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The Drug Evaluation and Classification (DEC) Program

Targeting Hardcore Impaired Drivers

American Prosecutors Research Institute

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Targeting Hardcore Impaired Drivers

October 2004

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DEDICATION

Our efforts are dedicated to the hundreds of thousands of impaired driving victims and their families and the thousands of professionals and advocates working to alleviate the impaired driving problem.

This monograph is dedicated to the following individuals for their tireless efforts to promote traffic safety:

Dr. Marcelline Burns is a research psychologist. She is the co-founder of the Southern California Research Institute in Los Angeles, California. Dr. Burns is a “living legend;” she is one of the world’s foremost authorities on the impairing effects of alcohol and other drugs on human performance and behavior. A true pioneer, she and her colleagues developed the Standardized Field Sobriety Tests (SFSTs) through a grant bestowed by the National Highway Traffic Safety Administration (NHTSA). Dr. Burns consults and provides expert testimony concerning the effects of alcohol and drugs’ effects on human performance and driving, sobriety tests and drug recognition methods. Courts around the country have relied upon her work and testimony in admitting SFST testimony and evidence. Dr. Burns also serves on various traffic safety committees and frequently speaks at professional conferences.

Mr. Dick Tarney and Mrs. Karen Tarney were traveling home on Good Friday in 1989. Mr. Tarney looked into the rear view mirror and warned his wife, “we’re going to be hit.” In a matter of seconds, a 27 year old drug-impaired driver with no driver’s license or insurance changed their lives forever. Mr. Tarney suffered minor back injuries, but Mrs. Tarney was not so lucky; she endured 17 surgeries over eight years. Inspired by their suffering, the Tarney’s founded Citizens AgaiNst Drug Impaired Drivers (C.A.N.D.I.D.). C.A.N.D.I.D.’s mission is to “reduce the number of injuries and fatalities due to drug impaired drivers by increasing the awareness of the risks involved when driving under the influence of illicit, prescription or over-the-counter drugs.” C.A.N.D.I.D. is a strong supporter of the Drug Evaluation and Classification (DEC) Program. In a world where many people are quick to criticize and slow to assist (or even appreciate), C.A.N.D.I.D.’s efforts are priceless.

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Additionally, we would like to recognize the many prosecutors, law enforcement officers, and highway safety personnel whose thoughts and writings provided a foundation for these articles, especially NHTSA Senior Highway Safety Specialist Sandy Richardson. This publication would not have been possible without their wisdom and support. Finally, I would like to thank NTLC Program Assistant Jennifer Torre for her consistent dedication and support.

We hope you find this monograph useful. If you have further questions, please feel free to contact us and/or visit our Web site at http://www.ndaa-apri.org/apri/programs/traffic/ntlc_home.html.

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THE DRUG RECOGNITION EXPERT (DRE) PROGRAM: SAVING LIVES AND TAKING PRISONERS

Introduction

Over 10 years ago, the American Medical Association (AMA) recognized that alcohol related traffic crashes are a “leading cause of unintentional injury and deaths and a substantial contributor to health-care costs in the United States.”¹ Unfortunately, impaired drivers remain a scourge on society. Over 17,000 people died in alcohol- or drug-related car crashes in 2003.² Another quarter million people were injured.³

Millions of Americans use and/or abuse drugs.⁴ Therefore, it is no surprise that drugs other than alcohol played a role in many fatality crashes. In 1994, researchers examined almost 2,000 fatality cases from seven states and determined that 18 percent of the cases involved drugs other than alcohol.⁵ In a California study of young male drivers killed in automobile crashes, researchers found over 40 percent of the men had drugs other than alcohol in their blood streams at the time of the crash.⁶ Similarly, a Canadian study found that over 30 percent of drivers killed in car crashes in Quebec had one or more drugs other than alcohol in their blood or urine.⁷

Sadly, approximately 30 percent of Americans will be involved in an alcohol- or drug-related crash during their lifetimes.⁸ Alcohol- and drug-related crashes cost American taxpayers over one hundred *billion* dollars a year.⁹ As impressive as these figures are, they may grossly underestimate the impaired driver problem.¹⁰ Traffic crashes today are the single greatest cause of death in the United States for every age group between two and 33 years.¹¹

Traditionally, police officers and prosecutors had a difficult time identifying and prosecuting drug impaired drivers.¹² Fortunately, law enforcement developed a solution: the Drug Evaluation and Classification (DEC) Program. The program enables police officers who are certified as Drug Recognition Experts or Drug Recognition Evaluators (DRE) to determine whether a suspect is under the influence of alcohol and/or drugs and, if so, what category of drugs, by combining basic medical knowledge about drug pharmacodynamics with validated psychomotor tests.

The drug evaluation and classification process is standardized and systematic. It utilizes a variety of readily observable signs and symptoms that are accepted in the medical community as reliable indicators of drug influence. During a DRE examination, the DRE takes the suspect’s brief medical history and assesses the suspect’s pulse, blood pressure, body temperature, pupil size and reaction to light, and psychomotor function. The DRE also examines the suspect’s ocular tracking, smooth pursuit and Horizontal and Vertical Gaze Nystagmus (HGN and VGN).

The program is employed by hundreds of law enforcement agencies at the local, state and federal levels and by private industry. In addition, the program is endorsed by numerous civilian associations and organizations including the Dade County Medical Association (DCMA),¹³ Broward County Medical Association (BCMA),¹⁴ Broward County Psychiatric Society (BCPS), Hawaii Medical Association (HMA), National Safety Council’s (NSC) Committee on Alcohol and Other Drugs,¹⁵ American Bar Association and American Civil Liberties Union (ACLU).¹⁶ The 1988 Surgeon General’s Workshop on Drunk Driving Panel on Law Enforcement also endorsed the program.¹⁷ At least two states, Maine and Maryland, enacted statutes adopting the DEC Program.¹⁸ The American Optometric Association endorsed one of the program’s components, the HGN test.¹⁹

To successfully explain the evidence and issues to jurors in Driving Under the Influence of Drugs (DUID) and DRE cases, prosecutors must understand the basics of the DEC Program. This publication is designed to provide prosecutors with a basic understanding of the drug evaluation and classification process.

History and Development

A DRE is a police officer who is trained to recognize impairment in drivers who are under the influence of drugs other than, or in addition to, alcohol. The International Association of Chiefs of Police (IACP) coordinates the National Drug Evaluation and Classification (DEC) Program; the National Highway Traffic Safety Administration (NHTSA) funds it.

The Los Angeles Police Department (LAPD) originated the program.²⁰ In the early 1970's, LAPD officers noticed that many of the individuals they arrested for driving under the influence of alcohol registered very low or zero alcohol concentration readings. The officers reasonably suspected that the arrestees were under the influence of drugs, but lacked the knowledge and skills to support their suspicions. In response, two LAPD sergeants collaborated with various medical doctors, research psychologists and other medical professionals to develop a simple, standardized procedure for recognizing drug influence and impairment. Their efforts culminated in the development of a multi-step protocol and the first DRE program. The LAPD formally recognized the program in 1979.²¹

The LAPD's DRE Program attracted NHTSA's attention in the early 1980's. NHTSA worked with the LAPD to develop a standardized protocol, which led to the development of the DEC Program. During the ensuing years, NHTSA, other agencies and research groups examined the DEC Program. These studies demonstrated that a properly trained DRE can successfully identify drug impairment and accurately determine the category of drugs causing such impairment.²²

In 1987, NHTSA started DEC pilot programs in Arizona, Colorado, New York and Virginia, and added Utah, California, and Indiana in 1988. Commencing in 1989, IACP and NHTSA expanded the DEC Program across the country. Currently, 37 states, the District of Columbia, three branches of the military, the Internal Revenue Service (IRS) and several countries around the world employ the DEC Program.

DRE Training and Certification

Many police departments handpick all DRE candidates. DRE candidates must be certified in, and proficient in, the administration of the standardized field sobriety tests (SFSTs), including the HGN test, *prior* to their acceptance into the DRE pre-school. DRE candidates undergo over 100 hours of intensive classroom instruction and formal training, including a basic overview of field sobriety tests, human physiology and drug pharmacology, and an internship period where the DRE conducts actual drug evaluations under the tutelage of a certified DRE instructor. To achieve certification as a DRE, the candidate's opinions must be confirmed by laboratory analysis of biological specimens collected during the training examinations.

At the DRE pre-school and school, DREs receive nine days of specialized DRE training concerning the effects of alcohol and other drugs on the human body. They also participate in several alcohol workshops and must pass a final exam before graduation. After graduation, DREs undergo a lengthy certification process. During this process, prospective DREs must perform a minimum of 12 supervised evaluations. The laboratory must corroborate their opinions 75 percent of the time before they can be certified.

The DRE Protocol

The DRE protocol is a standardized and systematic method of examining a Driving Under the Influence of Drugs (DUID) 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 like-

ly cause of the impairment.”²³ The process is *systematic* “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.”²⁴ The DRE evaluation is *standardized* because “it is conducted in exactly the same way, by every drug recognition expert, for every suspect” whenever possible.²⁵ Standardization is important because it makes the officers better observers, helps to avoid errors, allows for easy comparison of DRE evaluations, and promotes professionalism.

Medical Rule Outs

The DREs’ training and knowledge are not just important for investigative purposes. Because of their enhanced training, DREs are better equipped than other officers to identify medical impairments. Indeed, DREs have spared an untold number of people in the midst of medical crisis from being wrongfully charged with DUID.

Medical Rule Outs

In Kennewick, Washington, an officer discovered a man slumped over in his car in the middle of the road. The officer smelled no alcohol and believed that the man had overdosed on drugs. The officer requested a DRE, who determined that the man was diabetic and had missed an insulin shot.²⁶ In Oregon, a DRE dispatched a commercial bus driver, having a diabetic reaction, to an emergency room for treatment.²⁷ In Mesa, Arizona, DREs released and obtained medical help for two DUI suspects who were actually suffering from a diabetic condition. Another DRE referred a suspect to a doctor “because the DRE had detected a muscular problem . . . the suspect later called the police department to thank the DRE because the suspect was diagnosed as having M.S.”²⁸

The 12 Step Protocol²⁹

The DREs utilize a 12-step process to assess their suspects:

1. *Breath Alcohol Test*

The arresting officer reviews the subject’s breath alcohol concentration (BrAC) test results and determines whether the subject’s apparent impairment is consistent with the subject’s BrAC. If the subject’s impairment is consistent with the BrAC, the officer will not call a DRE. If the impairment is *not* explained by the BrAC, the officer requests a DRE evaluation.

2. *Interview of the Arresting Officer*

The DRE commences his or her investigation by reviewing the BrAC test results and discussing the circumstances of the arrest with the arresting officer(s). The DRE asks about the subject’s behavior, appearance, and driving pattern. The DRE also asks whether the subject made any statements and whether the arresting officer(s) found any other relevant evidence, like a small pipe or a baggie.

