and classification cases. The court will wish to consider relevant evidence of your alleged expertise. The resume can help to ensure that the court rules in your favor.

B. Preparation for Court Qualification

Being qualified as an expert may be as simple as stating your occupation. Or, it could require several hours of exhausting questioning by the prosecutor and the defense attorney. The prosecutor will seek to show that, insofar as drug evaluation is concerned, your knowledge is greater than that of the average person. The stronger your credentials, the better the chance that the court will consider you an "expert". And, the stronger your credentials, the more impressed the jury will be with your expertise, and the more weight they will give to your testimony.

The credentials that you have to offer to establish your expertise consist mainly of:

- o The formal education and training you have received.
- o The directly relevant experience you have acquired.
- o The "outside" readings and study you have done.

You need to have accurate, up-to-date and documented evidence of these credentials, to support the assertion that you are a expert.

C. Resume Content

1. Relevant Formal Education.

- a. High School Education
List the high school(s) you attended and the dates of your attendance. Highlight classes that provided knowledge in the area of drugs.
- b. College Education
List the schools and dates. Highlight courses relevant to drugs, and relevant to the drug evaluation and classification examination procedures. List major field(s) of study, degree(s) earned, etc.
- c. Specialized College/University - level courses.
List dates, instructor, subject(s) covered, credits earned, etc. Highlight the relevance of these courses to drugs.

2. Formal Training.

- a. Police Academy (recruit-level training).
List dates of attendance, major topics covered. Highlight drug-relevant training.
- b. Specialized Police Training/In-Service Training.
List dates, topics, instructors. Highlight drug-relevant training.
- c. Other specialized training (e.g., military; special seminars; lectures).
List dates, topics, instructors. Highlight drug-relevant training.

3. Relevant Experience.

- a. Job Experience. (law enforcement)
List specific assignments, including dates, rank held, etc. Include special assignments. Highlight duties associated with drug enforcement.
- b. Other Job-Related Experience.
List employers, dates, specific duties, etc. Highlight work relevant to drugs.
- c. Drug Enforcement/Evaluation Experience.
Maintain up-to-date totals of vehicle stops; DWI investigations; DWI arrests; drug evaluations; filings on alcohol-and drug-related charges; convictions on each charge.

d. Prior experience in testifying in drug-related cases. Maintain up-to-date totals of the numbers of appearances in various level courts (e.g., municipal, superior, etc.); the number of times qualified as an expert witness in drug cases; the number of times qualified as an expert witness in other cases.

4. Outside Readings and Study.

a. Maintain listings of the drug-related texts read; departmental training bulletins read; journals read; research papers read; films and video tapes viewed; etc.

Document drug-related training and research that you conducted or in which you participated. List all relevant publications, training bulletins, etc. that you authored or co-authored.

D. Sample Resumes

The remainder of this section of the Manual presents two sample DRE's resumes. They are based on the training and experience of actual drug recognition experts, although specific identifiers have been changed to preserve their anonymity.

SAMPLE RESUME NUMBER ONE

SHELTON POLICE DEPARTMENT

Traffic Division

The Resume of:

SERGEANT DAVID CARROLL REGAN
Certified Drug Recognition Expert

Latest update: 3/17/XX

Sgt. David C. Regan

Introduction

Sergeant David Carroll Regan is a supervisor in the Traffic Division, Shelton Police Department. He currently commands the special Impaired Driving Enforcement Activities Squad (IDEAS), a unit he was instrumental in forming. Sgt. Regan is a 15 year veteran of law enforcement. Prior to joining the Shelton Police Department ten years ago, he served for five years as a deputy with the Fairfield County Sheriff's Department.

Sergeant Regan has been assigned to the Traffic Division since his promotion to sergeant on 11/18/YY. His duties have included coordination of speed and DWI enforcement activities, the Joint Shelton-Derby Task Force for Sobriety Checkpoints, the Officer Friendly Program, the Motorcycle Safety Education Project, and general supervision of Traffic Division officers. He also serves as the Department's principal instructor for radar speed measurement, standardized field sobriety testing and drug recognition expert training.

Sergeant Regan hold the 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 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 Note-taking 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 Evaluation and Classification
Program Coordinator

7/8/YY to 11/17/YY

Patrol Officer First Class
Training and Operations
Shelton Police Department
Unit Supervisor, Traffic Law
Enforcement Training Branch

9/11/YY to 7/7/YY

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 Stamford, 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

<u>Title</u>	<u>Author</u>
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 Expert

Latest Update: 4/25/YY

Officer Ann M. Reed

Introduction

Officer Ann Marie Reed is an eight year veteran with the Trumbull Police Department. She is currently assigned to the Special Operations Branch of the Administrative Division, where she serves as a Narcotics Enforcement Officer. Previously, she has served in the same Branch as a Vice Enforcement Officer, and as a patrol officer in the Department's first and second precincts.

Officer Reed is a graduate of Monroe College, with the Bachelor's Degree in Police Science and Administration. She is currently a candidate for the JD Degree at the Law School of the University of Bridgeport.

Law Enforcement Experience

5/12/VV to Present	Narcotics Enforcement Officer and Drug Recognition Expert Special Operations Branch Trumbull Police Department
3/26/WW to 5/11/VV	Vice Enforcement Officer Special Operations Branch Trumbull Police Department
9/23/XX to 3/25/WW	Patrol Officer First Precinct Trumbull Police Department
8/28/NN to 9/22/XX	Patrol Officer Second Precinct Trumbull Police Department
5/15/NN to 8/25/NN	Trainee Fairfield County Regional Police Academy (Graduated 8/25/NN)

Special Police Training

2/YY	University of Norwalk, Police Science Institute 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
Technician Services; Training Bulletin for the Trumbull Police
Department. 6/VV.

Reed, Ann M., Recognizing the Heroin Addict; Training Bulletin
for the Trumbull Police Department. 1/VV.

Court Qualification Record

11/WW Qualified as an expert witness for identification
of Heroin impairment. (Judge Michael Adkins, 7th
District)

3/WW Qualified as a drug recognition expert in a case
involving a combination of CNS Stimulant and
Narcotic Analgesic. (Judge Roberta Mayer, 7th
District)

9/ZZ Qualified as an expert witness for identification
of "track" marks. (Judge Charles Peltier, 7th
District)

Specialized Readings

<u>Title</u>	<u>Author</u>
Signs and Symptoms Handbook	Barbara McVan, M.D.
Drugs From A to Z	Richard R. Lingeman
Guide to Psychoactive Drugs	Richard Seymour and David E. Smith, M.D.
Addictions: Issues and Answers	Robert M. Julien, M.D.
Report on Synthetic China White: Fentanyl	Det. James Miller, LAPD

SESSION XXIV
DRUG COMBINATIONS

HS 172 R4/93

SESSION XXIV DRUG COMBINATIONS

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

- o Explain the prevalence of polydrug use among drug-impaired suspects and identify common combinations of drugs abused by those suspects.
- o 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.
- o Identify the specific effects that are most likely to be observed in persons under the influence of particular drug combinations.

A. Examples of Polydrug Use

The collective experience of DREs across the country suggests that polydrug use -- the simultaneous consumption of two or more different types of drug categories -- is very common among drug abusers. In the Los Angeles Field Validation Study (1985), nearly three-quarters (72%) of the suspects who were evaluated were found to have two or more drugs in their blood samples. During Certification Training in New York City in early 1989, two-thirds (67%) of the suspects were polydrug users. The most familiar drug of all, alcohol, apparently is an especially popular "mixer" with other drugs. Alcohol routinely shows up in combination with virtually everything else, and often DREs encounter suspects who have consumed alcohol along with two or more other drugs. Cannabis is another popular "mixer", and frequently shows up in combination with Cocaine, PCP and various other things. The "speedball", a combination of Cocaine and Heroin, remains popular, despite the well-publicized hazards of that particular mixture; it was the combination responsible for the death of the actor John Belushi.

The practice of polydrug use is so common, and the "tastes" of drug abusers are apparently so indiscriminate, that DREs should not be surprised to encounter virtually any possible combination of drugs. Indeed, at many times and places, DREs should expect to find more polydrug users than single-drug users. This means that, if the DRE is to do a good job at interpreting the results of evaluations, he or she must understand the mechanisms of drug interaction.

B. The Mechanisms of Drug Interaction: Four Basic Concepts

When a person takes two different kinds of drugs into his or her body, each drug goes to work independently, in accordance with its own nature, and in keeping with its own parameters of onset and duration. What the body will exhibit, however, is a combination of those individual effects.

Four types of combined effects can, and generally will, occur when two drug categories are used together.

1. The Null Effect

The simplest way to explain the Null Effect is to say that it is the same thing as "zero plus zero equals zero". A specific example may help clarify this.

One of the first things a DRE does when examining a suspect is to check for horizontal gaze nystagmus. We know that many drugs simply **do not affect nystagmus**. For instance, if we examined a suspect that we knew was under the influence of Cocaine and nothing else, we would not expect to observe nystagmus. Likewise, if we examined someone who had used marijuana and nothing else, no nystagmus would be present. What do you expect we would see when we check for nystagmus in the eyes of someone who has used Cocaine and Cannabis in combination? Since neither drug independently has any

effect on nystagmus, the combination also would not affect nystagmus: nothing plus nothing equals nothing. Another example of the Null Effect would be found when we check the pupil size of a suspect who has used PCP and Xanax. PCP does not affect pupil size; neither does Xanax, a CNS Depressant. Both of those drugs, acting independently, will leave pupils normal. Their combination also will not affect the size of the pupils.

The Null Effect, then, means simply this: If neither drug affects some particular indicator of impairment, their combination also will not affect that indicator.

2. The Overlapping Effect

The Overlapping Effect comes into play when one drug does affect some indicator of impairment and the other drug has no effect whatsoever on that indicator. This is a case of "something plus nothing equals something".

Consider once again the example of a combination of Cocaine and Cannabis. We've already seen that this combination produces a Null Effect as far as nystagmus is concerned. But what about when we examine the suspect's eyes for a Lack of Convergence? Cannabis does produce a Lack of Convergence. Cocaine doesn't have any effect on Convergence; it doesn't produce a lack of convergence, but it also doesn't "cure" lack of convergence. Therefore, the suspect who is under the combined influence of Cannabis and Cocaine will exhibit a Lack of Convergence, due to the independent effect of the Cannabis. This is an instance where the effects of the two drugs "overlap".

Another example of an Overlapping Effect would be the pupil size of a person who has taken PCP in combination with Heroin. PCP doesn't have any effect on pupil size, but Heroin causes miosis, or constricted pupils. Therefore, the combination would also cause the pupils to constrict.

The Overlapping Effect boils down to: **Action plus no action equals action.**

3. The Additive Effect

The Additive Effect occurs when two drug categories both, independently, affect some indicator of impairment in the same way. In combination, these effects reinforce each other.

Once again, think of the combination of Cocaine and Cannabis. What will we find when we check this suspect's pulse rate? Cannabis produces Tachycardia, or an elevated pulse rate. So does Cocaine. When the two drugs are taken together, we can expect to observe Tachycardia because the drugs reinforce each other for that particular indicator of impairment. That is, the effect is additive.

The simplest way to express the Additive Effect is to say "something plus the same something produces that same something". One thing we can't say for certain is how much the two drugs will reinforce each other. Sometimes the reinforced effect is as simple as "one plus one equals two". But at other times, the combined effect is much greater than the individual contributions of the two drugs, e.g., on the order of "one plus one equals five". This is sometimes, by some people referred to as a "super-additive" or synergistic effect. As DREs, we do not use those terms, simply because it isn't our job to try to predict how much of an effect will be observed. We will use the term Additive Effect to cover all situations where two drugs impact on some parameter in the same way.

You have already noticed that we have used one particular drug combination, Cannabis and Cocaine, to furnish examples of all three kinds of effects covered so far. This drives home the important point that drug interactions are often complex, and involve a number of different mechanisms operating at the same time. One more of these mechanisms needs to be explained.

4. The Antagonistic Effect

The Antagonistic Effect occurs when two drug categories affect some parameter in exactly the opposite ways. This is a case of "action plus opposing action". For example, suppose we check the blood pressure of someone who is under the combined influence of Heroin and Cocaine; what are we likely to find?