3. *Preliminary Examination and First Pulse*

The DRE conducts a preliminary examination, in large part to ascertain whether the subject may be suffering from an injury or other condition unrelated to drugs. Accordingly, the DRE asks the subject a series of standard questions relating to the subject’s health and recent ingestion of food, alcohol and drugs, including prescribed medications. The DRE observes the subject’s attitude, coordination, speech, breath and face. The DRE

also determines whether the subject's pupils are of equal size and whether the subject's eyes can follow a moving stimulus and track equally. If there is greater than 0.05 millimeters difference in the subject's eyes, he or she may be suffering from a neurological disorder, disease or brain injury.

The DRE also looks for HGN and takes the subject's pulse for the first of three times (see below). The DRE takes each subject's pulse three times to account for nervousness, check for consistency and determine if the subject is getting worse or better. If the DRE believes that the subject *may* be suffering from a significant medical condition, he or she must seek help immediately. If the DRE believes that the subject's condition is drug related, the evaluation continues.

4. *Eye Examination*

The DRE examines the subject for horizontal gaze nystagmus (HGN), vertical gaze nystagmus (VGN) and a lack of ocular convergence. A subject lacks convergence if his or her eyes are unable to converge toward the bridge of his nose when a stimulus is moved in. Depressants, inhalants, and phencyclidine (PCP), the so-called DIP drugs, may cause HGN. In addition, the DIP drugs may cause VGN when taken in higher doses. The DIP drugs, as well as cannabis (marijuana), may also cause a lack of convergence.

5. *Divided Attention Psychophysical Tests*

The DRE administers four psychophysical tests: the Romberg Balance, the Walk and Turn, the One Leg Stand, and the Finger to Nose tests. The DRE can accurately determine whether a subject's psychomotor and/or divided attention skills are impaired by administering these tests.

6. *Vital Signs and Second Pulse*

The DRE takes the subject's blood pressure, temperature and pulse. Some drug categories may elevate the vital signs. Others may lower them. Vital signs thus provide much valuable evidence of the presence and influence of a variety of drugs.

7. *Dark Room Examinations*

The DRE estimates the subject's pupil sizes under three different lighting conditions with a pupilometer to determine whether the pupils are dilated, constricted, or normal. Some drugs increase pupil size. Others may decrease pupil size. The DRE also checks for the eyes' reaction to light. Certain drugs may slow the eyes' reaction to light. Finally, the DRE examines the subject's nasal and oral cavities for signs of ingestion.

8. *Examination for Muscle Tone*

The DRE examines the subject's skeletal muscle tone. Certain categories of drugs may cause the muscles to become rigid. Other categories may cause the muscles to become very loose and flaccid.

9. *Check for Injection Sites and Third Pulse*

The DRE examines the subject for injection sites, which may indicate recent use of certain types of drugs. The DRE also takes the subject's pulse for the third and final time.

10. *Subject's Statements and Other Observations*

The DRE typically reads *Miranda*, if he or she has not done so previously, and asks the subject a series of questions regarding the subject's drug use.

11. *Analysis and Opinions of the Evaluator*

Based on the totality of the evaluation, the DRE forms an opinion as to whether the subject is impaired. If

the DRE determines that the subject is impaired, the DRE indicates what category or categories of drugs may have contributed to the subject's impairment. The DRE bases these conclusions on his or her training and experience and the Drug Symptomatology Matrix (see Appendix). The Matrix's value should not be overstated. The Matrix is a tool, nothing more. DREs rely heavily on their general training and experience.

12. *Toxicological Examination*

The DRE requests a urine, blood and/or saliva sample from the subject and sends the sample to the toxicology lab for analysis.

Nothing in or about the DRE protocol is new or novel. The DRE protocol is a compilation of tests that physicians have used for decades to identify and assess alcohol- and/or drug-induced impairment.³⁰

Vital Signs

Alcohol and other drugs can affect a person's pulse, blood pressure and body temperature.³¹ The relationship between foreign substances and vital signs is well documented in the medical literature.³² Different classes of drugs affect people's vital signs differently. For example, central nervous system (CNS) depressants may slow a person's heart rate and blood pressure, while CNS stimulants may increase them.³³

DREs assess their subjects' vital signs using the same instruments and methods doctors have used for decades: thermometers, sphygmomanometers, and stethoscopes.³⁴ Although defense attorneys claim that DREs are not qualified to conduct vital sign examinations, the tests are easy to conduct and the data is simple to interpret.

HGN and VGN

"Nystagmus" is the involuntary jerking of the eye. Alcohol consumption causes distinct nystagmus in the "horizontal" or "lateral" gaze.³⁵ Scientists demonstrated the phenomenon in animals as early as 1842 and in human beings in the early 1900's.³⁶ Physicians have recognized the nystagmus as an accurate and reliable indicator of alcohol and/or drug influence and impairment for a long time.³⁷ There is a direct linear relationship between blood alcohol concentration (BAC) and BrAC and the point where nystagmus starts (referred to as the angle of onset of nystagmus): a person's BAC or BrAC may be *estimated* by subtracting the angle of onset from 50.³⁸ The margin of error for the test is approximately 0.02.³⁹ Thus, a person with an angle of onset of 35 degrees should have a BAC or BrAC of approximately .15 (or between .13-.17). Depressants, inhalants and phencyclidine (PCP) and its analogs also can cause distinct HGN.⁴⁰ However, drugs other than alcohol do not have a linear relationship with nystagmus.

HGN is not just an indicator of impairment; HGN is impairment.⁴¹ Nystagmus impairs the eye's ability to track a moving object. Thus, drivers with pronounced nystagmus observe significantly fewer "traffic aspects" than drivers without nystagmus.⁴² Drugs that cause HGN may cause vertical gaze nystagmus (VGN) when consumed in large doses.

The HGN test DREs employ is easy to perform and objective. Researchers have conducted numerous studies on the HGN test. Virtually every study clearly demonstrates that properly trained police officers can use the test to accurately and reliably identify and assess alcohol and/or drug impairment, as discussed in Sections

Psychophysical Tests

Alcohol and other drugs can impair a person's motor skills, including a person's ability to drive. DREs assess their

subjects' motor skills by utilizing a battery of four "psychophysical" or "psychomotor" tests: the Romberg balance, Walk and Turn, One Leg Stand, and Finger to Nose tests. DREs "score" each subject's performance on these tests according to clearly defined standards.

The DREs did not invent these tests. Most of the procedures are "modifications of those performed by neurologists in diagnosing illness and by pharmacologists in assessing the psychomotor effects of drugs."⁴³ Indeed, physicians have relied on these and/or similar tests for almost 100 years.⁴⁴ Professor E. M. P. Widmark, using a test battery remarkably similar to the DRE protocol, correlated quantitative analyses of body fluids with measures of behavioral impairment in 1914.⁴⁵

Categorization (Classification) of Drug Types

Physicians have long recognized that different types of drugs affect people differently. Nonetheless, drugs may be categorized or classified according to certain shared symptomatology or effects. The DRE categorization process is premised on these long-standing, medically accepted facts.⁴⁶

DREs classify drugs in one of seven categories: Central Nervous System (CNS) Depressants, CNS Stimulants, Hallucinogens, Phencyclidine (PCP) and its analogs, Narcotic Analgesics, Inhalants, and Cannabis. Drugs from each of these categories can affect a person's central nervous system and impair a person's normal faculties, including a person's ability to safely operate a motor vehicle.⁴⁷

Categories

1. CNS Depressants

CNS depressants "slow" down a person's brain and central nervous system. Alcohol is the most prominent CNS depressant. Other popular CNS depressants include anti-anxiety tranquilizers, anti-depressants, anti-psychotic tranquilizers and various derivatives of barbituric acid. It seems anomalous to classify "anti-depressants" as depressants; however, medical doctors, toxicologists and DREs generally classify drugs according to their effect on the brain and body, not their effect on mood. Specific drugs include Xanax, Valium, Rohypnol, Halcion, Soma, and GHB.

2. CNS Stimulants

CNS stimulants "speed up" a person's mind and central nervous system. Cocaine and methamphetamine are the two most commonly abused stimulants. Ritalin, Cylert, ephedrine, and caffeine are other well-known stimulants.

3. Hallucinogens

Hallucinogens impair a user's ability to perceive reality by distorting perceptions of sight, sound, touch and odors. They may even cause "synesthesia," a phenomenon where a person "mixes" the senses. For example, the person may "see" sounds or "hear" colors. This category includes natural substances like peyote, psilocybin and morning glory seeds, as well as synthetic substances like lysergic acid (LSD) and Ecstasy (MDMA).

4. PCP and its Analogs

PCP and its analogs, including Ketamine, are "dissociative anesthetics." They are extremely dangerous. People under the influence of PCP may be very violent.

5. Narcotic Analgesics

Narcotic analgesics include opiate class drugs and similar synthetic drugs. Most prescription painkillers are nar-

cotic analgesics. This category includes heroin, morphine, codeine, methadone, Oxycontin, Vicodin, Percodan, Fentanyl, Dilaudid, and Demerol. Narcotic analgesics are the only drugs that routinely constrict a person's pupils. Narcotic analgesics are highly addictive.

6. Inhalants

Named for their primary method of ingestion, inhalants are breathable chemicals, including volatile solvents, propellant gases or aerosols and some anesthetic gases. This group includes glue, gasoline, paint thinner, hair spray, insecticides, nitrous oxide ("laughing gas"), amyl nitrite, and ether. Some solvents, like aerosols and anesthetic gases are extremely fast acting, short duration substances, while others, including volatile solvents, may produce effects for several hours.

7. Cannabis

Cannabis is the scientific name for marijuana. The active ingredient in cannabis is delta-9 tetrahydrocannabinol, or THC. This category includes cannabinoids and synthetics like dronabinol.

The DRE Symptomatology Matrix

As noted above, DREs classify each subject's impairment according to the relevant signs and symptoms, the DREs' training and experience, and the DRE Symptomatology Matrix. The Matrix contains a synopsis of the signs and symptoms one would expect to see if someone was under the influence of a particular class of drugs (see Appendix).

Poly Drug Use

Studies and research demonstrate that drug users take multiple drugs at one time. This so-called "poly drug use" complicates the DREs' categorization task.⁴⁸ The drug categories affect the users or "work together" in one of four ways:

1. The Null Effect: "Nothing Plus Nothing Equals Nothing"

The "null effect" is a misnomer. When a person takes two drugs that do not cause a particular effect or effect(s), the combination will not cause the effect(s). For example, if a person takes a stimulant and a hallucinogen, neither of which causes nystagmus, the combination will not cause nystagmus.