The fact is, we're likely to find just about anything at all. The Heroin, independently, tends to produce Hypotension, or lowered blood pressure; the Cocaine, independently, usually produces Hypertension, or elevated blood pressure. The two drugs may offset each other, as far as blood pressure is concerned, and the suspect's blood pressure may wind up normal. On the other hand, if the Cocaine's effects are starting to wear off and the Heroin is still active in the suspect's body, we might find the blood pressure down. Conversely, if the Cocaine is active but the Heroin's effects have not yet reached their peak, we might find the blood pressure up. When we deal with an Antagonistic Effect, we simply can't predict what the outcome will be.

C. The Symptomatology of Drugs

On the next page, you will find the Cumulative Drug Symptomatology Matrix. This lists all of the expected effects of each drug category on the major indicators of impairment, and summarizes the general indicators, time parameters and methods of ingestion for each category. This matrix will be useful in identifying how specific combinations of drugs will interact to produce a variety of Null, Overlapping, Additive and Antagonistic Effects.

INDICATORS CONSISTENT WITH DRUG CATEGORIES

	DEPRESSANTS	STIMULANTS	HALLUCINOGENS	PCP	NARCOTIC ANALGESICS	INHALANTS	CANNABIS
HGN	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 possibly 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 Drooping 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 Methamphetamine: 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)	Inhalation (snorting) Smoked Injected Oral	Oral Inhalation Smoked Injected Transdermal	Smoked Oral Inhalation Injected Eye drops	Injected Oral Smoked Inhalation	Inhaled (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 Convulsions	Coma	Fatigue paranoia

D. Specific Examples of Drug Combinations: An Exercise for the Student

On the final five pages of this section of the Manual, you will find examples of specific drug combinations. The expected results for the first two of these combinations (Cannabis and Stimulants, and PCP and Heroin) have been worked out for you. Study those examples, then complete the work sheets for the thr remaining combinations.

CANNABIS AND STIMULANT IN COMBINATION

IMPAIRMENT INDICATOR	EFFECT DUE TO CANNIBIS	EFFECT DUE TO STIMULANT	TYPE OF COMBINED EFFECT	WHAT WILL WE SEE
HORIZONTAL GAZE NYSTAGMUS	NONE	NONE	NULL	NONE
VERTICAL GAZE NYSTAGMAS	NONE	NONE	NULL	NONE
LACK OF CONV.	PRESENT	NONE	OVERLAPPING	PRESENT
PUPIL SIZE	DILATED (1)	DILATED	OVERLAPPING OR ADDITIVE	DILATED (1)
REACT LIGHT	NORMAL	SLOW	OVERLAPPING	SLOW
PULSE RATE	UP	UP	ADDITIVE	UP
BLOOD PRESSURE	UP	UP	ADDITIVE	UP
BODY TEMP	NORMAL	UP	OVERLAPPING	UP

FOOTNOTE:

1. Pupil size may be normal.

PHENCYCLIDINE AND HEROIN IN COMBINATION

IMPAIRMENT INDICATOR	EFFECT DUE TO PHENCYCLINDINE	EFFECT DUE TO HEROIN	TYPE OF COMBINED EFFECT	WHAT WILL WE SEE
HORIZONTAL GAZE NYSTAGMUS	PRESENT	NONE	OVERLAPPING	PRESENT
VERTICAL GAZE NYSTAGMAS	PRESENT	NONE	OVERLAPPING	PRESENT
LACK OF CONV.	PRESENT	NONE	OVERLAPPING	PRESENT
PUPIL SIZE	NORMAL	CONSTRICTED	OVERLAPPING	CONSTRICTED
REACT LIGHT	NORMAL	LITTLE OR NONE VISIBLE	OVERLAPPING	SLOW/NORMAL
PULSE RATE	UP	DOWN	ANTAGONISTIC	DOWN/NORMAL/UP
BLOOD PRESSURE	UP	DOWN	ANTAGONISTIC	DOWN/NORMAL/UP
BODY TEMP	UP	DOWN	ANTAGONISTIC	DOWN/NORMAL/UP

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 NYSTAGMAS				
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 NYSTAGMAS				
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

SESSION XXV

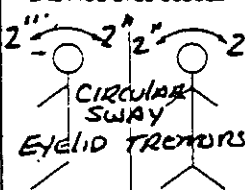
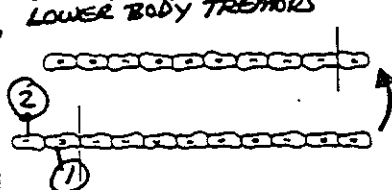
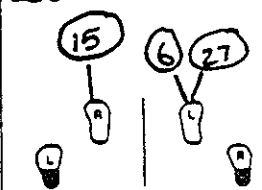
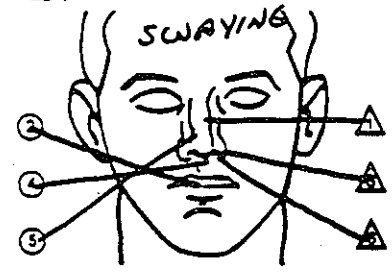
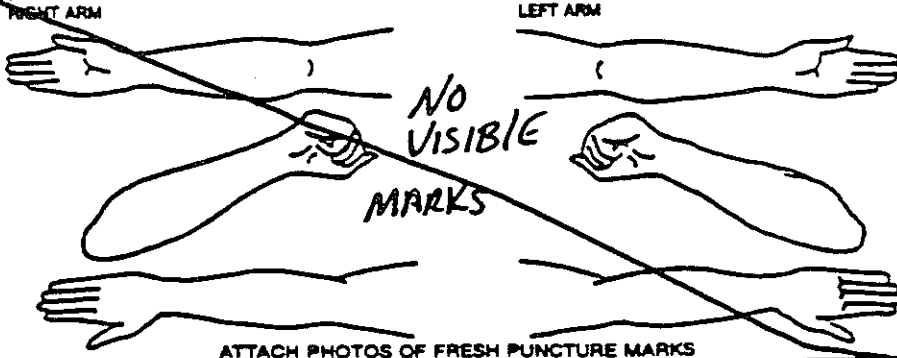
PRACTICE: TEST INTERPRETATION

SESSION XXV PRACTICE: TEST INTERPRETATION

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

- o Analyze the results of a complete drug evaluation and classification examinations and identify the category or categories of drugs affecting the individual examined.
- o Articulate the bases for the drug category identification.

This session is similar to Sessions XV and XVIII. You will once again review some drug evaluation and classification report "exemplars", consider all of the "evidence" they provide, and decide what categories of drugs -- if any -- are present. Now that we have covered all seven categories, you can expect to find any or all of the categories in these exemplars. And, some exemplars might involve combinations of drug categories.

Page <u> </u> of <u> </u>				EVALUATOR LAIRD, DOUG			
DRUG INFLUENCE EVALUATION				BOOKING NO 027		DR 38-xx-22	
ARRESTEE'S NAME (LAST FIRST MI) KNIGHT, RAYMOND K.			AGE 34	SEX M	RACE W	ARRESTING OFFICER (NAME SERIAL # DIV) MOEN, R. 6225 VTD	
DATE EXAMINED/TIME/LOCATION 3/21/XX 2330 TRAFFIC DIV VALLEY			BREATH RESULTS <input type="checkbox"/> Refused Results 0.00% Instrument # 1234		CHEMICAL TEST <input type="checkbox"/> Both Tests Refused <input checked="" type="checkbox"/> Urine <input type="checkbox"/> Blood		
MIRANDA WARNING GIVEN Given by LAIRD, D		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When? SOME COOKIES A FEW HOURS AGO		What have you been drinking? How much? TEA		Time of last drink? N/A
Time now? NO IDEA		When did you last sleep? How long? I DON'T REMEMBER. YESTERDAY? LAST NIGHT?		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor/dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		ATTITUDE COOPERATIVE, BUT SLOW TO RESPOND. DISINTERESTED			COORDINATION DISORIENTED. UNSTEADY		
SPEECH slow		BREATH STALE ODOR		FACE NORMAL			
CORRECTIVE LENS <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		<input checked="" type="checkbox"/> None		Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> L. Eye <input type="checkbox"/> R. Eye	
PUPIL SIZE <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		HGN Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
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	
BALANCE EYES CLOSED 		WALK AND TURN TEST LOWER BODY TREMORS 		Vertical Nystagmus? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		ONE LEG STAND LEG TREMORS 	
INTERNAL CLOCK 43 Estimated as 30 sec.		Describe Turn PROPER BUT VERY SLOW		Cannot do Test (explain) N/A		Type of Footwear SANDALS	
<input type="radio"/> Right <input type="radio"/> 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
		REFLUS		REBOUND DILATION		Reaction to Light	
		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		NORMAL	
BLOOD PRESSURE 140 / 100 TEMP 98.6°		RIGHT ARM / LEFT ARM 					
MUSCLE TONE <input checked="" type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		ATTACH PHOTOS OF FRESH PUNCTURE MARKS					
What medicine or drug have you been using? How much? NOTHING N/A		Time of use? N/A		Where were the drugs used? (Location) N/A			
DATE/TIME OF ARREST 21 MARCH XX 2250 HRS.		TIME DRE NOTIFIED 2315 HRS		EVAL START TIME 2330 HRS		TIME COMPLETED 0010 (3/22/XX)	

1. LOCATION EXAMINATION of KNIGHT, RAYMOND K WAS CONDUCTED IN DRE ROOM, VALLEY TRAFFIC DIV.
2. WITNESS MOEN, RON LAPD/UTD #6225 (ARR. OFFICER)
3. BAC OFFICER MOEN STATED HE HAD ADMIN. GCI TESTS TO SUBJ KNIGHT AT 2312 HR AND 2315 HRS AND OBTAINED RESULTS OF 0.00% AND 0.00%.
4. NOTIFICATION / INTERVIEW AT 2315 HRS I WAS CONDUCTING ROLC CALL FOR 3RD SHIFT SQUAD IN BRIEFING ROOM OF VTD. DESK SGT INFORMED ME THAT OFF. MOEN REQUIRED MY ASSISTANCE IN DRE ROOM. WHEN I ARRIVED OFF. MOEN STATED HE HAD STOPPED SUBJ KNIGHT FOR DRIVING W/O HEADLIGHTS. OFF. MOEN ALSO STATED THAT SUBJ KNIGHT'S VEHICLE HAD BEEN MOVING VERY SLOWLY (APPROX 20MPH) AND IMPEDING TRAFFIC.
5. INITIAL OBSERVATION of SUSPECT I FIRST SAW SUBJ KNIGHT AT 2330 HRS. HE WAS SEATED ON THE BENCH IN THE DRE ROOM. HE APPEARED PASSIVE, QUIET AND SEEMED UNINTERESTED IN WHAT WAS GOING ON AROUND HIM. HOWEVER, HE WAS COOPERATIVE AND RESPONSIVE WHEN I SPOKE WITH HIM.
6. MEDICAL PROBLEMS / TREATMENT N/A
7. PSYCHOPHYSICAL TESTS SUBJ KNIGHT ESTIMATED 43 SECS AS 30 SECS ON R' BORG TEST, AND SWAYED APPROX 2". HE ALSO HAD EYE/IO TREMORS. ON WAT, SUBJ KNIGHT TWICE LOSE BALANCE DURING INSTR. AND REPEATEDLY RAISED ARMS WHILE WALKING. ON OLS, HE REPEATEDLY SWAYED, RAISED THE ARMS, AND PUT THE FOOT DOWN. ON FTN, HE SWAYED, EXHIBITED EYE/IO TREMORS AND CONSISTENTLY MISSED THE TIP OF NOSE.
8. CLINICAL SIGNS SUBJ KNIGHT HAD ELEVATED PULSE RATE (112, 114, 112) AND ELEVATED DIASTOLIC B/P (100). HIS PUPILS WERE DILATED IN DARKNESS (7.0). HE HAD NO NYSTAGMUS, HIS RIGHT EYE DID NOT CONVERGE.
9. SIGNS OF INGESTION SUBJ KNIGHT HAD A BROWNISH-GREEN COATING ON HIS TONGUE
10. STATEMENTS SUBJ KNIGHT DENIED USING ANY MEDICATION OR DRUGS.
11. OPINION of EVALUATOR IN MY OPINION AS A DRUG RECOGNITION EXPERT,
12. TOXICOLOGICAL SPECIMENS SUBJ KNIGHT COMPLIED WITH MY REQUEST FOR A URINE SPECIMEN. I FORWARDED THE SPECIMEN TO THE LAPD CRIME LAB.
13. MISCELLANEOUS

EVALUATOR TOWER, Bill
 BOOKING NO 028 DA 195-xx-32

Page ___ of ___ **DRUG INFLUENCE EVALUATION**

ARRESTEE'S NAME (LAST, FIRST, MI) LOPEZ, NANCY L. AGE 19 SEX F RACE B

ARRESTING OFFICER (NAME, SERIAL #, DIV.) TOWER, T.W. #1776 MSP

DATE EXAMINED/TIME/LOCATION 5/7/XX 0200 HRS Howard CTY PD HDQTS BREATH RESULTS Refused Results 0.00% Instrument # 1234 CHEMICAL TEST Urine Blood Both Tests Refused

MIRANDA WARNING GIVEN Yes No What have you eaten today? PIZZA When? DON'T REMEMBER What have you been drinking? How much? COCA-COLA N/A Time of last drink? N/A

Time now? 9:00 AM 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, DETACHED COORDINATION POOR - STUMBLING

SPEECH SLOW, SLURRED, LOW BREATH CHEMICAL ODOR FACE FLUSHED

CORRECTIVE LENS 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 Eyeballs: Normal Droopy

PULSE & TIME	HGN	Left Eye	Right Eye	Vertical Nystagmus?	ONE LEG STAND
1. <u>102 / 0210</u>	Lack of Smooth Pursuit	<u>YES</u>	<u>YES</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
2. <u>104 / 0222</u>	Max. Deviation	<u>YES</u>	<u>YES</u>	Convergence Right Eye <u> </u> Left Eye <u> </u>	
3. <u>104 / 0232</u>	Angle of Onset	<u>35°</u>	<u>35°</u>		

BALANCE EYES CLOSED 3" 3" 3" 3"

 WALK AND TURN TEST REPEATEDLY REQUESTED ADDITIONAL INSTRUCTIONS

 Cannot keep balance Starts too soon

Stops Walking	<u> </u>	<u> </u>
Misses Heel-Toe	<u> </u>	<u> </u>
Steps off Line	<u> </u>	<u> </u>
Raises Arms	<u> </u>	<u> </u>
Actual Steps Taken	<u>9</u>	<u>9</u>

 TEST STOPPED NEARLY FEELING
 TEST STOPPED NEARLY FEELING
 TEST STOPPED NEARLY FEELING
 TEST STOPPED NEARLY FEELING

INTERNAL CLOCK 90 Estimated as 30 sec. Describe Turn PROPER, BUT VERY SLOW + STIFF Cannot do Test (explain) N/A Type of Footwear FIAT SHOES

PUPIL SIZE	Room Light	Darkness	Indirect	Direct	NASAL AREA ALWAYS NOSE PAINT SMEARS ON NOSE, LIP ORAL CAVITY
Left Eye	<u>5.0</u>	<u>6.5</u>	<u>6.0</u>	<u>4.5</u>	<u>PAINT SMEARS ON NOSE, LIP ORAL CAVITY CLEAR</u>
Right Eye	<u>5.0</u>	<u>6.5</u>	<u>6.0</u>	<u>4.5</u>	

HIPPUS Yes No REBOUND DILATION Yes No Reaction to Light NORMAL

RIGHT ARM PAINT SMEARS LEFT ARM PAINT SMEARS

 BLOOD PRESSURE 142 / 98 TEMP 98.8°
 MUSCLE TONE Near Normal Flaccid Rigid
 Comments:
 ATTACH PHOTOS OF FRESH PUNCTURE MARKS

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 7 MAY XX 0130 TIME ONE NOTICED N/A (PERSONALLY ARRESTED) EVAL START TIME 0200 TIME COMPLETED 0238

TEST TERMINATED AT 90 SECS.

1. LOCATION I EXAMINED NANCY L. LOPEZ IN THE DRE ROOM OF HOWARD COUNTY POLICE DEPT.
2. WITNESS = OFFICER SCOTT WICHTENDAHN, HCPD #219
3. BAC: AT MY REQUEST AND IN MY PRESENCE, OFFICER WICHTENDAHN ADMINISTERED AN INTOXLYZER TEST TO SUBJ. LOPEZ AND OBTAINED RESULT OF 0.00%.
4. NOTIFICATION/INTERVIEW: N/A (I PERSONALLY ARRESTED SUBJ. LOPEZ).
5. INITIAL OBSERVATION OF SUSPECT: I FIRST SAW NANCY L. LOPEZ AT APPROXIMATELY 0115 HR ON 7 MAY 19XX. I WAS AT MY HOME IN COLUMBIA, HOWARD COUNTY, MD. WHEN I WAS AWAKENED BY LOUD SHOUTS AND ARGUING VOICES. UPON LOOKING OUT THE WINDOW, I OBS'D. FOUR PERSONS STANDING ON MY FRONT LAWN. THREE APPEARED TO BE YOUNG MALES, WHO WERE SHOUTING AT AND SHOWING ONE ANOTHER. THE OTHER, WHOM I LATER LEARNED TO BE SUBJ. LOPEZ, WAS STANDING PASSIVELY SEVERAL YARDS FROM THE OTHER THREE. I TURNED ON MY OUTSIDE LIGHT AND OPENED MY FRONT DOOR, AT WHICH POINT THE THREE MALES FLED ON FOOT ALONG THE PATHWAY LEADING TOWARD OAKLAND MILLS HIGH SCHOOL. SUBJ. LOPEZ REMAINED STANDING ON THE LAWN. AS I APPROACHED HER, I NOTICED A STRONG CHEMICAL ODOR -- SIMILAR TO PAINT -- AND OBSERVED THAT SHE APPEARED TO BE DAZED AND CONFUSED. AFTER A BRIEF CONVERSATION WITH HER, I DECIDED TO TRANSPORT HER TO HCPD HQS. FOR A DRUG INFLUENCE EXAMINATION. EN ROUTE, I RADIOED MSP DISPATCHER, WALDORF BARRACKS, AND ASKED THAT HCPD BE ALERTED.
6. MEDICAL PROBLEMS/TREATMENT N/A
7. PSYCHOPHYSICAL TESTS SUBJ. LOPEZ SWAYED APPROX 3" CIRCULAR ON RUMBERG BALANCE. SHE KEPT HER EYES CLOSED FOR 90 SECONDS, AT WHICH TIME I INSTRUCTED HER TO OPEN THE EYES. I ASKED HER "HOW LONG DID I TELL YOU TO KEEP YOUR EYES CLOSED?" SHE STARED AT ME FOR SEVERAL SECONDS, THEN SAID "WHAT? WHAT YOU SAY?" I REPEAT THE QUESTION, AND SHE SLOWLY SHRUGGED AND SAID "I DON'T KNOW". ON WAY, SUBJ. LOPEZ TWICE LOST BALANCE DURING INSTRUCTIONS, AND STOPPED WALKING ON THREE OCCASIONS. SHE REPEATEDLY MISSED HEEL-TO-TOE AND RAISED THE ARMS. ON SEVERAL OCCASIONS, SHE ASKED "WHAT DO YOU WANT ME TO DO NEXT?" SHE COULD NOT COMPLETE THE OLS ON EITHER FOOT, AND NEARLY FELL. ON FTN, SHE SWAYE REPEATEDLY MISSED THE TIP OF NOSE, AND KEPT OPENING HER EYES.
8. CLINICAL SIGNS SUBJ. LOPEZ HAD BOTH HORIZONTAL AND VERTICAL NYSTAGMUS, AND NEITHER EYE WAS ABLE TO CONVERGE. HER PULSE WAS ELEVATED (102, 104, 104). HER B/P ALSO WAS ELEVATED (142/98).
9. SIGNS OF INGESTION SUBJ. LOPEZ HAD WHAT APPEARED TO BE PAINT SMEAR ON HER NOSTRILS, LIPS AND RIGHT HAND. SHE ALSO HAD A CHEMICAL ODOR ON HER BREATH.
10. STATEMENTS SUBJ. LOPEZ DENIED USING ANY MEDICATION OR DRUGS.
11. OPINION OF EVALUATOR IN MY OPINION AS A DRE
12. TOXICOLOGICAL SPECIMEN SUBJ. LOPEZ AGREED TO PROVIDE A BLOOD SPECIMEN.
13. MISCELLANEOUS:

EVALUATOR SPARKS, BOB				BOOKING NO 029		OR 78-XX-15	
age <u>29</u> of <u>M</u> DRUG INFLUENCE EVALUATION							
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/XX 2300 PHOENIX PD HDQTS.				BREATH RESULTS. <input type="checkbox"/> Refused Results 0.00% Instrument # 1234		CHEMICAL TEST <input type="checkbox"/> Both Tests Refused <input checked="" type="checkbox"/> Urine <input type="checkbox"/> Blood	
MIRANDA WARNING GIVEN <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				What have you eaten today? When? NO RESPONSE		What have you been drinking? How much? Time of last drink? NO RES.	
Given by SPARKS, BOB				Are you sick or injured? DIDN'T DRINK ANYTHING		Are you diabetic or epileptic? NO RESPONSE	
Time now? NO RESPONSE When did you last sleep? How long? "EAT? SOME... HOT..DOSH"				Are you under the care of a doctor/dentist? NO RESPONSE			
Do you take insulin? NO RESPONSE				Do you have any physical defects? "DIDN'T DRINK ANYTHING"		Are you under the care of a doctor/dentist? NO RESPONSE	
Are you taking any medication or drugs? (ANSWERED "NO" VERY SLOWLY)				ATTITUDE NON-RESPONSIVE, PASSIVE.		COORDINATION VERY POOR - STAGGERING + STUMBLING	
SPEECH SLOW, DRAWN OUT. SOMETIMES REPETITIVE				BREATH ODOR OF MARIJUANA		FACE SWEATY BLANK STARE	
CORRECTIVE LENS <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft				Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input type="checkbox"/> None <input type="checkbox"/> L Eye <input type="checkbox"/> R Eye	
PUPIL SIZE <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)				HGN Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Able to follow stimulus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PULSE & TIME				HGN		Vertical Nystagmus: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
1. 108 12307		Lack of Smooth Pursuit		Left Eye YES	Right Eye YES	Convergence: Right Eye NEVER MOVED Left Eye NEVER MOVED	
2. 110 12318		Max. Deviation		Left Eye YES	Right Eye YES	ONE LEG STAND	
3. 108 12329		Angle of Onset		Left Eye 30°	Right Eye 30°		
BALANCE EYES CLOSED				WALK AND TURN TEST		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon <input checked="" type="checkbox"/>	
ARMS VERY RIGID				NEVER PUT HEEL TO THE GROUND		1st Nine: <input checked="" type="checkbox"/> 2nd Nine: <input checked="" type="checkbox"/>	
INTERNAL CLOCK 55 Estimated as 30 sec.				Describe Turn DID NOT LEAVE FRONT FOOT STATIONARY		Type of Footwear RUNNING SHOES	
<input type="radio"/> Right <input type="radio"/> Left Draw lines to spots touched. SUBJ. REPEATEDLY LEFT HIS FINGER ON HIS FACE, AND HAD TO BE REMUNDED TO LOWER THE ARM.				PUPIL SIZE		NASAL AREA CLEAR	
				Left Eye 5.5		Room Light 7.5	
ARM VERY RIGID				Right Eye 5.5		Reaction to Light NORMAL	
				HIPPUS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		REBOUND DILATION <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
BLOOD PRESSURE 148 / 102 TEMP 99.8				RIGHT ARM LEFT ARM			
MUSCLE TONE <input type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid				ATTACH PHOTOS OF FRESH PUNCTURE MARKS			
Comments: ARMS + LEGS VERY RIGID							
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 21 AUG XX 2240 HRS.				TIME ONE NOTIFIED (I WAS PRESENT AT THE ARREST)		EVAL START TIME 2300	
						TIME COMPLETED 2338	