2. Additive Effect: "Something Plus Something Equals a Lot More of Something"

When a person ingests two substances that cause the same effect or effects, the combination will cause enhanced effect(s). If a person ingests a stimulant and PCP, both of which increase pulse rate, the combination will increase the person's pulse rate.

3. Antagonistic Effect: "Something Plus its Opposite Equals Anything"

When someone ingests two drugs that cause opposite effects, the end result is unpredictable; it is dependent on numerous factors including dose, method of ingestion, duration of effect, and tolerance. If a person consumes a "speedball" (a stimulant, usually cocaine, which dilates the pupils), simultaneously with a narcotic analgesic, (typically heroin, which constricts the pupils), the effects will vary.

4. Overlapping Effect: "Something Plus Nothing Equals Something"

When an individual takes two drugs, one of which causes a particular effect that the other does not cause, the combination will cause the effect. If a person takes a depressant, which causes nystagmus, and a stimulant, which does not, the person will have nystagmus.

The DRE's Accuracy and Reliability

The medical literature is replete with articles and studies that support the DEC Program's underlying theories and procedures.⁴⁹ During the past 20 years, researchers and medical professionals have examined and studied the DEC Program and/or one or more of its components.⁵⁰ Many of these studies are readily available (you may contact the National Traffic Law Center [NTLC] for copies). Additionally, several agencies evaluated their local DEC programs (see below for an example).⁵¹ The DREs' accuracy rates varied. Most programs demonstrated corroboration rates in the high eighties (80s). This is particularly impressive given that most laboratories around the country lack the resources to test for many types of drugs (particularly the newest synthetics). Still, the examinations, studies and evaluations conclusively demonstrated that: (1) the protocol and its components, including the psychomotor and HGN tests, provide an accurate and reliable means for identifying alcohol and drug impairment; and (2) DREs can accurately and reliably identify drug-impaired drivers.

The DEC Program incorporates numerous safeguards to ensure the accuracy of DRE opinions and conclusions. First, the DEC Program is designed to err in favor of the subject. If a DRE is not certain that a subject is impaired by drugs, then he or she must find that a subject is not under the influence of drugs. Second, DREs ask their subjects if they have any medical conditions that may contribute to their impairment. Third, because DREs record all of their observations in their reports, the observations (and resulting conclusions) are subject to peer review. Fourth, DREs collect urine or blood samples for toxicological testing during the evaluation process.

Miami-Dade SFST/DRE Study

In 1994, the Miami-Dade County State Attorney's Office (SAO) collaborated with some local officers to conduct a retrospective study of the county's DUI/DRE Program. The SAO reviewed Miami-Dade County's three largest police departments' arrest logs and DRE evaluations for 1991 through 1993. The SAO examined 25,129 total DUI arrests, including 1,181 DRE cases. The SAO examined DUI alcohol cases and looked at the SFSTs' efficacy in those cases because DREs utilize the same SFSTs as other Miami-Dade County police officers (the SFSTs identify impairment, but are not specific to alcohol or drugs).

Among the 25,129 arrests, the SAO found that 88.5 percent of the arrestees who provided breath alcohol samples blew a 0.08 or above. 0.08 is the "legal limit"⁵² in Florida. 91 percent of the drivers blew 0.08 or above or refused to provide a breath sample. The refusals are significant because Florida law requires DUI arrestees to provide breath samples upon request. In the early 1990's, a person who refused to provide a breath sample forfeited his or her driver's license for one year for a first refusal or 18 months for a second or subsequent refusal.

Nine percent of the drivers blew below 0.08. This figure, of course, does not represent a false arrest rate for two reasons. First, the figure does not account for those people who were under the influence of drugs. As the review showed, most of the arrestees who blew below the legal limit were under the influence of drugs other than alcohol. Second, there is no truly "safe" BAC at which people can drive.⁵³ Studies demonstrate that impairment begins at the lowest recordable levels.⁵⁴ Indeed, the American Medical Association's (AMA) Council on Scientific Affairs recognizes that, "*significant* alcohol involvement in injury-causing road crashes begins at a driver BAC of 0.05%."⁵⁵ Thus, the AMA⁵⁶ and the American College of Emergency Physicians (ACEP)⁵⁷ advocate a legal limit of 0.05. 93.8

percent of the drivers who provided breath samples blew at or above the AMA recommended 0.05 limit. 95 percent blew 0.05 or above or refused to provide a breath sample.⁵⁸

Among the 1,181 DRE cases, the SAO found that Miami-Dade County's DREs correctly identified drug impairment 92.3 percent of the time. This figure likely underestimates the DREs' ability to identify drug use and impairment because the Miami-Dade County's Forensic Toxicology Laboratory was able to test for only a handful of the most commonly used drugs in the early 1990's. Of the cases where the DREs correctly identified drug impairment, they correctly identified the impairing drug category 98 percent of the time. Excluding alcohol, they correctly identified the drug category in 93.9 percent of the cases.

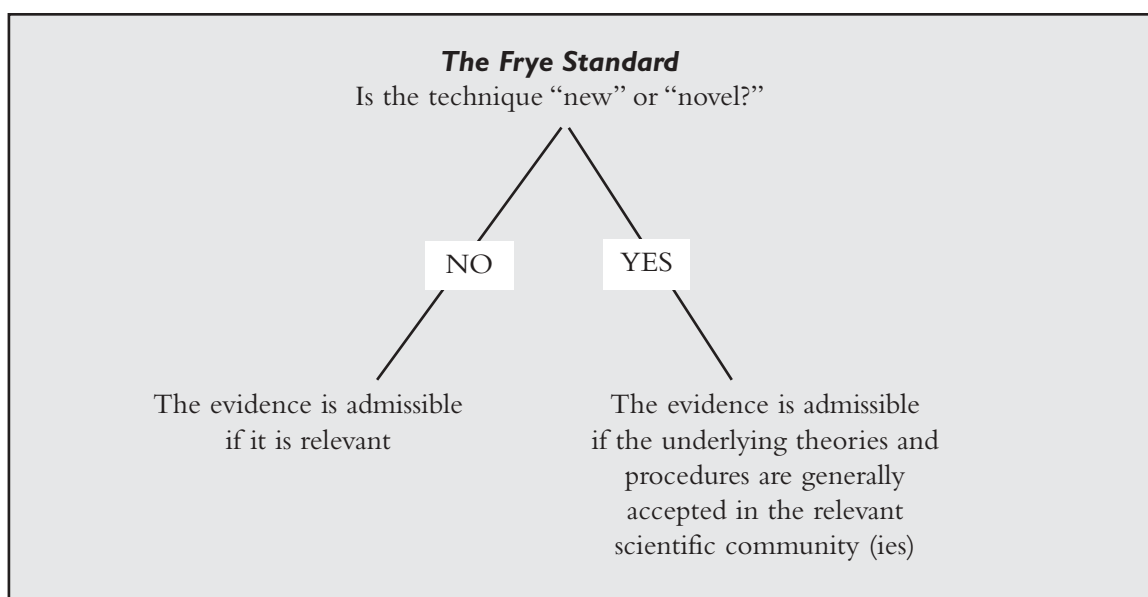
Finally, the SAO reviewed two of the most experienced officers' HGN logs, comprising 568 cases. The SAO found that the officers correctly determined that arrestees were under the influence of alcohol and/or drugs over 97 percent of the time.

The Admissibility of DRE Testimony and Evidence

The DRE process is not a test. Rather, it is a method for collecting evidence, a tried and true compilation of accepted medical theories and practices, as noted above. Nevertheless, creative defense attorneys challenge the admissibility of DRE testimony and evidence, including the psychomotor and HGN tests, on several grounds.

The Admissibility of Scientific Evidence: Frye and Daubert

American courts employ either the *Frye* or *Daubert* standard for determining the admissibility of scientific evidence. The *Frye* standard is the traditional test for determining the admissibility of scientific evidence. The standard derives from *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923), a case involving the admissibility of the systolic blood pressure deception test (the precursor to today's polygraph test). Essentially, *Frye* courts admit *new or novel* scientific evidence only if the evidence is "generally accepted" in the "relevant scientific communities."⁵⁹ The "general acceptance" standard does not require "unanimity of view."⁶⁰ The *Frye* standard does not apply to evidence that has passed from the stage of experimentation to reasonable demonstrability. This distinction makes sense because the purpose of requiring general acceptance is to ensure that a party cannot gain an unfair advantage by finding an obscure witness who will attest to obscure techniques or "junk science" without being subjected to any kind of real scrutiny. Courts recognize that litigants should have no difficulty finding witnesses to testify about older techniques because the relevant scientific communities would have had time to examine them. The *Frye* general acceptance standard applies to methods and techniques only; it does not apply to pure expert opinion testimony based on training and experience. In other words, an expert's opinion itself need not be generally accepted.⁶¹ If the evidence is not new or novel, the evidence is admissible if it is sufficiently reliable to be relevant.



The *Daubert* standard derives from *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). Some courts refer to the standard as the *Daubert/Kumho* standard because the Supreme Court readdressed and reaffirmed the standard in *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999). Pursuant to *Daubert*, courts serve as a “gatekeeper” for all scientific evidence, regardless of newness or novelty. Scientific evidence is admissible if the court determines that the underlying “reasoning or methodology” is “scientifically valid.” Courts assess the evidence by considering four factors: (1) whether the opinions offered are testable; (2) whether the methods or principles used to reach the opinions have been subject to peer review evaluation; (3) whether a known error rate can be identified with respect to the methods or principles underlying the opinion; and (4) whether the opinion rests on methodology that is generally accepted within the relevant scientific or technical community (ies).

Under either standard, scientific evidence need not be “conclusive” to be admissible. Generally, experts may express their opinions if they can do so “within a reasonable degree of certainty.”⁶² Indeed, courts routinely admit “probabilistic” evidence like DNA analysis, serological tests, and gun shot residue (GSR) particle analysis.⁶³

DRE Case Law

This section summarizes decisions concerning the DRE protocol. For a discussion of HGN specific case law, please refer to the NTLC web site resource section located at http://www.ndaa-apri.org/apri/programs/traffic/legal_issues_resources.html.

Frye Jurisdictions

Every court that considered the admissibility of DRE testimony and evidence ruled in the State’s favor, except one.

Decisions Admitting DRE Testimony and Evidence

In 1990, an Arizona court considered the admissibility of DRE testimony for the first time in *State v. Johnson and Rodriguez*, Case Nos. 90056865 and 90035883 (Ariz. City Ct. Nov. 2, 1990), review denied, *Dayton, Johnson, et al v.*

Honorable Rita Jett, 90056865 et seq.; CV-91-0488-SA (Ariz. May 7, 1992)(unpublished opinions). The judge determined that “the reliability and veracity of the conclusions reached by properly trained DRE officers can be amply supported by the results of the Los Angeles Study and the Johns Hopkins University Study.” The defense filed an appeal. On May 7, 1992, the Arizona Supreme Court heard oral argument in a special action proceeding. In oral argument, Justice Corcoran recognized that DRE testimony regarding drug impairment is very similar to traditional police testimony regarding alcohol impairment. Chief Justice Feldman further observed that “the component examination procedures had been established for fifty years.” Accordingly, the Justices of the Arizona Supreme Court unanimously declined to apply the *Frye* test to the DRE protocol and refused jurisdiction to review the lower court’s decision.

In 1991, a New York court conducted the first DRE *Frye* hearing. See *People v. Quinn*, 153 Misc.2d 139, 580 N.Y.S.2d 818 (N.Y.D.C. 1991), *overturned on alternative grounds*, 607 N.Y.S.2d 534, 158 Misc.2d 1015 (N.Y. 1993). The court held that the evidence is admissible, finding that “[t]he protocol is relatively simple” and that the “HGN test and the DRE protocol meet the standards enunciated by *Frye* and *Middleton*.” Other court decisions followed. In *New York v. Villeneuve*, 232 A.D.2d 892, 649 N.Y.S.2d 80 (N.Y. App. Div. 3d Dept. 1996), the court rejected the defendant’s argument that a DRE was not qualified to testify as an expert.

In *People v. Hernandez*, Criminal Action No. 92M 181 (Colo. Boulder County Ct. Aug. 14, 1992) (unpublished opinion) the court determined that DRE testimony is admissible because it is relevant. The court ruled that *Frye* is inapplicable because the evidence is not new or novel. Other Colorado County Court judges reached similar conclusions in *Colorado v. Constantino*, Criminal Action No. 96M1511 (Colo. Mesa County Ct. Jan. 15, 1998) (unpublished opinion) and *Colorado v. Turner*, Criminal Action No. 92T413 (Colo. Kit Carson County Ct. Nov. 29, 1993)(unpublished opinion).

In *State v. Klawitter*, 518 N.W.2d 577 (Minn. 1994), the courts found that the DRE protocol is not new or novel. The court ruled that DRE testimony and evidence is admissible because it is accurate, reliable and generally accepted in the relevant scientific communities. In *Williams v. State*, 710 So. 2d 24 (Fla. 3d DCA 1998), *rehearing denied*, 725 So. 2d 1111 (Fla. 1998), the court determined that the majority of the protocol and subtests is not “scientific” within the meaning of *Frye* because they are “clearly within the common experience and understanding of the average person.” The court ruled that the HGN, VGN and Lack of Convergence tests are “quasi-scientific.” The court declined to apply the general acceptance standard because the tests are not new or novel. Finally, the court held that the entire protocol is admissible because the underlying tests, theories and procedures are generally accepted to be accurate and reliable.

In *Nebraska v. Pride*, Case No. CR97-2770 (Neb. Hall County Ct. December 30, 1998) (unpublished opinion), the court applied the *Frye* standard and ruled that the protocol is generally accepted in the relevant scientific communities. In *Utah v. Layman*, 953 P.2d 782 (Utah 1998), the court determined that DRE testimony is opinion, rather than scientific testimony. Therefore, the court ruled that the state’s version of the *Frye* standard did not apply and that the trial court did not err when it admitted the evidence. In *Washington v. Baity*, 991 P.2d 1151, 140 Wn.2d 1 (Wash. 2000), the court determined that *Frye* applies to the protocol because the process has “scientific elements.” The Court further found that the DREs’ use of the HGN test to detect certain drugs is new or novel. Still, the court admitted the evidence, finding that the protocol and its parts are generally accepted in the relevant scientific communities. Finally, in *State v. Novak*, Case No. 12-K-03-000404 (Md. Hartford County August 25, 2004) (oral opinion), the court held that the protocol is admissible under *Frye*.

Decisions Limiting the DREs' Opinions

In an aberrant opinion, a Baltimore judge ruled DRE testimony inadmissible. *State v. Squire*, No. 892099008 (Md. Cir. Ct. 1992). The judge indicated in an oral opinion that she “had no problem with [the field sobriety tests] and finds [sic] that they are reasonably, I think accepted, generally accepted throughout the country in the scientific community as being an indicator of impairment The Drug Recognition Expert Program has thus far in my record proved to be a good index, a good probability, just as field sobriety tests are good indices, good probabilities that one is under the influence of drugs.” Thus, the judge said that “[she had] no problem with the testimony from the Drug Recognition Expert” as to impairment and noted that she could “think of no reason whatsoever why the examining officer should be precluded from indicating the results of the field sobriety test they have presented and I have no reason that I can think of why the drug expert cannot be able to testify as to his observations of the defendant.” Still, the judge expressed a concern about what she considered a dearth of literature and studies on the program and held that “there is [not] a relevant scientific community whose general consensus is that the Drug Recognition Program with nothing else is sufficiently reliable to indicate that one is under the influence of a specific drug or even a specific category of drugs” and ruled that DREs may not testify in their expert opinion that a defendant was under the influence of drugs.

The court’s decision is inconsistent with the evidence (as described above) and *Frye* case law. *Frye* applies to a method’s underlying theories and procedures, not to the resulting opinion testimony.⁶⁴ It is unclear whether the court had the benefit of the aforementioned studies, literature and case law.

Daubert Jurisdictions

Every *Daubert* court that considered the admissibility of DRE testimony and evidence ruled in the government’s favor. In *United States v. Everett*, 972 F.Supp. 1313 (D.C. Nev. 1997), the court determined that *Daubert* did not apply to DRE evidence because the protocol is not “scientific.” The court held that DRE testimony is admissible to assist the trier of fact.⁶⁵ An Iowa court reached an identical conclusion in *Iowa v. Sanders*, No. OWCR041844 (Iowa Johnson County D.C. October 31, 1997) (unpublished opinion). In *Oregon v. Sampson*, 6 P.3d 543, 167 Ore. App. 489 (Or. Ct. App. 2000), the court engaged in a *Daubert* type analysis, ruling that DRE testimony and evidence is admissible. In *State v. Cheung*, Case Nos. 098304039 and 098304512 (Haw. Dist. Ct. April 21, 1999) (unpublished opinion), the court determined that neither *Frye* nor *Daubert* applied to DRE evidence because the procedures are not new or novel and because the protocol involved technical, not scientific, knowledge. The court also ruled that the protocol is admissible because it applied established and accepted scientific principles and produces an accurate and reliable result.

Finally, the court indicated that the evidence is admissible even under *Frye* and *Daubert*.⁶⁶ In *State v. Aleman*, Case No. CR-20003-00025 (N.M. County Ct. April 15, 2004) (unpublished opinion), the court admitted DRE testimony and evidence, holding that the “protocols are the application or incorporation of traditional techniques in the biology, physiology, anatomy, chemistry, pharmacology and toxicology fields. . . . [and that the] evaluation method is generally accepted in the particular scientific field of forensic toxicology.” Similarly, in *State v. Cubrich*, No. CR 03-8203 (Neb. County Ct. August 29, 2004) (unpublished opinion), the court found that the 12 step protocol “has been recognized in the scientific community, including physicians, ophthalmologists, and forensic toxicologists, as a dependable methodology by which an officer, properly trained, can identify impairment and the category of drug(s) which are impairing the subject’s cognitive and physical capabilities,” and admitted the evidence.

Common Defense Challenges to the Protocol

Claim: DRE Procedures are “Experimental” (“New or Novel”)

Response: The DRE procedures are not new or novel; as noted above, law enforcement borrowed the program’s underlying theories and practices from the medical profession. A medical principle or method does not become “new” or “novel” simply because a non-physician employs it. The laws of physics, biology and chemistry are not suspended in a courtroom; they do not change simply because a police officer testifies about them.

Claim: The Tests are “Irrelevant” Because they Measure “Abnormal Faculties”

Response: Although people normally do not stand at attention and touch their noses or stand on one leg for 30 seconds, they normally are capable of doing so. Additionally, motorists often are required (lawfully and otherwise) to respond to “abnormal” or unusual situations, such as emergencies, and their abilities to handle emergency situations are impaired at very low dosages.⁶⁷

Claim: HGN Appears at Low BrACs or BACs and Remains After a Person “Sobers Up”

Response: Defense attorneys cite articles and studies pertaining to “positional alcohol nystagmus” (PAN), rather than HGN. Unfortunately, several courts, most notably the Kansas Supreme Court,⁶⁸ accepted this argument. This claim is misplaced.⁶⁹ Unlike HGN, PAN only is visible when a person turns his or her head to the side.⁷⁰ Police officers, however, require their subjects to face forward. Thus, “when the HGN test is performed correctly, PAN is not, and can never be, a factor.”⁷¹

Claim: The Tests are “Subjective” and Subject to Error

Response: As noted earlier, the current field sobriety test battery and the DRE protocol are standardized, systematic and objective.⁷² Police officers perform the tests the same way each and every time whenever possible. Further, the fact that a scientific test needs to be interpreted or is subject to error if not properly conducted is not a reason for rejecting evidence adduced by such a test. Indeed, the persuasiveness of scientific evidence “is, in large measure, dependent upon the expertise of the witness who conducted it, which in the final analysis is to be determined by the jury.”⁷³

Claim: The Tests are “Unreliable;” Sober People Can Easily “Fail” the Tests⁷⁴

Response: As discussed above, virtually all of the credible studies, reviews and surveys demonstrate that DREs accurately and reliably identify drug-impaired drivers.

Claim: The Tests are not “Sensitive”

Response: “Studies of policemen, bartenders, and social drinkers indicate that they usually cannot identify subjects with blood alcohol concentrations of about 0.10 percent, frequently mistaking them for sober subjects or underestimating their blood alcohol concentrations.”⁷⁵ This argument contradicts the defense attorneys’ claim that the tests are unreliable and misses the point: prosecutors do not introduce psychomotor test results to prove that subjects are or were sober. The state introduces test results to prove that the defendants who failed the tests were impaired. Consequently, any “false negative” rate enhances, rather than detracts from, the conclusion that a person’s failure of field sobriety tests indicates alcohol or drug impairment.

Claim: The Tests are Meaningless Because the DRE Failed to Conduct Them According to NHTSA or IACP Standards

Response: Many defense attorneys recognize the futility of attacking the DRE protocol and attempt a different tack. They argue, pursuant to *Ohio v. Homan*, 732 N.E.2d 952 (Ohio 2002), that the court should suppress their evidence in their clients' cases because the officers failed to administer the tests correctly. In fact, *Homan* is an anomalous opinion that conflicts with prevailing case law around the country.⁷⁶ As a general rule, scientific evidence is admissible despite minor variations in protocol, including the failure to follow administrative rules, manufacturer recommendations, or scientific protocols.⁷⁷ These types of errors affect "only the weight to be given the tests."⁷⁸ Thus, a DRE's opinion is admissible *even if the DRE fails to complete the entire protocol* as long as there is sufficient admissible evidence supporting the opinion.⁷⁹

Conclusion

Impaired drivers are killing and maiming people at an unconscionable rate. While DREs cannot prevent the carnage, they can help minimize it. On our streets and highways and in our communities, the DREs play an important role in the war against drugs.