1. LOCATION I EXAMINED MR WAYNE M MORSE IN THE DRE ROOM AT PHOENIX PD HDBTS.
2. WITNESS OFFICER JAMES UNSWORTH, #1811PPD (ARREST OFFICER)
3. BAC I ADMINISTERED INTOXLYZER TEST TO SUBJ, MORSE AND OBTAINED RESULT OF 0.00%
4. NOTIFICATION/INTERVIEW I WAS PRESENT AT THE ARREST OF SUBJ, MORSE.
5. INITIAL OBSERVATION OF SUSPECT I WAS SUPERVISING THE SOBRIETY CHECKPOINT WHEN I OBSERVED OFF. UNSWORTH APPROACH A VEHICLE AND INITIATE CONVERSATION WITH THE DRIVER, WHO I LATER LEARNED WAS SUBJ, MORSE. I OBSERVED OFF UNSWORTH INSTRUCT SUBJ, MORSE TO EXIT THE VEHICLE. SUBJ, MORSE WAS VERY UNSTEADY ON HIS FEET AND WAS VERY SLOW IN RESPONDING TO OFF. UNSWORTH'S INSTRUCTIONS AND QUESTIONS. THERE WAS AN ODOR OF MARIJUANA ON SUBJ, MORSE'S BREATH. OFFICER UNSWORTH AND I TRANSPORTED SUBJ, MORSE TO PPD HDBTS. FOR THE PURPOSE OF CONDUCTING A DRUG INFLUENCE EXAMINATION.
6. MEDICAL PROBLEMS/TREATMENT N/A
7. PSYCHOPHYSICAL TESTS SUBJ, MORSE SWAYED SIDE-SIDE (3") ON RUMBERG AND ESTIMATED 55 SECS AS 30 SECS. ON WAT, HE TWICE LOST BALANCE DURING INSTRUCTIONS, NEVER TOUCHED HEEL-TOE WHILE WALKING, STOPPED OFF LINE FOUR TIMES AND STOPPED WALKING FOR SEVERAL SECONDS ON ONE OCCASION, HE ALSO DID NOT LEAVE THE FRONT FOOT STATIONARY WHEN TURNING. ON OLS, HE REPEATEDLY RAISED THE ARMS, SWAYED AND PUT THE FOOT DOWN. ON 2ND TRIAL, TEST WAS TERMINATED WHEN FOOT CAME DOWN A THIRD TIME. ON FTN, SUBJ, MORSE REPEATEDLY MISSED TIP OF NOSE, AND LEFT HIS FINGER IN CONTACT WITH THE FACE ON EVERY TRIAL.
8. CLINICAL SIGNS SUBJ, MORSE EXHIBITED HORIZONTAL AND VERTICAL NYSTAGMUS, AND HIS EYES FAILED TO CONVERGE. HIS PUPILS WERE DILATED IN NEAR-TOTAL DARKNESS, AND EXHIBITED REBOUND DILATION UNDER DIRECT LIGHT. HIS PULSE, BLOOD PRESSURE AND TEMPERATURE WERE ALL ELEVATED.
9. SIGNS OF INGESTION SUBJ, MORSE HAD AN ODOR OF MARIJUANA ON HIS BREATH, AND BIT OF VEGETABLE MATERIAL ON HIS TEETH.
10. STATEMENTS SUBJ, MORSE DENIED USING DRUGS.
11. OPINION OF EVALUATOR IN MY OPINION AS A DRE
12. TOXICOLOGICAL SPECIMEN SUBJ, MORSE SUPPLIED A URINE SAMPLE.
13. MISCELLANEOUS

Page 1 of 2 DRUG INFLUENCE EVALUATION

EVALUATOR: NILES, WILLIAM
 BOOKING NO. 03 OR 001-XX-36

ARRESTEE'S NAME (LAST, FIRST, MI) NEAL, CHARLES N. AGE 44 SEX M RACE W ARRESTING OFFICER (NAME, SERIAL #, DIV) MILSTEAD, FRANK 4443 Phx

DATE EXAMINED/TIME/LOCATION 10/2/XX 1930 NRB BREATH RESULTS: Refused Results 0.00% Instrument # 1234 CHEMICAL TEST Urine Blood Both T Ref

MIRANDA WARNING GIVEN: Yes No What have you eaten today? When? CORN FLAKES THIS MORNING What have you been drinking? How much? Time c last of N/A

Given by: MILSTEAD 4443 Are you sick or injured? Yes No Are you diabetic or epileptic? Yes No

Time now? MIDNIGHT When did you last sleep? How long? I DONT REMEMBER 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 COORDINATION POOR: STUMBLING, SLOPPY

SPEECH SLOW, LOW AND 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 Uneq

PUPIL SIZE: Equal VERY SMALL ~ 1.5 mm Unequal (explain) HGN Present Yes No Able to follow stimulus: Yes No Eyelids: VERY DROOPY

PULSE & TIME	HGN	Left Eye	Right Eye	Vertical Nystagmus?
1. <u>56 / 1935</u>	Lack of Smooth Pursuit	<u>NO</u>	<u>NO</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. <u>60 / 1950</u>	Max. Deviation	<u>NO</u>	<u>NO</u>	Convergence Right Eye Left Eye
3. <u>56 / 2005</u>	Angle of Onset	<u>NONE</u>	<u>NONE</u>	

ONE LEG STAND TEST STOPPED ON BOTH ATTEMPTS

BALANCE EYES CLOSED WALK AND TURN TEST Cannot keep balance 11 Starts too soon

	1st Nine	2nd Nine
Stops Walking	<u>11</u>	<u>11</u>
Misses Heel-Toe	<u>1</u>	<u>11</u>
Steps off Line	<u>1</u>	<u>11</u>
Raises Arms	<u>11</u>	<u>111</u>
Actual Steps Taken	<u>9</u>	<u>9</u>

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

INTERNAL CLOCK: 58 Estimated as 30 sec. Describe Turn LOST BALANCE AND STAGGERED TO THE RIGHT Cannot do Test (explain) N/A Type of Footwear WORK BOOTS

PUPIL SIZE	Room Light	Darkness	Indirect	Direct	NASAL AREA
Left Eye	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>CLEAR</u>
Right Eye	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>CLEAR</u>

ORAL CAVITY CLEAR

HIPPUS Yes No REBOUND DILATION Yes No Reaction to Light NONE OBSERVABLE

RIGHT ARM SCAR LEFT ARM SCAR

PUNCTURE WOUNDS w/ Oozing Fluid

BLOOD PRESSURE: 110 / 60 TEMP 97.5

MUSCLE TONE: Near Normal Flaccid Rigid comments: NECK RUBBERY

What medicine or drug have you been using? How much? "IM CLEAN NOW" "IM NOT USING NOW" Time of use "HONEST, I'M CLEAN" Where were the drugs used? (Location) "NO, REALLY, I'M CLEAN"

DATE/TIME OF ARREST 10-2-XX 1915 TIME DRE NCTIFIED 1915 EVAL START TIME 1930 TIME COMPLETED 2010

CONTROL # XX-12 EXAMINING OFFICER NILES SERIAL # 4228 DIVISION XIRB UNAVAILABLE DATES XX REVIEWED BY TUTTLE, ED

1. LOCATION: I EXAMINED MY NEAL IN THE HOLDING AREA OF NRB
2. WITNESS: A/O FRANK MILSTEAD *4443 PHX P.D.
3. BAC : ADMINISTERED BY A/O MILSTEAD ON IR 3000 ; RESULT 0.00 %
4. NOTIFICATION/ INTERVIEW :

ON 10/2/XX, I WAS ASSISTING MEMBERS OF PPD CONDUCTING A DRUG SURVEILLANCE AT COMPTON TERRACE PRIOR TO A GRATEFUL CHICKENS CONCERT CONCERT WAS TO BEGIN AT 2000 HRS. I SAW A/O MILSTEAD ASSIST A FAN FROM HIS SEAT, AND I APPROACHED AS A BACKUP. OF. MILSTEAD SAID HE WAS TOLD BY SEVER PATRONS THAT "A DRUNK" WAS SEATED NEAR THEM, SO HE WENT WITH THEM TO CONTACT THE SUBJECT (NEAL). NEAL APPEARED VERY SLEEPY & WAS VERY UNSTEADY ON HIS FEET WHILE WALKING EVEN WHILE BEING SUPPORTED. ONCE AWAY FROM THE CONCERT, HE WAS TAKEN TO NRB FOR A DRUG INFLUENCE EVALUATION.

5. INITIAL OBSERVATIONS OF THE SUBJECT :

I FIRST SAW NEAL AS HE SAT IN HIS CHAIR. HIS HEAD WAS FLOPPED DOWN AGAINST HIS CHEST AND HE APPEARED TO BE SLEEPING. AS HE WALKED, HE WAS VERY UNSTEADY & STUMBLING. HIS PUPILS WERE VERY CONSTRICTED & VOICE SLOW, LOW AND RASPY.

6. MEDICAL PROBLEMS/ TREATMENT : NONE

7. PSYCHOPHYSICAL TESTS :

NEAL HAD A S/S SWAY OF 1" AND 3" FRONT SWAY ON ROMBERG WHILE ESTIMATING 58 SEC. AS 30 SEC. ON WAT, HE STEPPED OFF 2X DURING INSTRUCTIONS, STOPPED 4x, MISSED H/T 3x, STEPPED OFF LINE ONCE, AND USED ARMS 5x; HE ALSO DID POORLY ON THE TURN. ON OLS, HE WAS STOPPED BY THE COUNT OF 4, BOTH LEGS DUE TO HIS POOR BALANCE. HE ALSO USED ARMS 3x PRIOR TO TEST BEING STOPPED. ON FTN, HE HAD VERY SLOW MOVEMENTS, HEAD WAS LEANING FORWARD TOWARD HIS CHEST, AND MISSED ALL 6 ATTEMPTS.

8. CLINICAL SIGNS :

NEAL HAD NO HGN, VGN & WAS ABLE TO CONVERGE, HIS PUPIL WERE CONSTRICTED TO 1.5mm IN ALL LIGHTING CONDITIONS. HIS PULSE, BLOOD PRESSURE AND TEMPERATURE WERE ALL BELOW NORMAL RANGES

9. SIGNS OF INGESTION :

NEAL HAD SEVERAL OLD TRACK MARKS ON BOTH ARMS, AND FRESH PUNCTURE WOUNDS ON HIS LEFT HAND W/OOZING FLUID VISIBLE ON ALL (3) MARKS.

10. STATEMENTS : NEAL MADE SEVERAL STATEMENTS ABOUT BEING "CLEAN" AND "NOT USING NOW" BUT NEVER MADE ADMISSIONS OF DRUG USAGE.