REFERENCES

Introduction

¹ *Reduction in Alcohol-Related Traffic Fatalities—United States, 1990-1992*, 271 J. A.M.A. 99 (January 23, 1994).

² See 2003 Annual Assessment: *Motor Vehicle Traffic Crash Fatality Counts and Injury Estimates for 2003*, DOT HS 809 755, <http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/ncsa/ppt/2003AARreleaseBW.pdf> (National Highway Traffic Safety Administration (NHTSA) August 2004). The National Center for Statistics and Analysis (NCSA) compiled the document utilizing the Fatality Analysis Reporting System (FARS) and the National Automotive Sampling System General Estimates System (NASS GES). NHTSA estimates that drug use is a factor in approximately 18% of motor vehicle deaths. See "Impaired Driving," <http://www.cdc.gov/ncipc/factsheets/driving.htm> (National Center for Injury Prevention and Control (CDC) 2004).

³ *Id.*

⁴ According to the 2002 National Survey on Drug Use and Health (NSDUH), an estimated 35 million Americans aged 12 or older had used drugs in the year before the survey, 19.5 million of whom had used drugs within a month. See "Overview of Findings from the 2002 National Survey on Drug Use and Health," <http://www.oas.samhsa.gov/nhsda/2k2nsduh/Overview/2k2Overview.htm> (Substance Abuse and Mental Health Services Administration (SAMHSA), Office of Applied Studies 2003). The National Survey on Drug Use and Health (NSDUH) formally was known as the National Household Survey on Drug Abuse (NHSDA). The study represents approximately 98 percent of the United States population aged 12 and older. Researchers based their conclusions on 68,126 completed interviews. "Current drug use means use of an illicit drug during the month prior to the survey interview." Note that the 2002 figure represents a substantial increase from the previous two years. In 2001, 15.9 NSDUH estimated that 15.9 million people were current drug users; in 2001, 14 million. Another 6.2 million persons were "current users of psychotherapeutic drugs," including pain relievers, tranquilizers, sedatives and stimulants. *Id.* An estimated 22 million Americans aged 12 and over suffered from substance dependence or abuse. Approximately 7.7 million of them needed treatment for their problems. Unfortunately, only 1.4 million obtained treatment at a specialty substance abuse facility. Disturbingly, only 362,000 or 5% of the untreated abusers who needed treatment recognized their need and, about 274,000 of the estimated 362,000 people who recognized the need for treatment made no effort to get it! An estimated 11 million person drove under the influence of an illicit drug in 2002. This figure represents five percent of the total United States population aged 12 or over and 31 percent of the past year illicit drug users! The rate of DUI driving was over three times higher for persons 17 to 25 years old than it was for persons 26 or older. *Id.*

⁵ See J. Fell, "What's new in Alcohol, Drugs and Traffic Safety in the U.S.," T95 Paper, <http://cast.adelaide.edu.au/T95/paper/s14p1.html> (NHTSA 1994).

⁶ See R. Compton, et al, FIELD TEST OF ON-SITE DRUG DETECTION DEVICES: Final Report – October 2000, http://www.nhtsa.dot.gov/people/injury/research/pub/onsitedetection/Drugs_ch1.htm (NHTSA 2000). See also C. Soderstam, et al, "Marijuana and Alcohol Use Among 1023 Trauma Patients: A Prospective Study, 123 ARCH. SURG. 733 (1988)(presented at the 30th Annual Conference, American Association for Automotive Medicine, Montreal, Quebec, Canada, October 6-8, 1986)(reporting that over one-third of trauma patients had Delta-9-tetrahydrocannabinol, the active impairing substance in cannabis, in their blood streams).

⁷ See C. Dussault, et al, "The Contribution of Alcohol and Other Drugs Among Fatally Injured Drivers in Quebec: Some Preliminary Results," http://www.saaq.gouv.qc.ca/publications/dossiers_etudes/drogue_an.pdf

⁸ See <http://www.madd.org/stats/0,1056,1789,00.html>.

⁹ See "Impaired Driving in the United States," http://www.nhtsa.dot.gov/people/injury/alcohol/impaired_driving_pg2/US.htm (Pacific Institute for Research and Evaluation (PIRE) 2003). See also Jenson, A. et al, "Impaired Driving in the United States" (PIRE 1999).

¹⁰ Law enforcement officials and traffic safety experts experience a myriad of difficulties in obtaining accurate information. See e.g., B. Chapman, *Pathologists Say Alcohol Factor Greater than Suspected in Motor Vehicle Accidents*, 39 PATHOLOGIST 21 (Mar. 1995); B. Chapman, *CAP Survey Confirms Pathologists'*

Suspicious, Reveals Data-Gathering Problems, 39 *PATHOLOGIST* 24 (Mar. 1995).

¹¹ “Traffic Safety Facts 2002,” <http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/TSF2002/2002ovrfacts.pdf> (NHTSA 2002). The NCSA compiles the Traffic Safety Facts sheets using NHTSA data. The 2002 edition is the most recent.

¹² The vast majority of states do not have “per se” laws or “legal limits” for drugs as they do for alcohol.

¹³ The DCMA is the largest county-wide medical society in Florida. About 50 percent of Miami-Dade County’s medical doctors belong to the DCMA. The DCMA boasts almost 3,000 members, representing approximately 75 specialties and sub-specialties.

¹⁴ The BCMA is the second largest county-wide medical society in Florida. About 66 percent of Broward County’s medical doctors belong to the BCMA. The BCMA boasts almost 2,000 members in approximately 85 specialties and sub-specialties.

¹⁵ The NSC boasts more than 45,000 members from “business, labor, academia, government and community service.” National Safety Council, Letter from the Chairman and President, <http://www.nsc.org/insidenc.htm>.

¹⁶ See ACLU’s Legislative Kit #3, Workplace Rights, <http://archive.aclu.org/issues/worker/legkit3.html>.

¹⁷ *Highlights of the Proceedings of the Surgeon General’s Workshop on Drunk Driving*, 14 *ALC., HEALTH & RES. WORLD* 5, 8 (1990).

¹⁸ See M.S.A. Section 1312 and 1312-1 (1993); ANN. CODE MD TRANSP. Section 16-205.1 (1993).

¹⁹ 64 *J. AM. OPTOMETRIC ASSOC.* 663 (Sept. 1993).

History and Development

²⁰ *Drug Evaluation and Classification Training: “The Drug Recognition School,” Student Manual*, Section III, at 1 [hereinafter DRE Manual].

²¹ *Id.*

²² See e.g. R. Compton, *Field Evaluation of the Los Angeles Police Department Drug Detection Program*, U.S. D.O.T. H.S. 807 012 (Feb. 1986); G. Bigelow, W. Bickel, J. Roache, I. Liebson and W. Nowowieski, *Identifying Types of Drug Intoxication: A Laboratory Evaluation of a Subjection-Examination Procedure*, U.S. D.O.T. H.S. 806 753 (May 1985).

The DRE Protocol

²³ DRE Manual, Section IV, at 1.

²⁴ *Id.*

²⁵ *Id.*

²⁶ Butler, B., “Officers trained to spot drivers on drugs,” *Tri-City Herald*, August 18, 2000, <http://www.tri-cityherald.com/news/2000/0818/story3.html>.

²⁷ See “The Role of Drug Recognition Experts,” Oregon Risk Management Division, <http://egov.oregon.gov/DAS/Risk/VehicleHarshipRisKeyNotes2.shtml>.

²⁸ See Mesa Police Department Traffic Section, <http://www.ci.mesa.az.us/police/traffic/default.asp>.

²⁹ This section is based upon the DRE Manual, *supra*.

³⁰ See e.g. L. Prockop, *Specific Neurological Evaluation of Inhalant Abusers: Clinical and Laboratory*, REVIEW OF INHALANTS: EUPHORIA TO DYSFUNCTION, <http://www.drugabuse.gov/pdf/monographs/download15.html>, (NIDA Research Monograph 15, Oct. 1977). In 1994, Dr. Prockop, formerly Professor of Medicine and Chief of the Neurology Section of the College of Medicine at the University of South Florida, testified in a hearing to determine the admissibility of DRE testimony and evidence that the DRE protocol is virtually identical to the method he himself uses and espouses.

³¹ R. Borkenstein, *Historical Perspective: North American Traditional and Experimental Response*, Proceedings of the North American Conference on Alcohol and Highway Safety, Baltimore, Md., June 1984, *J. STUD. ALC. Supp. No. 10*, 5 (1985).

³² See e.g. Goodman and Gilman’s *The Pharmacological Basis of Therapeutics* (Pergamon 8th ed. 1990); R. O’Brien and S. Cohen, *The Encyclopedia of Drug Abuse* (Facts on File, Inc. 1984); A. James Giannini and A. Slaby, *Drugs of Abuse* (Medical Economics Books 1989); *The Merck Manual of Diagnosis and Therapy* (R. Berkow, ed., Merck Research Laboratories 16th ed. 1992); K. Bell, *Identifying the Substance Abuser in Clinical Practice*, Orthopaedic Nursing, Mar./Ap. 1992, at 29; *Nursing ’93 Drug Handbook* (Springhouse Publishing 1993); S. Kaye, *Handbook of Emergency Toxicology* (Charles Thomas 4th ed. 1980); *Drugs of Abuse* (United States Department of Justice 1988).

³³ *Id.*

³⁴ R. Borkenstein, *Historical Perspective: North American Traditional and Experimental Response*, Proceedings of the North American Conference on Alcohol and Highway Safety, Baltimore, Md., June 1984, *J. STUD. ALC. Supp. No. 10*, 5 (1985).

³⁵ See C.J. Forkiotis, *Optometric Expertise: The Scientific Basis for Alcohol Gaze Nystagmus*, 59 *CURRICULUM II* 1, 3 (April 1987); *Nystagmus*, 72 *POISINDEX (R) Toxicologic Management* (Micromedex, Inc. 1974-1992); R. Adams, and M. Victor, *PRINCIPLES OF NEUROLOGY* (4th Ed. 1991); M. Burns, *The Use of Horizontal Gaze Nystagmus as a Field Sobriety Test*, presented at the 35th International Congress on Alcoholism and Drug Dependence, Oslo, Norway (July 31 to August 6, 1988); Alfred R. Fregly, Bergstedt, M., and Graybiel, A., *Relationships between Blood Alcohol, Positive Alcohol Nystagmus and Postural Equilibrium*, 28 *Q. J. STUD. ALC.* 11 (1967).

³⁶ H.B. Murphee, L. Price and L. Greenberg, *Effect of Congeners in Alcoholic Beverages on the Incidence of Nystagmus*, 27 *Q. J. STUD. ALC.* 201 (1996).