11. OPINION OF EVALUATOR : IT IS MY OPINION AS A DRE

12. TOXICOLOGICAL SPECIMEN: NEAL PROVIDED A URINE SAMPLE FOR ANALYSIS

13. MISCELLANEOUS :

EVALUATOR: TOLAND, Steve

Page of **DRUG INFLUENCE EVALUATION** BOOKING NO. 031 DR. 002-XX-33

ARRESTEE'S NAME (LAST, FIRST, MI) OATES, John F. JR. AGE 48 SEX M RACE W ARRESTING OFFICER (NAME, SERIAL #, DIV) GREEN, W # 4196 M.P.D

DATE EXAMINED/TIME/LOCATION NOVEMBER 5, 19XX/2100/MPD BREATH RESULTS: Refused Results 0.00% Instrument # 1234 CHEMICAL TEST Urine Blood Both Refu:

MIRANDA WARNING GIVEN: Yes No What have you eaten today? MILKSHAKE When? NOON What have you been drinking? How much? NOTHING - I DON'T DRINK Time of last drg? N/A

Given by: SGT TOLAND Are you sick or injured? Yes No I FEEL JUST FINE Are you diabetic or epileptic? Yes No

Time now? MIDNIGHT When did you last sleep? How long? TODAY 2 HOURS 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 FROM UNCONTROLLED LAUGHTER TO CRYING COORDINATION VERY POOR STUMBLING

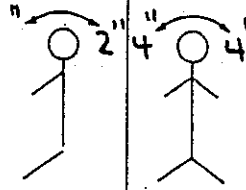
SPEECH MUMBLED BREATH NORMAL FACE FLUSHED, SWEATY

INCORHERENT, Sometimes shouting CORRECTIVE LENS: None Glasses Contacts, if so Hard Soft Eyes: BUG EYED STARE Blindness: None L Eye R Eye Equal Uneq. Tracking: WIDE OPEN

PUPIL SIZE: Equal Unequal (explain) HGN Present: Yes No Able to follow stimulus: Yes No Eyelids: WIDE OPEN

PULSE & TIME	HGN	Left Eye		Right Eye		Vertical Nystagmus?
		Lack of Smooth Pursuit	Max. Deviation	Convergence Right Eye	Convergence Left Eye	
1. <u>116/2110</u>		<u>NO</u>	<u>NO</u>	<u>NO</u>	<u>NO</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. <u>108/2130</u>		<u>NO</u>	<u>NO</u>	<u>NO</u>	<u>NO</u>	
3. <u>112/2145</u>		<u>NONE</u>	<u>NONE</u>	<u>NONE</u>	<u>NONE</u>	

Angle of Onset: NONE NONE

BALANCE EYES CLOSED: 

WALK AND TURN TEST: TEST STOPPED - COULD NOT STAND HEEL-TOE Cannot keep balance Starts too soon Stops Walking Misses Heel-Toe Steps off Line Raises Arms Actual Steps Taken:

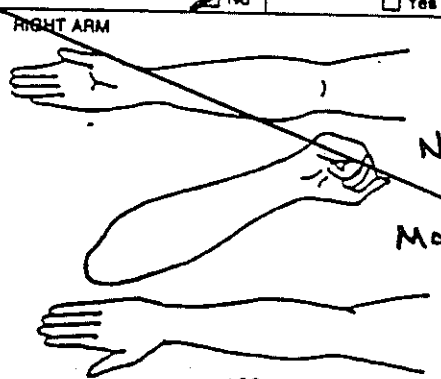
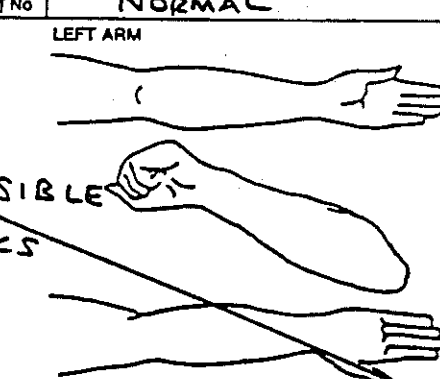
1st Nine	2nd Nine

TEST STOPPED 1233 NEARLY FELL

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: LOAFERS

PUPIL SIZE	Room Light	Darkness	Indirect	Direct	NASAL AREA
Left Eye	<u>6.5</u>	<u>8.5</u>	<u>8.0</u>	<u>6.0</u>	<u>CLEAR</u>
Right Eye	<u>6.5</u>	<u>8.5</u>	<u>8.0</u>	<u>6.0</u>	<u>CLEAR</u>

HIPPIUS: Yes No REBOUND DILATION: Yes No Reaction to Light: NORMAL

RIGHT ARM:  LEFT ARM: 

***** PHOTOS OF FRESH PUNCTURE MARKS

BLOOD PRESSURE: 156 / 102 TEMP: 99.8

MUSCLE TONE: Near Normal Flaccid Rigid

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

What medicine or drug have you been using? How much? LAUGHING UNCONTROLLABLY Response: (LAUGHING)

DATE/TIME OF ARREST: 5 NOV XX 2050 HRS TIME DRE NOTIFIED: 2055 EVAL START TIME: 2100 TIME COMPLETED: 2150

CONTROL # EXAMINING OFFICER SERIAL # DIVISION UNAVAILABLE DATES REVIEWED BY

1. LOCATION: I EXAMINED MR DATES IN DRE ROOM # 1 AT MESA P.D. HEADQUARTERS

2. WITNESS: OFFICER WILLIAM GREEN # 4196, ARRESTING OFFICER

3. B.A.C.: OFFICER GREEN ADMINISTERED AN INTOXILYZER 5000 TEST WITH A B.A.C. READING OF 0.00%.

4. NOTIFICATION/INTERVIEW: I RESPONDED TO MESA P.D. HEADQUARTERS TO CONDUCT THIS D.I.E. EVALUATION AFTER MR DATES WAS ARRESTED FOR DWI BY OFFICER GREEN. MR DATES WAS NEARLY INVOLVED IN A HEAD ON ACCIDENT.

5. INITIAL OBSERVATION OF SUSPECT: WHEN I FIRST OBSERVED MR DATES IN THE HOLDING FACILITY HE WAS TALKING TO HIMSELF AND LAUGHING UNCONTROLLABLY.

6. MEDICAL PROBLEMS / TREATMENT N/A

7. PSYCHOPHYSICAL TESTS: ON THE ROMBERG TEST MR DATES SWAYED 2" FRONT TO BACK AND 4" SIDE TO SIDE. THE TEST WAS STOPPED FOR SAFETY REASONS ON THE WALK AND TURN TEST THE TEST WAS STOPPED AS DATES LOST HIS BALANCE 3 TIMES. THE ONE LEG STAND TEST WAS STOPPED AS MR DATES NEARLY FELL. MR DATES ALSO COULD NOT COMPLETE THE FINGER TO NOSE TEST.

8. CLINICAL SIGNS: MR DATES EXHIBITED NO HGN OR VERTICAL NYSTAGMUS. HIS PUPILS WERE DILATED IN NEAR DARKNESS AS WELL AS INDIRECT LIGHT. MR DATES HAD AN ELEVATED PULSE, BLOOD PRESSURE, AND TEMPERATURE.

9. SIGNS OF INGESTION: NONE OBSERVED

10. STATEMENTS: MR DATES STATED HE HAS NOT USED ANY DRUGS SINCE THE 60'S.

11. OPINION OF EVALUATOR: IN MY OPINION AS A DRE...

12. TOXICOLOGICAL SPECIMEN: MR DATES PROVIDED A URINE SAMPLE.

13. MISCELLANEOUS:

SESSION XXVI

PREPARING THE NARRATIVE REPORT

HS 172 R4/93

SESSION XXVI PREPARING THE NARRATIVE REPORT

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

- o Discuss the essential elements of the drug evaluation report.
- o Prepare a clear and concise narrative description of the results of the drug evaluation.

The Importance of a Good DRE Report

Successful prosecution of a DRE case will depend, more than anything else, on the evidence that you supply, and on how clearly and convincingly you present that evidence. The chemist or toxicologist may also be able to provide some important evidence, but the results of the blood or urine analysis definitely play a supportive, or corroborative role. The chemical test simply cannot prove that the suspect was impaired, or under the influence at the time the violation occurred. It is up to you to prove that, and to prove that the nature of the impairment was consistent with some category or combination of drugs. Your observations, your examinations and your expertise are the prosecution's strongest weapons. In some cases, they will be the only weapons. You have to get your evidence across, and you have to make it as believable as possible. You start doing this in your DRE report.

The DRE Report has two major sections. The first is the standard Drug Influence Evaluation Face Sheet. Its purpose is to document the results of all observations and examinations that you personally made of the suspect. This Face Sheet is a unique document. It is used by every law enforcement agency that participates in the NHTSA/IACP Drug Evaluation and Classification Program. It contains some very important information, and it must be filled out accurately and completely. But notwithstanding the importance of the Face Sheet, it does not constitute the entire DRE report. A narrative section also must be prepared. The narrative section must be a clear, plain-English and detailed rendition of all evidence obtained during all twelve components of the drug recognition process, including the breath test result; the information obtained from your interview of the arresting officer; statements, actions, gestures, etc. made by the suspect; paraphernalia found in the suspect's possession; etc. Bear in mind that the Face Sheet is a **technical document**. As a DRE, you are very familiar with the Face Sheet, and with its various symbols, abbreviations, etc. But many prosecutors, most judges and virtually all jurors won't know how to read the Face Sheet. It is up to you to "translate" the Face Sheet and all other evidence into language that they can understand. That's where the narrative section of your report comes in.

Standard Procedures for Completing the Face Sheet

The Standard Drug Influence Evaluation Face Sheet must be completed, in its entirety, every time you conduct an evaluation of a person suspected of drug impairment. Follow the guidelines given in the paragraphs below every time you complete a Face Sheet.

The upper right corner of the standard Drug Influence Evaluation Report consists of spaces to record recordkeeping data, consistent with your department's standard operating procedures.

EVALUATOR	
BOOKING NO.	DR.
ARRESTING OFFICER	(NAME, SERIAL #, DIV.)

On the first three full lines of the report, you will record identifying information about the suspect, the arresting officer, and the time and place where the DRE examination was conducted. You will also note the results of the breath test (if available), and note the type of sample (blood or urine) taken for drug analyses. And, you will indicate whether the suspect was admonished of his or her constitutional rights in accordance with the Miranda ruling, and if so, by whom.

DRUG INFLUENCE EVALUATION				
Page _____ of _____				
ARRESTEE'S NAME (LAST, FIRST, MI)		AGE	SEX	RACE
DATE EXAMINED/TIME/LOCATION	BREATH RESULTS: <input type="checkbox"/> Refused Results Instrument #		CHEMICAL TEST <input type="checkbox"/> Both Tests <input type="checkbox"/> Urine <input type="checkbox"/> Blood <input type="checkbox"/> Refused	
MIRANDA WARNING GIVEN: Given by:	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When?	What have you been drinking? How much?	Time of last drink?

Starting on the third line, and continuing through the ninth line, you will record the results of the preliminary examination of the suspect. If the suspect merely responds "yes" or "no" to a question, you may simply put a mark through the appropriate box on the right side of the space provided for the question. But if he or she embellishes the response, you should use the space provided to capture the response. For example, if the suspect were to answer the question "what have you eaten today" in an obviously false or ridiculous manner ("I haven't eaten for six years"), you should record that answer verbatim.

Time now?	When did you last sleep? How long?	Are you sick or injured? <input type="checkbox"/> Yes <input type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input type="checkbox"/> No
Do you take insulin? <input type="checkbox"/> Yes <input type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input type="checkbox"/> No	Are you under the care of a doctor/dentist? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input type="checkbox"/> No	ATTITUDE	COORDINATION	
SPEECH	BREATH	FACE	
CORRECTIVE LENS: <input type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft	EYES: <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery	Blindness: <input type="checkbox"/> None <input type="checkbox"/> L.Eye <input type="checkbox"/> R.Eye	Tracking: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal
PUPIL SIZE: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)	HGN Present: <input type="checkbox"/> Yes <input type="checkbox"/> No	Able to follow stimulus: <input type="checkbox"/> Yes <input type="checkbox"/> No	Eyelids: <input type="checkbox"/> Normal <input type="checkbox"/> Droopy

After completing the preliminary questioning of the suspect, be sure to record brief descriptions of his or her attitude, coordination, speech, breath and facial appearance. Check to determine the type of corrective lenses the suspect is wearing, if any, and record the general appearance of the suspect's eyes. Be sure to indicate whether the suspect is or claims to be blind in either eye. Check the suspect's tracking ability (just as you would test for lack of smooth pursuit), and indicate whether the eyes track equally, whether HGN is present and whether he or she is able to follow the stimulus. Note whether the suspect's pupils are of equal size, and note the condition of his or her eyelids.

PULSE & TIME	
1.	/
2.	/
3.	/

Almost midway down the form, and on the left side, is the space to record the three measurements of the suspect's pulse that are required during the DRE examination. Always record the pulse in beats per minute. For example, since you use a 30 seconds interval to count the pulse, be sure to multiply the count by two, and record that result on the form.

Also, always record the time at which each pulse count was taken.