³⁷ See e.g. I.M.S. Wilkinson, R. Kime, and M. Purnell, “Alcohol and Human Eye Movement,” 97 *BRAIN* 785 (1974); *Nystagmus*, 72 *Poisindex® Toxicologic Management* (Micromedex, Inc. 1974-1992); RAYMOND D. ADAMS and MAURICE VICTOR, *PRINCIPLES OF NEUROLOGY* (4th ed. 1991); G. Goding and R. Dobie, *Gaze Nystagmus and Blood Alcohol*, 96 *LARYNGOSCOPE* 713, 716 (July 1986). See also 64 *J. AM. Optometric Assoc.* 653 (Sept. 1993) (endorsing the use of horizontal gaze nystagmus testing as a field sobriety test).

³⁸ See V. Tharp, *Gaze Nystagmus as a Roadside Sobriety Test*; T. Forrest, The rapid eye test to detect drug abuse, 84 POSTGRADUATE MED. 108 (July 1988). See also *State v. Superior Court of the County of Cochise*, 149 Ariz. 269, 718 P.2d 171, 180-181 (1986) (“the professionals who have investigated the subject do not dispute the strong correlation between BAC and the different types of nystagmus”) (emphasis added); *Williams v. State*, 710 So. 2d 24 (Fla. 3d DCA 1998), rehearing denied, 725 So. 2d 1111 (Fla. 1998).

³⁹ Id.

⁴⁰ See *id.*; C. Stomberg, T. Seppaa, and M.J. Mattila, *Acute Effects of Maprotiline, Doxepin and Zimeldine with Alcohol in Healthy Volunteers*, 291 ARCH. INT. PHARMACODYN 217 (Jan./Feb. 1988) (pharmacologists relying on “objective tests of performance” including horizontal gaze nystagmus and “tracking” to measure the combined effect of alcohol and certain drugs); J. Stapleton, S. Guthrie, and M. Linnoila, *Effects of Alcohol and Other Psychotropic Drugs on Eye Movements: Relevance to Traffic Safety*, 47 J. STUD. ALC. 426 (Sept. 1986); C. Rashbass, *The Relationship Between Saccadic and Smooth Tracking Eye Movements*, 159 J. PHYSIOLOGY 326 (1961) (nystagmus is indicative of barbiturate use); Annotation, *Horizontal Gaze Nystagmus Test: Use in Impaired Driving Prosecution*, 60 A.L.R. 4th 1129, at Section 2(a), page 1131 (the HGN test “is useful in detecting both alcohol and drugs”) (citing Los Angeles Times, February 17, 1985m Sunday Home Edition, metro part 2, Page 12, Column 1 and United Press International, April 25, 1984, Wednesday, AM Cycle, Louisiana Regional News).

⁴¹ See J. Stapleton, S. Guthrie, and M. Linnoila, *Effects of Alcohol and Other Psychotropic Drugs on Eye Movements: Relevance to Traffic Safety*, 47 J. STUD. ALC. 426 (Sept. 1986).

⁴² W. Buikhuisen and R. W. Jongman, *Traffic Perception Under the Influence of Alcohol*, 33 Q. J. STUD. ALC. 800 (Sept. 1972).

⁴³ J. Cowan and S. Jaffee, *Proof and Disproof of Alcohol-Induced Driving Impairment Through Evidence of Observable Intoxication and Coordination Testing*, 9 AM. JUR. PROOF OF FACTS 3d 459, Section 9, at 488.

⁴⁴ See e.g. L. Goldberg, *Quantitative Studies on Alcohol Tolerance in Man*, 5 ACTA PHYSIOLOGICA SCAND. Supp. XVI (1943); M. Hebbelincx, *The Effects of a Small Dose of Ethyl Alcohol on Certain Basic Components of Human Physical Performance*, 143 ARCH. INT. PHARMACODYN. 143 (1963); R. Borkenstein, *Historical Perspective: North American Traditional and Experimental Response*, Proceedings of the North American Conference on Alcohol and Highway Safety, Baltimore, Md., June 1984, J. STUD. ALC. Supp. No. 10, 5 (1985); L. Fornazzari, *Clinical Recognition and Management of Solvent Abusers*, 9 IM—INTERNAL MED. FOR THE SPECIALIST 99 (June 1988).

⁴⁵ Professor Widmark relied on factors such as pupils’ reaction to light, signs of ataxia including insecure turning and the Romberg test, finger to finger test, picking up small objects, and others. R. Borkenstein, *Historical Perspective: North American Traditional and Experimental Response*, Proceedings of the North American Conference on Alcohol and Highway Safety, Baltimore, Md., June 1984, J. STUD. ALC. Supp. No. 10, 5 (1985).

Categorization (Classification) of Drug Types

⁴⁶ Note that DREs categorize drug effects according to class. DREs generally do not, and cannot, opine that a person is under the influence of a *specific* drug without an admission, physical evidence, a toxicological test result or other drug specific evidence.

⁴⁷ The categories and their descriptions are based upon the DRE Manual, *supra*.

The DREs’ Accuracy and Reliability

⁴⁸ This section is based upon the DRE Manual, *supra*

⁴⁹ See *supra*, and *Williams v. State*, 710 So. 2d 24 (Fla. 3d DCA 1998), rehearing denied, 725 So. 2d 1111 (Fla. 1998). In *Williams*, the State provided the court with over 2,000 pages of medical literature.

⁵⁰ See e.g. Compton, Shinar, Schechtman, *Laboratory Identification of Drug Use Based on Observable Signs and Symptoms* (2000) http://www.vv.se/traf_sak/t2000/205.pdf; Stuster and Burns, *Validation of the Standardized Field Sobriety Test Battery at BACs Below 0.10 Percent*, (Anacapa Sciences, Inc. 1998) <http://www.nhtsa.dot.gov/people/injury/alcohol/Archive/Limit.08/SFSTREP.PDF>; Burns and Anderson, *A Colorado Validation Study of the Standardized Field Sobriety Test (SFST) Battery* (Colo. Dept. Transp. November 1995) <http://publicsafety.tamu.edu/docs2/1995.pdf>; Burns, et al., *A Florida Validation Study of the Standardized Field Sobriety Test (S.F.S.T.) Battery* (1995) <http://www.sheriff.co.st-clair.il.us/duival.asp>; *Impact of the Drug Evaluation and Classification Program on Enforcement and Adjudication*, 58 TRAFFIC TECH 1 (Dec. 1993); S. Kiger, D. Lestina and A. Lund, *Passive Alcohol Sensors in Law Enforcement Screening for Alcohol Impaired Drivers*, 9 ALC., DRUGS AND DRIV. 7 (Jan./Mar. 1993); J. Hedlund and J. Fell, *United States Impaired Driving Policies and Practices*, presented at the International Conference on Alcohol, Drugs and Traffic Safety, Cologne, Germany (1992); R. Compton, *FIELD EVALUATION OF THE LOS ANGELES POLICE DEPARTMENT DRUG DETECTION PROGRAM*, U.S. D.O.T. H.S. 807 012 (Feb. 1986); G. Good and A. Augsburg, *Use of Horizontal Gaze Nystagmus as a Part of Roadside Sobriety Testing*, 63 AM. J. OPTOMETRY & PHYSIOLOGICAL OPTICS 467 (June 1986); G. Goding and R. Dobie, *Gaze Nystagmus and Blood Alcohol*, 96 LARYNGOSCOPE 713 (July 1986) (Presented at the Meeting of the Western Section of the American Laryngological, Rhinological and Otological Society, Inc., San Francisco, Cal., January 11, 1986); G. Bigelow, W. Bickel, J. Roache, I. Liebson and P. Nowowieski, *IDENTIFYING TYPES OF DRUG INTOXICATION: LABORATORY EVALUATION OF A SUBJECT-EXAMINATION PROCEDURE*, U.S. D.O.T. H.S. 806 753 (May 1985); T. Anderson, R. Schweitz, and M. Snyder, *FIELD EVALUATION OF A BEHAVIORAL TEST BATTERY FOR DWI*, U.S. D.O.T. H.S. 806 475 (Sept. 1983); V. Tharp, M. Burns and H. Moskowitz, *DEVELOPMENT AND FIELD TEST OF PSYCHOPHYSICAL TESTS FOR DWI ARREST*, U.S. D.O.T. H.S. 805 865 (Mar. 1981); M. Burns and H. Moskowitz, *PSYCHOPHYSICAL TESTS FOR DWI ARREST*, U.S. D.O.T. H.S. 802 424 (June 1977). But see Jackson, Tunbridge and Rowe, *Drug Recognition and Field Impairment Testing: Evaluation of Trials*, http://www.vv.se/traf_sak/t2000/222.pdf (2000); S. Heishman, et al, *Laboratory Validation Study of Drug Evaluation and Classification Program: Ethanol, Cocaine, and Marijuana*, 20 J. ANAL. TOX. 468, 480 (October 1996); S. Heishman, et al, *Laboratory Validation Study of Drug Evaluation and Classification Program: Alprazolam, d-Amphetamine, Codeine, and Marijuana*, 22 Journal of Analytical Toxicology 468-483 (October 1998). Officers participating in the Jackson study had high error rates. However, the study has little value for several reasons. First, the study assessed the still developing United Kingdom’s (UK) program. UK officers use a modified protocol. The report does not indicate whether the officers examined the participants’ vital signs or checked for nystagmus. Second, the officers were very inexperienced. Third, it is unclear what scoring methods, if any, they used. DREs participating in Heisman’s studies also had high error rates. However, the studies’ utility is suspect because the researchers misled the officers as to what drugs the subjects may have taken and the DREs administered only a portion of the protocol. See e.g. *State v. Sampson*, 6 P.3d 543 (Or. App. 2000).

Note that even many defense oriented commentators concede that the current test battery does “a fairly good job at picking out those subjects with alcohol concentrations above 0.10 percent.” See e.g. J. COWAN and S. JAFFEE, *Proof and Disproof of Alcohol-Induced Driving Impairment Through Evidence of Observable Intoxication and Coordination Testing*, 9 AM JUR. PROOF OF FACTS 3d 459, Section 12, page 494.

⁵¹ See e.g. Adler and Bourland, *Arizona's DRE Program: A Comparison of DRE Opinions to Toxicology Results* (Unpublished manuscript available through the Arizona Department of Public Safety); Mesa (Arizona) Police Department Traffic Section, <http://www.ci.mesa.az.us/police/traffic/default.asp>; Harbey, *DRE Confirmation and Drug Classification Trends*, 5 DRE 9 (Summer 1993); Ricca, *Drug Evaluation and Classification Program in Louisiana*, 4 DRE 9 (Oct./Nov. 1992); Minnesota Drug Evaluation and Classification Program: 2003 Annual Report, Oregon Drug Evaluation and Classification Program Annual Report, http://osp.state.or.us/html/1997_annual_report.html; Hardin, Meyer and Juejurikar, “Minnesota Corroboration Study: DRE Opinions and Toxicology Evaluations,” (Minn Bureau of Crim. Apprehension 1993); Oregon Drug Evaluation and Classification Program Annual Report, http://osp.state.or.us/html/1997_annual_report.html; Louie, *Report on the Drug Recognition Evaluation (DRE) Program in Harris County, Texas*, DRE I (May/June 1990).