Record the results of the checks for Horizontal Gaze Nystagmus, Vertical Nystagmus and Lack of Convergence in the spaces at the center of the form. For HGN, write the word "YES" to indicate that there was a lack of smooth pursuit, and write "NO" if the eye does pursue the stimulus smoothly. In other words, "YES" means that evidence of HGN is present and "NO" means that the evidence wasn't found. Similarly,

HGN	Left Eye	Right Eye
Lack of Smooth Pursuit		
Max. Deviation		
Angle of Onset		

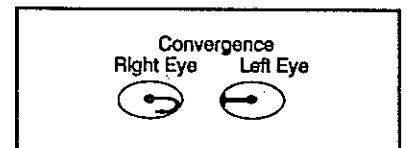
along the "Max. Deviation" line, write "YES" if there is distinct jerking when the eye is held as far to the side as possible, and write "NO" if the eye does not jerk distinctly. Along the "Angle of Onset" line, write the number of degrees at which the jerking first is noticed; try to estimate the angle to the nearest

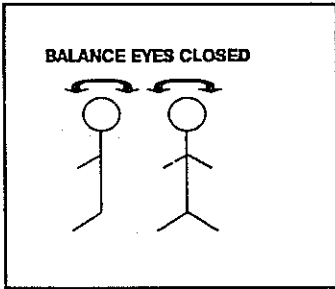
five degrees (i.e., 30, 35, 40, etc.). If the eyes actually jerk while the suspect stares straight ahead, write the word "RESTING" on the "Angle of Onset" line. If the jerking begins before the eye has moved to the 30-degree point, write the word "IMMEDIATE". Be sure to check each eye independently, and record the evidence of HGN separately for each eye.

For the Vertical Nystagmus test, simply check either the "YES" or "NO" box, depending on whether the evidence was present or absent.

Vertical Nystagmus?
<input type="checkbox"/> Yes <input type="checkbox"/> No

For the Convergence test, draw a circle in the middle of each "eye socket" provided on the form, and connect arrows to the circles to depict how the eyes moved when the test was given. For example, the sketch at the right shows that the left eye converged properly, while the right started to move in, and then drifted back out.

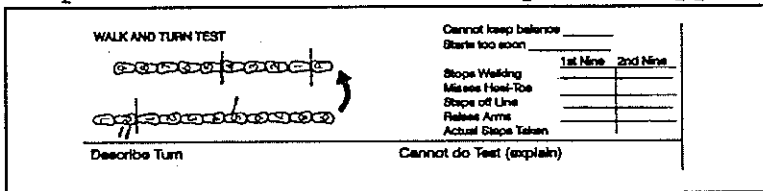




Spaces are provided to record in detail the suspect's performance of the four divided attention tests. Make sure that the Romberg Balance test is the first one that you administer. The two "stick figures" are used to indicate how much the suspect sways while standing with the eyes closed. The figure on the left (with only one arm and one leg visible) is used to depict forward-and-backward swaying; at the arrow points above the "head", write the approximate number of

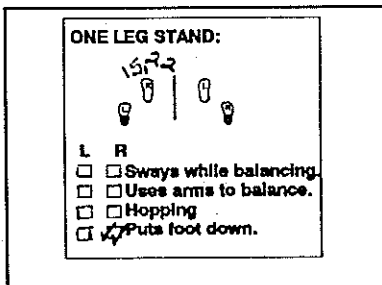
inches the suspect sways forwards and backwards. Write the word APPROXIMATE across the stick figures to indicate that it is not a measure but an estimate. The figure on the right (with two arms and legs) is used to depict side-to-side swaying. If the suspect sways in a circular manner, indicate by writing "Circular Swaying" across the "stick figures". In the space immediately below the "stick figures", write the number of seconds that the suspect actually stood with the eyes closed, while he or she attempted to estimate the passage of 30 seconds.

For the Walk and Turn test, you must diagram how the suspect walked, and you must indicate how often each of the eight validated clues was observed. On the diagram of steps, when the suspect steps off the line, indicate with half a slash mark at an angle in the direction the step was taken. If the suspect stopped walking, draw a slash mark



between the feet. The sketch to the left, for example, diagrams a test on which the suspect moved the right foot to the side twice while listening to the instructions; stepped off the line

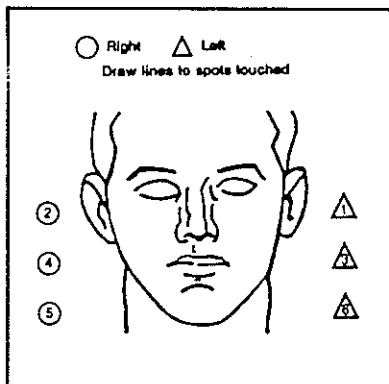
toward the left on the fifth step; and stopped after the fourth step on the way back down the line after turning. Anything else that is unusual or noteworthy about how the suspect walked should be indicated in writing near the diagram (e.g., "stopped counting aloud after the third step"). In the spaces provided to the right of the diagram-of-the-feet, use check marks to record how often each clue was seen and the actual numbers of steps the suspect took. In the space below the diagram-of-the-feet, write a brief but clear description of how the suspect executed the turn; if he or she turned in the proper fashion, simply write "PROPER". If the suspect was unable to complete the test, write an explanation of why the test was stopped.



For the One Leg Stand, you will diagram when the suspect put the foot down (if at all) and you will indicate how often each of the four validated clues was observed. Always have the suspect first perform this test by standing on the left foot, and indicate that you did so by darkening in the left foot on the left-side sketch, as shown in the example to the right. If the suspect puts the elevated right foot down, indicate above the foot the number they were counting when they put their foot down. In our example, the

suspect put the right foot down when he or she had counted to "one thousand and fifteen" and again when the count reached "one thousand and twenty-two". Put check marks in or near the boxes below the sketch to indicate how often each of the four clues was seen while the suspect stood on the left foot.

Then, have the suspect repeat the test by standing on the right foot, and use the right-side sketch to record the results of that test. In the box below, indicate the type of footwear the suspect was wearing while performing these tests.



For the Finger to Nose test, you will diagram exactly where each finger tip touched the suspect's face. Simply draw a line from the point of contact on the face to the symbol representing each finger (this makes it easier to draw a straight line). The finger symbols are numbered in the sequence in which you should instruct the suspect (i.e., "left, right, left, right, right, left"). If the suspect inadvertently uses the incorrect hand at some point, draw in an additional appropriate symbol (circle or triangle), write the trial number in it (1 to 6) and draw a line from it to the spot

touched on the face. Then, cross out the symbol for the finger that he or she should have used on that trial. For example, in the sketch above, the suspect actually used the right-hand index finger on the third trial, rather than the left hand as instructed.

PUPIL SIZE	Room Light	Darkness	Indirect	Direct	NASAL AREA
Left Eye					ORAL CAVITY
Right Eye					
HIPPUS	<input type="checkbox"/> Yes <input type="checkbox"/> No		REBOUND DILATION <input type="checkbox"/> Yes <input type="checkbox"/> No		Reaction to Light

Pupil size estimations are to be recorded in the boxes provided. You should have a pupillometer with circles ranging in diameter from 1.0mm to 9.0mm, in half-millimeter

increments. Simply record the size of the circle that comes closest to the size of the pupil. DO NOT attempt to interpolate between circles. For example, if a pupil appears to be ever so slightly smaller than the 3.0mm circle, DO NOT write 2.8 or 2.9 as the pupil size record to the nearest 1/2 mm!

In the spaces provided, write a brief but clear description of anything noteworthy that you found in your examinations of the suspect's nose and mouth. If hippus or rebound dilation is observed, note that in the appropriate space. Remember, hippus refers to a pulsating pupil that rhythmically contracts and expands within fixed limits, for example always dilating to 5.0mm and always shrinking back to 4.0mm. Rebound dilation also involves pulsating pupils, but with an overall trend towards greater and greater dilation. For example, the pupil might initially expand to 5.0mm, but soon after "balloon out" to 5.5mm, then to 6.0mm, etc. REMEMBER ALSO that sloppy procedure with the penlight could induce a response that could be confused with

rebound dilation or hippus. If you inadvertently move the penlight closer to the suspect's eye and then draw it farther away, you will change the intensity of the light flooding into the eye and you may cause the pupil to constrict or dilate. Make sure that you always hold the light steady while making these examinations.

In the space provided, indicate how the suspect's pupils reacted when the light was directed into the eye. If the reaction appeared to be normal, write "Normal"; if it appeared to be a slow reaction but some shrinkage of the pupil was evident, write "Slow"; if the pupil did not appear to shrink at all, write "None". Approximately 1 second is normal.

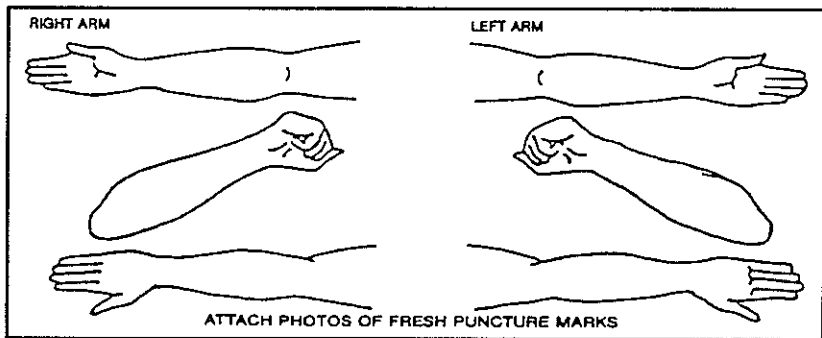
BLOOD PRESSURE:	TEMP.
_____ / _____	_____ °

Record both the systolic and diastolic blood pressure (in even numbers), and the suspect's body temperature, in the spaces provided. Also indicate whether the suspect's muscle tone appeared to be rigid, flaccid or normal.

You will examine the suspect's arms and hands for punctures or "track marks", and you will sketch anything noteworthy that you find.

Draw lines on the arm and hand pictures to indicate the locations and lengths of scars, and draw x-marks to depict puncture wounds. Always describe

the condition of puncture wounds (e.g., "red dots, oozing fluid"). It is always good practice, and it is standard operating procedure for many departments, to take photographs of a suspect's fresh puncture wounds. If photos have been taken, indicate on the sketch which areas were photographed. If the examination discloses no punctures, scars or anything else worthy of note, draw a diagonal line across the sketches of arms and hands and write "No Visible Marks" on that section of the form.



On the third line from the bottom, record the suspect's responses to the final three questions. Remember that most if not all courts generally hold that a suspect must be advised of constitutional rights before these kinds of questions should be asked.

What medicine or drug have you been using? How much?	Time of use?	Where were the drugs used? (Location)
--	--------------	---------------------------------------

The last two lines on the form are used to record information about basic time parameters of concern to the evaluation, and to record additional pertinent information about you, the DRE who conducted the evaluation. If another DRE supervised your evaluation, his or her name should be written in the final block on the lower right corner of the form. That is especially important during your certification training phase.

The reverse side of the form should be used for the narrative Drug Evaluation Report, and continuation sheets should be attached, as appropriate. Guidelines for organizing the narrative report are given below.

Guidelines for writing the narrative report

The narrative portion of a standard DRE report has thirteen segments.

a. **The Location**

State where the drug recognition evaluation was conducted.

Example:

Evaluation of Subject Richardson was conducted in the DRE room, Jail Division, Parker Center.

b. **Witnesses**

Give names, agency affiliations and other identifiers of any persons who witnessed all or portions of the evaluation. State the person who served as the evaluator and recorder with complete agency names.

Example:

Derald Gautier, Denver, Colorado Police Department served as a witness for the entire evaluation. Sgt. Tom Page, Los Angeles, California Police Department served as the evaluator. Officer Jim Brown, Los Angeles, California Police Department, served as the recorder.

c. **The Breath Alcohol Test**

Indicate if the test was taken, and state whether you personally administered or observed the test. Give the test results, and state the serial number or other identifier of the instrument on which the test was taken.

d. **The Notification and Interview of the Arresting Officer**

Indicate when you were first notified of the request for a drug evaluation, and summarize the information you were given at that time. State where you were and what you were doing when the request was received. Include a summary of your interview of the arresting officer.

Example:

On 3/17/xx, at 2145 hours, this officer ... was notified by Officer John ... that he had arrested one Richardson. ... Officer Page requested that I conduct a drug influence examination ...