⁵² The term “legal limit” is a misnomer. In Florida, as in many other states, an *impaired* driver is guilty of DUI even if the driver’s blood or breath alcohol is below 0.08. See e.g. FLA. STAT. 316.193 (1993).

⁵³ M. Valaske, *A Safe-Driving Level of Blood Alcohol*, 39 PATHOLOGIST 36 (Mar. 1985) (advocating a zero tolerance DUI law). See also J. Peterson, J. Rothfleisch, P. Zelazo and R. O. Pihl, *Acute Alcohol Intoxication and Cognitive Functioning*, 51 J. STUD. ALC. 114 (1990).

⁵⁴ See e.g. G. C. Drew, W. P. Colquhoun, H. A. Long, *Effect of Small Doses of Alcohol on a Skill Resembling Driving*, 1958 BRIT. MED. J. 993 (Oct. 25, 1958) (researchers finding that “there is a measurable increase in mean error [on a driving simulator] as soon as there is a measurable quantity of alcohol in the blood”); H. Moskowitz and M. Burns, *Effects of Alcohol on Driving Performance*, 14 ALC., HEALTH & RES. WORLD 12 (1990) (“[c]ertain skills important for driving are impaired at 0.01 and 0.02 percent BAC or, in other words, at the lowest levels that can be measured reliably”). See also M. Valask, *A Safe-Driving Level of Blood Alcohol*, 39 PATHOLOGIST 36 (Mar. 1985) (advocating a zero tolerance DUI law)

⁵⁵ Council on Scientific Affairs, *Council Report: Alcohol and the Driver*, 255 J. A.M.A. 522 (Jan. 24/31, 1986). See also *Medical Conditions Affecting Drivers* (T. Doege and A. Engleberg, ed., A.M.A. 1986) (drivers with blood alcohol concentrations of 60mg% are twice as likely to be involved in a fatal crash as a sober driver”); Council on Scientific Affairs, *Council Report: Automobile-Related Injuries*, 249 J. A.M.A. 3216 (June 17, 1983) (“most authorities agree [that BAC’s of 0.05 or greater] cause impairment of physical and mental functioning and interfere with the task of driving vehicles safely”); H. Moskowitz and C. Robinson, EFFECTS OF LOW DOSES OF ALCOHOL ON DRIVING-RELATED SKILLS: A REVIEW OF THE EVIDENCE, U.S. D.O.T. H.S. 807 280 (July 1988).

⁵⁶ Council on Scientific Affairs, *Council Report: Alcohol and the Driver*, 255 J. A.M.A. 522 (Jan. 24/31, 1986).

⁵⁷ “Blood Alcohol Concentration and Driving,” 17 ANNALS EMERG. MED. 1252 (November 1988)

⁵⁸ In 2004, we conducted an identical review of the three police departments’ DUI arrests from 1999-2001. The sample was much smaller; however, the results were remarkably similar to the 1990’s survey.

The Admissibility of DRE Testimony and Evidence

⁵⁹ See Gianelli, *The Admissibility of Novel Scientific Evidence: Frye v. United States, A Half-Century Later*, 80 COLUM. L. REV. 1197 (1980).

⁶⁰ See *United States v. Baller* (4th Cir. 1975), 519 F.2d 463, cert. denied, 423 U.S. 1019, 46 L. Ed. 2d 391, 96 S. Ct. 456 (1975); *State v. Garcia*, 197 Ariz. 79; 3 P.3d 999 (Ariz. Ct. App. 1999); *People v. Guerra*, 37 Cal. 3d 385, 208 Cal. Rptr. 162, 690 P.2d 635 (Cal. App. 1984); *Lindsey v. People*, 892 P.2d 281, 289 (Colo. 1995); *Brim v. State*, 695 So. 2d 268, 272 (Fla. 1997); *People v. Dalcollo*, 282 Ill. App. 3d 944, 957, 669 N.E.2d 378, 218 Ill. Dec. 435 (Ill. App. 1996), cert. denied, 169 Ill. 2d 575, 675 N.E.2d 635, 221 Ill. Dec. 440 (1976).

⁶¹ *State v. Sercey*, 825 So. 2d 959 (Fla. 1st DCA 1992).

⁶² *Matter of Miller v. Nat’l Cabinet Co.*, 8 N.Y.2d 277 (1960); *People v. Barbara*, 255 N.W.2d 171 (Mich. 1977).

⁶³ *People v. Rogers*, 385 N.Y.S.2d 228 (N.Y. Sup. Ct. 1976) (blood alcohol tests); *Mills v. State*, 476 So. 2d 172 (Fla. 1985) (neutron activation residue tests); *People v. Palmer*, 145 Cal. Rptr. 466, 80 Cal. App.3d 239 (Cal. App. 1978) (scanning electron microscope GSR test).

⁶⁴ See e.g. *People v. Palmer*, 145 Cal. Rptr. 466, 80 Cal. App.3d 239 (Cal. App. 1978); *Troedel v. State*, 462 So. 2d 392, 396 (Fla. 1985).

⁶⁵ See also *Mace v. Arkansas*, 944 S.W.2d 830, 328 Ark. 536 (Ark. 1997). In *Mace*, the court held that DREs qualify as experts because DREs have specialized knowledge. The court did not address the protocol’s reliability.

⁶⁶ See Sandler, *Expert and Opinion Testimony of Law Enforcement Officers Regarding Identification of Drug Impaired Drivers*, 23 HAW. L. REV. http://www.tenndre.homestead.com/files/Hawaii_Law_Review.doc.

⁶⁷ H. Moskowitz and C. Robinson, *Driving-Related Skills Impairment at Low Blood Alcohol Level*, the Proceedings of the Tenth International Conference on Alcohol, Drugs and Traffic Safety, Amsterdam, Holland (Sept. 9-12, 1986) (researchers consistently find that breath alcohol levels as low as 0.04 impair people’s ability to handle emergency situations); H. MOSKOWITZ and C. D. ROBINSON, EFFECTS OF LOW DOSES OF ALCOHOL ON DRIVING-RELATED SKILLS: A REVIEW OF THE EVIDENCE, U.S. D.O.T. H.S. 807 280 (July 1988), at 61; United States Department of Transportation, *Alcohol Impairment and its Effects on Driving: An Informational Booklet*.

⁶⁸ See *State v. Witte*, 251 Kan. 313, 836 P.2d 1110 (Kan. 1992).

⁶⁹ For an excellent analysis of this particular claim, see D. Whiting, *State v. Witte: Questioning HGN’s Frye General Acceptance Under Blake*, 5 DRE 7 (Spring 1993).

⁷⁰ Citek, K. and Yolton, Y., “Positional Alcohol Nystagmus—What is it and How do You Avoid it at Roadside?,” 6 NW Evaluator 1, http://www.osp.state.or.us/assets/DRE_NL_March_2001.pdf (March 2001).

⁷¹ *Id.*

⁷² See G. BIGELOW, W. BICKEL, J. ROACHE, I. LIEBSON, AND P. NOWOWIESKI, *IDENTIFYING TYPES OF DRUG INTOXICATION: LABORA-*

THE DRUG EVALUATION AND CLASSIFICATION (DEC) PROGRAM

TORY EVALUATION OF A SUBJECT-EXAMINATION PROCEDURE, U.S. D.O.T. H.S. 806 753 (May 1985); RICHARD P. COMPTON, FIELD EVALUATION OF THE LOS ANGELES POLICE DEPARTMENT DRUG DETECTION PROGRAM, U.S. D.O.T. H.S. 807 012 (Feb. 1986); T. ANDERSON, SCHWEITZ and M. SNYDER, FIELD EVALUATION OF A BEHAVIORIAL TEST BATTERY FOR DWI, U.S. D.O.T. H.S. 806 475 (Sept. 1983); V. THARP, M. BURNS and H. MOSKOWITZ, DEVELOPMENT AND FIELD TEST OF PSYCHOPHYSICAL TESTS FOR DWI ARREST, U.S. D.O.T. H.S. 805 864 (Mar. 1981).

⁷³ See *Reid v. State*, 372 N.E.2d 1149, 1152 (Ind. 1978).

⁷⁴ See *supra*. Defense attorneys typically cite the work of Dr. Spurgeon Cole to “support” the proposition that the psychomotor tests are unreliable. However, Dr. Cole’s study is of questionable value. See *State v. Adams*, No. 93-39271-MM (Fla. County Ct. Nov. 24, 1993) and *State v. Rodil*, No. 60349WG (Fla. County Ct. Nov. 22, 1993) (unpublished opinion). For further information, contact the NTLC.

⁷⁵ See J. COWAN and S. JAFFEE, Proof and Disproof of Alcohol-Induced Driving Impairment Through Evidence of Observable Intoxication and Coordination Testing, 9 AM. JUR. PROOF OF FACTS 3d 459, Section 8, at 485.

⁷⁶ See e.g. *Georgia v. Pastorini*, 474 S.E.2d 122 (Ga. Ct. App. 1996); *Cann-Hanson v. Georgia*, 478 S.E.2d 460 (Ga. Ct. App. 1996); *Smith v. Wyoming*, 11 P.3d 931 (2000). See also *State v. Tankersley*, 956 P.2d 486 (Ariz. 1998); *Troedel v. State*, 462 So. 2d 392, 396 (Fla. 1985), *habeas granted*, 667 F.Supp. 1456, *affirmed*, 828 F.2d 670 (1986); *State v. Sercey*, 825 So. 2d 959, 975 (Fla. 1st DCA 2002); *State v. Brown*, 949 S.W.2d 639 (Mo. App. E.D. 1997). For a thorough discussion of this issue as relates to the field sobriety tests, see also Cunningham, “SFSTs and Strict Compliance: *Ohio v. Homan* Case Law Summary, http://www.ndaa-apri.org/apri.programs/traffic/sfst_ohio_homan.html.

⁷⁷ See e.g. *id.*

⁷⁸ *Georgia v. Pastorini*, 474 S.E.2d 122 (Ga. Ct. App. 1996).

⁷⁹ *Minnesota v. Cammack*, 1997 Minn. App. LEXIS 278, 1997 WL 104913 (Minn. Ct. App. 1997).