Officer John informed me that Subject Richardson's vehicle was observed moving ... at approximately 15 mph. Vehicle maintained speed as it passed stop sign ... Officer John activated lights/siren. Subject vehicle responded slowly ... Subject Richardson appeared to be asleep ...

e. Initial Observation of the Suspect

Document in detail your personal initial observations of the suspect. Describe where and when you first saw the suspect. Highlight any noteworthy or unusual actions, appearances, etc. that you observed. Summarize the findings of your Preliminary Examination of the suspect.

Example:

I first saw Richardson at 2200 hours ... He wore a 3-pc business suit ... Subject walked slowly, staggered ... swayed constantly ... head nodded forward repeatedly ... (etc.)

f. Medical Problems and Treatment

Describe your own observations concerning possible injuries or illness that the suspect may be suffering. Document suspect's statements or claims concerning illness or injury. Document any medical attention or treatment that the suspect received while in your care.

g. Psychophysical Indicators of Impairment

Give a brief but clear, complete and accurate description of the suspect's performance of the Romberg, Walk-and-Turn, One-Leg-Stand and Finger-to-Nose tests.

Example:

Romberg Balance: Forward sway up to 7 inches; backward sway up to 5 inches. Actual elapsed time of 55 seconds when estimating 30 seconds.

h. Clinical Indicators of Impairment

Give a brief but clear, complete and accurate description of your examinations of the suspect's eyes and vital signs.

Example:

Horizontal gaze nystagmus: Lack of smooth pursuit (both eyes); distinct nyst. at max. dev. (right eye only); no angle of onset up to 50 deg. (both eyes). Total of 3 clues of nyst.

i. Signs of Ingestion

Document the results of your examinations of the suspect's oral and nasal cavities, search for injection marks, etc. Describe any odors detected on the suspect's breath, hands, clothing, etc. Describe any physical debris of drugs or drug paraphernalia found on the suspect's person.

Example:

Left arm: Three recent puncture wounds (red dots, oozing fluid). One-inch "track mark" scar. (Photo attached.)

j. Subject's Statements

Document the subject's statements, both in response to your questions and spontaneous utterances. Use verbatim quotes whenever possible. Document your Miranda admonition to the suspect and his or her waiver.

Example:

Subject Richardson repeatedly denied using drugs. At one point....he responded "Do I look like I do Dope?" Subsequently,....he responded "Go have a heart attack".

k. The DRE's Opinion

State the category or combination of categories of drugs that you believe is/are affecting the suspect. State your opinion concerning the suspect's ability to operate a motor vehicle safely, if vehicle operation is relevant to this case. Summarize the key facts/observations that support your opinion.

Example:

In the opinion of this officer, Subject Richardson is under the influence of a Narcotic Analgesic, and is unable to operate a motor vehicle safely. This opinion reflects the facts that:

- o There is no evidence of a medical problem or injury**
- o Richardson's BAC was 0.00%**
- o Richardson exhibits noticeable psychophysical impairment**
- o Richardson's pupils are markedly constricted and show no visible reaction to light**
- o Richardson's vital signs are depressed**
- o There are fresh injection marks on Richardson's arm**

l. The Toxicologic Sample

State the type of sample (blood, urine, etc.) taken from the suspect. Give the name, title, agency affiliation, etc. of the person who drew the sample or observed its collection. State where the sample was taken and to whom it was given. If the results of the toxicologic analysis are known at the time the report is written, state those results. If the suspect refused to submit a sample, state that fact in the report.

m. Miscellaneous

Include any other information that might be relevant.

Example:

Based on the observations of Subject Richardson, this officer infers that the subject is right-handed. This would be consistent with hypodermic injection into his left arm.

The remaining pages of this section of the Manual provide a complete sample DRE report, on Subject Page.

EVALUATOR: PAGE, TOM

Page 1 of 1 DRUG INFLUENCE EVALUATION

BOOKING NO. 16245 OR 12050A

ARRESTEE'S NAME LAST, FIRST, MI RICHARDSON, MIKE E AGE 33 SEX M RACE W

ARRESTING OFFICER (NAME, SERIAL & DIV.) JOHN, CLARK

DATE EXAMINED/TIME/LOCATION 11-17-92, 2200 HRS, PARKER CTR. BREATH RESULTS: Refused Returned Results -00 Instrument # 1298 CHEMICAL TEST Urine Blood Both Tests Refused

MEMORANDA WARNING OFFICER: Yes No What have you eaten today? When? Nothing What have you been drinking? How much? NONE Time of last drink? NA

Given by: JOHN CLARK Yes No Are you sick or injured? Yes No Are you diabetic or epileptic? Yes No

Time now? 2200 When did you last sleep? How long? LAST NIGHT, 5 HRS 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 COOPERATION POOR

SPEECH slow, raspy & low BREATH Normal FACE appeared sleepy

CORRECTIVE LENSES: Glasses Contacts, if so Hard Soft None 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 sentence: Yes No Eyeballs: Normal Groovy

PULSE & TIME	HGN	Left Eye	Right Eye	Vertical Nystagmus?	ONE LEG STAND
1. <u>60 / 2203</u>	Lack of Smooth Pursuit	<u>YES</u>	<u>YES</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
2. <u>58 / 2215</u>	Max. Deviation	<u>NO</u>	<u>YES</u>	Convergence Right Eye <u>→</u> Left Eye <u>↻</u>	
3. <u>58 / 2236</u>	Angle of Onset	<u>NONE</u>	<u>NONE</u>		

BALANCE EYES CLOSED: WALK AND TURN TEST: SLOW & DELIBERATE Cannot keep balance. Starts too soon. 1st Nine: ✓ 2nd Nine: ✓

Stops Walking	Misses Heel-Toe	Steps off Line	Raises Arms	Actual Steps Taken
<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>

Type of Footwear: TENNIS

INTERNAL CLOCK: 45 Estimated as 30 sec. Describe Turn: As directed Cannot do Test (explain):

PUPIL SIZE	Room Light	Darkness	Indirect	Direct	NASAL AREA
Left Eye	<u>2.5</u>	<u>3.0</u>	<u>2.5</u>	<u>2.5</u>	<u>Normal</u>
Right Eye	<u>2.6</u>	<u>3.0</u>	<u>2.5</u>	<u>2.5</u>	<u>Normal</u>

Reaction to Light: NONE VISIBLE

RIGHT ARM: LEFT ARM: FRESH PUNCTURES ATTACH PHOTOS OF FRESH PUNCTURE MARKS

USE WRONG HAND #5

BLOOD PRESSURE: 112 / 56 TEMP: 97.7

MUSCLE TONE: Near Normal Flaccid Rigid

Comments:

What medicine or drug have you been using? How much? DENIED ANY DRUG USAGE Time of use? N/A Where were the drugs used? (Location) N/A

DATE/TIME OF ARREST: 11-17-92, 2145 HRS. TIME DRE NOTIFIED: 2145 HRS EVAL START TIME: 2200 HRS TIME COMPLETED: 2236 HRS.

CONTROL # 92-17 EVALUATING OFFICER: PAGE, TOM SERIAL NO. 0025 DIVISION: TRAFFIC UNAVAILABLE DATES: 12-25-92 REVIEWED BY: KEVIN CLARK

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% BAC from Richardson.
4. THE NOTIFICATION AND INTERVIEW OF THE ARRESTING OFFICER: At approximately 2145 hours Officer John requested me to conduct a DRE evaluation on suspect - Richardson. Richardson had been arrested by John for DUI. Impairment was not consistent with .00% BAC 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 denied illness or injury. No evidence of injury or illness observed. Blood for HIV drawn at Jail Infirmary by Dr. Mogge.
7. PSYCHOPHYSICAL: Richardson exhibited impairment throughout all portions of the psychophysical exams. Examples: Swaying and impaired internal clock during Romberg; staggered, raised arms, failed to touch heel to toe on Walk and Turn; swayed, raised arms, put foot down during One Leg Stand; used wrong hand on Finger to Nose.
8. CLINICAL INDICATORS: EYES: Lack of smooth pursuit in both eyes. HGN at maximum deviation in right eye only. No angle of onset. No Vertical Nystagmus. Lack of Convergence present. Pupils constricted in all light levels. No visible reaction to direct light. Ptosis (droopy eyelids) evident. VITAL SIGNS: Pulse depressed (60, 58, 58 BPM); systolic B/P depressed; temperature at lower end of normal range.

9. SIGNS OF INGESTION: Three fresh puncture wounds found on suspect's left arm. (photo attached).
10. SUSPECT'S STATEMENTS: Richardson denied drug usage.
11. DRE'S OPINION: In my opinion, Richardson is under the influence of a Narcotic Analgesic and is unable to safely operate a motor vehicle.
12. TOXICOLOGICAL SAMPLE: Urine obtained from crime lab analysis. Page and I witnessed elimination by the suspect.
13. MISCELLANEOUS: Needles and syringes were found in Richardsons' vehicle.

SESSION XXVII

PRACTICE: TEST ADMINISTRATION

SESSION XXVII PRACTICE: TEST ADMINISTRATION

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

- o Administer selected portions of the battery of examinations that constitute the drug evaluation and classification process.
- o Articulate the examinations procedures.
- o Document the results of the evaluations.

In this session, you will have an opportunity to practice conducting a complete drug evaluation and classification examination. You will work in a team with one or two fellow students. When you conduct the examinations, your teammate will serve as your test subject. And, you will serve as the subject for a teammate when he or she conducts the examination.

SESSION XXVIII

CASE PREPARATION AND TESTIMONY

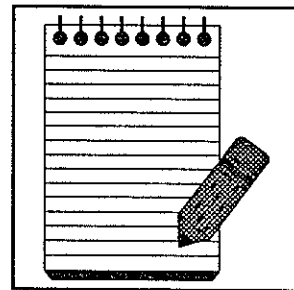
Upon successfully completing this session, the participants will be able to:

- 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.

A. Guidelines for Case Preparation

Case preparation actually begins with your first contact with the suspect. At that point you begin "collecting" the evidence that you will organize and present at trial.

To begin properly, make sure that you complete each portion of the standard drug evaluation and classification report form. Be especially careful to take accurate notes of your observations of the suspect, and to record his or her statements accurately. Note and document all relevant information you obtain during your interview of the arresting officer.



When you are notified of the trial date, you should conduct a careful review of all records and reports associated with the case. If you made the arrest, or were summoned to the scene, revisit the scene. During discovery, list and properly document all evidence. Compare your notes with the arresting officer, and clarify or resolve any discrepancies, if possible.

If at all possible, try to arrange a pre-trial conference with the prosecutor. Review with the prosecutor all evidence and all bases for your conclusions. If there are weak points in your case, bring them to the prosecutor's attention. Ask the prosecutor to review the questions he or she intends to ask you on the witness stand. Point out when you do not know the answer to a question. Ask the prosecutor to review questions and tactics that he or she anticipates the defense attorney may use. Make sure your resume is current. Review your credentials and qualifications with the prosecutor.

If you cannot have a pre-trial conference, try to identify the main points about the case, and be sure to discuss these with the prosecutor during the few minutes you will have just before the trial.

B. Guidelines for Direct Testimony

1. Testifying about your qualifications as a drug recognition expert.

Remember that having been qualified as an expert in the past does not automatically guarantee that this court and judge will deem that you are an expert in this case. You may have to testify in some detail as to your relevant training, education and experience. In fact, it often is to the prosecution's advantage to have you provide such detailed testimony: juries and even judges may be favorably impressed by the depth and scope of your experience and other credentials, and may attach added "weight" to your opinions and conclusions if they have had an opportunity to learn how

well qualified you are to render them. For this reason, you should encourage the prosecutor, if possible, not to accept the defense's stipulation as to your expertise. Instead, always try to enter testimony as to your credentials into the record.

When testifying about your qualifications, try to relate your training and experience to the specific categories of drugs involved in the case at hand. Highlight the number of times you have seen a person under the influence of those drugs. Explicitly highlight the number of times you have examined subjects and concluded they were not under the influence of those drugs: this helps to demonstrate the fairness and impartiality of your examinations.

2. Testifying about the facts of the case.

Your basic task is to establish that the suspect was under the influence of a drug or combination of drugs. When you testify about the suspect's performance of the standardized field sobriety tests, do not use the terms "pass" or "fail". Also, do not refer to the suspect's "score" on the test or the number of "points" he or she produced. Instead, describe clearly and explicitly how the suspect performed (e.g., "stepped off the line twice, raised the arms three times, etc."). By presenting your observations clearly and convincingly, you will allow the fact of the suspect's impairment to speak for itself. In the same way, describe exactly what you observed and measured during the eye examinations and vital signs examinations, and relate these observations and measurements to your training and experience. In this way you will establish a solid foundation for introducing your opinions and conclusions.

Always keep in mind that juries typically focus on an officer's demeanor as much or more than on the content of his or her testimony. Strive to maintain your professionalism and impartiality. Be clear in your testimony: explain technical terms in layman's language; don't use jargon, abbreviations, acronyms, etc. Be polite and courteous. Do not become agitated as a result of questions by the defense. Above all, if you don't know the answer to a question, say so. Don't guess at answers, or compromise your honesty in any way.

C. Introduction of Evidence Involving "New" Scientific Principles

As a drug recognition expert, you will be asked to offer opinions and conclusions based on scientific principles that are quite unfamiliar to the jury or even to the judge. These principles aren't really "new", but they are newly discovered, and they aren't yet within the common realm of knowledge of average people. Your task is to help see to it that the evidence you have obtained through your special knowledge and your hard work will be acceptable to the court.

Evidence derived from a "new" scientific principle is subjected to the Frye standard of admissibility. This standard derives from the landmark case Frye vs. United States, 293F. 1013 (D.C. Cir. 1923). Frye requires that the scientific principle or theory used to support some offered "evidence" be in conformity with a generally accepted explanatory theory, if the "evidence" is to be admissible. Under Frye, it is not enough that a qualified expert, or even several experts, testify that a particular scientific technique is valid. The technique must be generally accepted by the relevant scientific community.

D. Typical Defense Tactics

In a drug evaluation and classification case, you will be the key witness for the prosecution. Therefore, the defense will try very hard to cast doubt on your testimony.

The defense may ask some questions to challenge your observations and interpretations. For example, you may be asked whether the signs, symptoms and behaviors you observed in the suspect couldn't have been caused by an injury or illness, or by alcohol, or by something else other than the drugs you concluded were present. You may also be asked questions whose purpose is to make it appear that you weren't really certain that you actually saw what you say you saw. Answer these questions honestly, but carefully. If your observations are not consistent with what an illness or injury or alcohol would produce, explain why not. Make it clear that your conclusions about drug influence are not simply one plausible interpretation of the observed facts, but the only logical interpretation.

The defense may also ask some questions to challenge your credentials. These questions may try to disparage or deprecate the formal training you have had as a drug recognition expert. There may also be an attempt to ask questions to "trip you up" on technical/scientific issues, to make it appear that you are less knowledgeable than you should be or claim to be. Stick to absolute honesty. Answer all questions about your training fully and accurately, but don't embellish. Don't try to make the training appear to have been more elaborate or extensive than it really was. Answer scientific/technical questions if you know the answer. Otherwise, admit that you don't know. Don't try to fake or guess the answers.

And, the defense may ask questions to challenge your credibility. You may be asked several very similar questions, in the hope that your answers will be inconsistent. You may be asked questions whose purpose is to show that you had already formed your opinion well before you completed the examination of the suspect. And, you may be asked questions that try to suggest that you eliminated portions of the examination, or only gave very cursory attention to some portions. Guard against these kinds of defense challenges by always performing a complete, painstaking examination, exactly as you have been taught. Standardization will help ensure both consistency and credibility.

E. Test Your Knowledge

The Final Written Examination for this School will take place during Session XXX. This is an opportunity for you to test your knowledge prior to the exam, to verify that you are ready for it. The test that appears on the following pages is similar to the final exam in terms of its content and structure, although it does not (of course) contain the same questions. Take this sample test, and compare your answers with the answer key that appears on the page following the test.

REVIEW SESSION #2

HS 172 R4/93

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:

- o Compile a complete, clear and accurate report documenting the conduct and results of a drug evaluation and classification examination.

In this session, you will have opportunities to participate in conducting complete drug evaluation and classification examinations of "arrested suspects". Of course, these "suspects" will not actually be under the influence of any drug. However, at various points during the examination they will instruct you to record certain measurements and observations. In this way they will supply you with information simulating a possible drug-impaired subject.

When you complete the examination, you will carefully review all of the data you have recorded and decide whether the "suspect" is simulating a person who is:

- (1) under the influence of a drug or drugs; and,
- (2) if so, what category or combination of categories of drugs is causing the simulated "impairment".

A word of caution: it is possible that one or more of these "suspects" will be role-playing unimpaired subjects. That is, in some cases, the correct conclusion may be that the "suspect" is not under the influence of any drug. In addition, it is highly likely that one or more "suspect" will be simulating a person who is under the influence of a combination of drug categories.

At some point during this practice session an instructor will approach you and notify you that you will have to prepare a complete narrative report on your examination of one of the "suspects". The particular "suspect" who will be the subject of your report could be any of the ones you examine. Therefore, it is very important that you take good, comprehensive and detailed notes on each examination.

You will work in this session as a member of a team with two or three fellow students. You and your team mates should "put your heads together" in reaching your conclusions concerning each "suspect"; that is, discuss the "evidence" you have recorded and reach a joint conclusion. You should divide the report writing work among yourselves in some equitable fashion. And, you should each take at least one turn at conducting the complete examination.

This is a very important session in this course. It is here that your instructors will begin to determine whether you have the skills needed to progress to Certification Training, or whether you need more practice before you are ready to move on.

SESSION XXX

TRANSITION TO CERTIFICATION TRAINING

HS 172 R4/93

SESSION XXX TRANSITION TO CERTIFICATION TRAINING

During this session, the participants will:

- o Demonstrate his or her mastery of the knowledge and skills the course was intended to help him or her develop.
- o Summarize the key topics covered.
- o Offer comments and suggestions for improving the course.
- o Receive his or her assignments for Certification Training.

This session completes the first, or classroom phase, of your training as a candidate drug recognition expert. Among other things, three important events will take place during this session.

- (1) You will take a written, multiple-choice test, designed to measure your knowledge of drugs, drug recognition examination procedures, and related facts. This knowledge test is one indicator of whether you are ready for Certification Training.
- (2) You will take a proficiency examination, in which you will demonstrate your skills in conducting the drug evaluation and classification examination. This skill test is the other indicator of your readiness for the next phase.
- (3) You will complete a written -- but anonymous -- critique form, which gives you a chance to express your opinions about this course and the instructors. This information is very important. It will help your department improve the quality of the training, and to maintain the quality at the highest possible level.

A. Preparing for the Knowledge Examination

The following are not the questions that will appear on the knowledge examination. But some of them are quite similar to the examination questions, and all of them address subject matter that will be covered on the test.

If you can answer these questions correctly, you will have no problem in scoring very well on the knowledge examination.

Answers appear on the pages following the questions.

B. Preparing for the Proficiency Examination

On the three pages that immediately follow, you will find a copy of the Proficiency Examination Checklist that your instructors will use to assess your skills in conducting the drug evaluation and classification procedures. Review the Checklist carefully. It will give you a good idea of what factors will be considered in your examination, i.e., the errors of omission or commission that you need to avoid.

Practice conducting the drug evaluation and classification procedures before submitting yourself to this proficiency examination. Make sure you can administer the procedures flawlessly. It would be a good idea to conduct some after-class-hours practice with fellow students, so that you can coach each other and help each other progress to Certification Training.

C. The Anonymous Written Critique

The Student's Critique Form appears on the following pages. You will have time, during the final session of the course, to complete this form and offer any comments that you think are appropriate. It will be especially helpful to your department to hear your suggestions for improving this training.

Please look over the critique form prior to the final session, to start organizing your thoughts and feelings about the instruction you have received.

D. Maintaining the Log of Drug Influence Evaluations

Beginning with your first night of Certification Training, and continuing throughout your career as a DRE, you will maintain a log of all persons you examine for possible drug impairment. The log is your personal record of your work as a DRE, and it will have a major impact on three things that should be of cable importance to you:

- (1) Whether or not your instructors can recommend you for your initial certification as a DRE.
- (2) Whether or not you qualify for re-certification, when your initial certification expires.
- (3) Whether or not the trial judge in a particular drug impairment case qualifies you as an expert, and allows you to render your opinion as evidence.

Under the National Program Standards established by NHTSA and IACP, your instructors cannot endorse you for certification by IACP unless your Log of Drug Influence Evaluations is up-to-date, complete and accurate. The next-to-last line on the Certification Progress Log that you received at the beginning of the PRE-School, and that you handed back in at the start of this School, is titled "Rolling" Log Approved. ("Rolling" Log is the informal name of the Log of Drug Influence Evaluations.) If a valid instructor's signature does not appear on that line, IACP cannot grant you a certificate. Once you do receive a certificate, it usually will be valid for two years. At that time, to qualify for re-certification, you must submit a copy of the entries in your "Rolling" Log since you were certified, as proof that you have maintained your proficiency. And, each time you go to court as a DRE, you must bring your "Rolling" Log along, to help establish your credentials as an expert.

What is the "Rolling" Log? Five copies of it appear on the final pages of this manual. Remove one of those copies now, so that you can refer to it as you read the instructions for entering information on it.

At the top of the Log, there is a space in which you will print your name ("Drug Recognition Expert"); another space for the page number (obviously, the first page will be #1, the second #2, and so on; as you continue your career as a DRE, the page number will grow very large); and, a third space in which to print your IACP Certificate Number. Until you have completed your certification training, you will print the word "STUDENT" in that space.

Each subsequent line of the log corresponds to a suspect examination in which you participated. In the "Control Number" box, you will print the number that you assign to the examination; i.e., if this is the seventh examination in which you participated in 1993, the control number would be 93-7. If you were the actual examining DRE for this particular case, you need not print anything other than the control number in that box. But if you served only as the recorder, you must print "RECORDER" in the box, immediately below the control number. Likewise, if you were participating only as a witness, you will print "WITNESS" in the box.

In the box to the right of the control number, you will print the suspect's full name (last, first, middle initial); further to the right, enter the booking number. The booking number is whatever control number the responsible law enforcement agency assigned to track this particular arrestee. In some instances, there may be no booking number. For example, you may have an opportunity to examine a person who is receiving drugs in a clinical setting, and no arrest is involved. Or, the person you are examining might be someone already incarcerated in the jail who agrees to submit to the examination with the understanding that its outcome will not affect his or her particular case; in that instance, the booking number would not be relevant. In any case where there is no relevant booking number, simply print "N/A" in the box.

In the next box, print the date on which the examination began; in other words, an examination that starts one minute before midnight on March 17th is recorded on that date, not on the 18th, despite the fact that almost all of the work took place on the later day.

The next box, of course, is very important. Record your opinion in complete detail. If you conclude that the suspect is not impaired, that is what you will record. If you conclude that he or she is under the influence of alcohol only, that is what you must record. If you believe the suspect is suffering from an injury or illness, print "Medical Rule Out" in the box. Otherwise, print the category or combination of categories of drugs that you believe is causing the impairment. If the suspect has a positive BAC, don't forget to include "alcohol" as one of those.

In the "Toxicologic Results" box, you will print the outcome of all chemical tests performed on the suspect. Obviously, days or weeks will usually pass by before you have the results of blood or urine tests, so you will routinely have to "update" your log. Don't forget to include the BAC obtained from the breath test in this space. And, if the suspect refused to submit to the blood or urine test, indicate that.

In the final box, print the names of persons who witnessed the examination, and include any other appropriate comments. Use the reverse side of the page, or add continuation sheets, if longer comments are appropriate.

Experienced DREs usually maintain two copies of their "Rolling" Logs, to ensure preservation of this most important record.

Course Location _____

Date _____

**DRT 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.

	1	2	3	4	5
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 DRT 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 DRT 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 DRT 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 DRT School is at least one day too short.
Agree Disagree Not Sure