DREs: A PUBLIC SAFETY RESOURCE

By Chuck Hayes

Police departments around the country are beginning to recognize the DREs' utility in non-traditional investigations. In 2002, Oregon DREs found that 17% of DUID offenders also possessed chemical or controlled substances. Accordingly, the DREs began participating in highway drug interdictions and related criminal investigations. Other states are following Oregon's lead. California DREs frequently assist in "knock-and-talk" investigations while Washington DREs participate in the State Patrol's Serious Highway Crime Action Team (SHCAT).⁸⁰

DRE Drug Interdiction⁸¹

A police officer in Southern Oregon stopped a driver for driving the wrong way on a one-way street. The officer examined the driver and determined that the driver was impaired, but the suspect blew a 0.000 during the breath test. The officer called a DRE, who conducted a drug influence evaluation on the suspect and determined that the suspect was under the influence of cannabis and a hallucinogen. The officers searched the suspect's vehicle and found a baggie of psilocybin (hallucinogenic) mushrooms. The DRE questioned the suspect about his drug use and the drugs in the car. Based upon the suspect's admissions, the DRE contacted a local narcotics detective, who continued the investigation. The police ultimately obtained enough information to conduct 21 search warrants, make 11 arrests and recover LSD, bufotenine, 136 pounds of psilocybin mushrooms and \$22,000. They also forfeited five real estate parcels.

DREs in Los Angeles, California, Mesa, Arizona, and Hampton, New Hampshire, help conduct health and safety code inspections and identify drug-impaired people in the workplace.⁸² They also provide training to inspectors and employers. In this way, the DREs can play a critical role in promoting workplace safety and employee rights. Indeed, the ACLU's model statute for workplace drug testing requires employers to utilize DREs prior to demanding a more invasive urine test.⁸³

Workplace Safety⁸⁴

A citizen complained to Oregon police that a pharmacist was injecting drugs while working at a local pharmacy. Officers, including a DRE, responded to the pharmacy and spoke to the pharmacist. The DRE observed signs consistent with drug use, including a fresh injection mark on the inside of the pharmacist's left arm. The officers conducted a consent search and found several unlabeled prescription bottles of Vicodin. The officers and Oregon Board of Pharmacy subsequently determined that the pharmacist wrote more than 140 false prescriptions for more than 19,000 pills, including morphine, lorazepam, oxycodone, Vicodin, Xanax, Klonopin, and OxyContin. The prosecutor's office charged the defendant with tampering with drug records and possession of a controlled substance. The pharmacist pled guilty.

Some states train their Department of Transportation (DOT) officers as DREs. Such cross training reaps untold benefits. In September 2002, DREs in California, Oregon, Washington and British Columbia participated in a 48-hour combined commercial motor vehicles operation. They inspected 3,609 tractor-trailers, single-unit trucks, and

their drivers. They declared 918 vehicles and 292 drivers out of service and issued 2,055 citations. They also arrested six drivers for DUI. In Iowa, a DRE trained motor vehicles compliance officer stopped a semi-tractor trailer. The officer noted that the driver appeared to be impaired and conducted a consent search of the truck. The DRE found 12 duffel bags full of marijuana. The Drug Enforcement Administration (DEA) conducted a follow-up investigation and arrested three other people connected to the incident in Michigan.

Finally, some DREs work closely with their local schools and school districts to deter drug use and abuse. Arizona, Kansas and New York DREs formalized their programs to maximize efficiency and results.⁸⁵ NHTSA and IACP recognized the value of their programs, identified their “best practices,” and created the national Drug Impairment Training for Education Professionals (DITEP) program.⁸⁶ DREs participating in the DITEP program provide 16 hours of training for school administrators, teachers, and nurses to identify drug abuse and impairment.⁸⁷ In Texas, DREs have trained over 1,500 DITEP participants since 1999. These trainees have conducted over 750 DITEP assessments.⁸⁸ New York State Police DREs employ an even more comprehensive approach. In addition to the standard DITEP course, they conduct a 40-hour course for school officials and a one-hour block for students.⁸⁹ As one vice-principal recognized, “We have a responsibility to do the best we can to help kids in schools when we see a problem. This class is not intended to turn teachers into cops. This class is intended to help teachers intervene and provide help when there is a problem.”⁹⁰

REFERENCES

⁸⁰ Hayes, C., “Drug Recognition Experts: A Public Safety Resource,” 70 *Police Chief Magazine*, http://www.policiechiefmagazine.org/magazine/index.cfm?fuseaction=display&article_id=...

⁸¹ *Id.*

⁸² “Drug Recognition Expert Program,” State of Arizona Department of Public Safety, <http://www.dps.state.az.us/safety/impaireddriving/dre/>; “The LAPD’s Drug Recognition Expert Program: An Overview,” Los Angeles Police Department Drug Recognition Expert Unit, <http://www.lacity.org/LAPD/traffic/dre/overview.htm>; “Hampton Drug Recognition Experts,” Hampton Police Department,” <http://www.hamptonpd.com/dre.htm>.

⁸³ See ACLU’s Legislative Kit #3, Workplace Rights, <http://archive.aclu.org/issues/worker/legkit3.html>.

⁸⁴ Hayes, C., “Drug Recognition Experts: A Public Safety Resource,” 70 *Police Chief Magazine*, http://www.policiechiefmagazine.org/magazine/index.cfm?fuseaction=display&article_id=...

⁸⁵ See e.g. “The Texas DITEP Program,” Public Safety & Security, Texas A&M University, <http://publicsafety.tamu.edu/index.aspx?page=1121>.

⁸⁶ “Drug Impairment Training for Educational Professionals,” NHTSA, <http://www.nhtsa.dot.gov/people/injury/alcohol/dec00impdrprm/drugprofessionals.html>.

⁸⁷ *Id.* See also “Drug Impairment Training for Educational Professionals (DITEP), Texas A&M University, http://216.239.41.104/search?q=cache:XdeG36_McSQJ:publicsafety.tamu.edu/docs2/Mult...

⁸⁸ “Drug Impairment Training for Educational Professionals (DITEP), Texas A&M University, http://216.239.41.104/search?q=cache:XdeG36_McSQJ:publicsafety.tamu.edu/docs2/Mult...

⁸⁹ “Drug Recognition Experts: Community Resource Programs, New York State Division of State Police, http://www.troopers.state.ny.us/Schools_&_Communities/Programs/Drug_Recognition/.

⁹⁰ See “Educators Receive Training to Recognize Drug Use,” Ohio State Police, <http://www.osp.state.or.us/html/ditep.html>.

FIRST PERSON PERSPECTIVE: THE ROLE OF THE DRE AND DRE STATE COORDINATOR

By Chuck Hayes

In the late 1980's I was a Patrol Sergeant with the Oregon State Police and one of the Department's DWI/SFST instructors. As a trooper with the Oregon State Police and then later as a supervisor working patrol, I often encountered drivers suspected of being under the influence of drugs, but I didn't have the knowledge or skills to determine impairment. I began hearing about the Drug Evaluation and Classification (DEC) Program (also known as the Drug Recognition Expert (DRE) program) in Los Angeles, California, and how effective it was in identifying drugged drivers. The more I heard about the program, the more I wanted to go through the training and become a DRE.

I was working patrol one summer afternoon in central Oregon when I was informed, by dispatch, of a reckless driver traveling toward my location. Dispatch indicated that they had received numerous complaints about an "18-wheeler" speeding, tailgating, and passing other cars unsafely. I set-up my radar and waited for the offending truck. Within 10 minutes, the speeding truck came past my location, traveling over 80 miles per hour. I immediately activated my overhead lights and pursued the truck. I soon noticed that the truck drifted over the center divider line and seemed to be ignoring me. I continued to follow the truck for three to four miles until, suddenly, the driver slammed on the brakes and came to a sliding stop.

Before I could exit my patrol car, the driver got out of the truck and rapidly approached my position. I met the driver near the front of my patrol car and could see he was extremely agitated and very animated. The driver could not stand still and his speech was rapid and slurred. After I advised him why I had stopped him, he became even more agitated and animated. While writing the speeding citation, I observed several things that made me think the driver could possibly be under the influence of something. I performed a quick Horizontal Gaze Nystagmus (HGN) test with negative results. I could not smell any odor of alcohol on his breath. I asked him about drug use, which he denied. I ended up issuing the driver a speeding citation. I then allowed him to get back behind the wheel of his 80,000-pound truck and trailer and drive away, hoping that I had not made a big mistake.

Several years later, I had the good fortune to attend the Los Angeles Police Department DRE School under the direction of Sergeant Dick Studdard. Within the first week, I realized that I had stopped many drivers who were under the influence of drugs, including that truck driver, and had not known it due to my lack of training. The DRE School training turned out to be some of the best training of my career. It was an eye-opening experience to learn about the various drug categories and their effects on people; I could not wait to take my new knowledge back to Oregon and use it.

Being the only DRE in the state, things started out a little slowly. However, I made my services available to law enforcement agencies within a reasonable driving distance. It did not take long for other officers to see the rewards of being a DRE.

Experiences like the one I had with the truck driver convinced me of the DEC Program's importance. I used that experience, along with other incidents that I had heard about, to persuade others in Oregon that we needed the DEC Program. It was not easy. It took many years. Eventually, other police officers and prosecutors became interested in the program and helped me obtain the necessary support. In 1995, the International Association of Chiefs of Police

(IACP) and the National Highway Traffic Safety Administration (NHTSA) recognized Oregon as a DEC State. I was appointed Oregon's first State DRE Coordinator and welcomed the challenge of developing and expanding the program. With the help of several other dedicated law enforcement officers, I planned Oregon's first DRE School for March 1995, and began a thorough selection process for the state's first DREs. After careful consideration, we approved 22 officers for the School. All 22 successfully completed the training and certification process and soon began using their new skills on Oregon's highways. In the first year, the newly trained DREs conducted over 300 drug evaluations on suspected drug impaired drivers.

Despite the program's rapid development in Oregon, we still encountered difficulties in selling the program to some law enforcement administrators, supervisors, police officers, prosecutors and judges. I learned that the DEC Program, despite its many successes and endorsements, is not always met with open arms. As the DRE State Coordinator, I worked hard to sell the program at every opportunity. With support from the Highway Safety Office, I targeted various groups and organizations throughout the state. To my surprise, many were totally unaware of the DEC Program and DRE. Some even thought DRE and D.A.R.E. (Drug Abuse Resistance Education) were the same programs!

As the State Coordinator, I compiled an annual report highlighting the program's accomplishments for the first year. I included examples of actual arrests and evaluations involving the different drug categories. We mailed the annual report to every law enforcement agency, district attorney and traffic safety group and organization within the state. I also developed a PowerPoint program that we used for presentations at various statewide conferences and meetings that attracted law enforcement administrators and other key partners in the program.

The DRE State Coordinator can "make or break" the program. It is essential that the State Coordinator be willing and able to promote the program and provide successful leadership. The State Coordinator must plan for the future by developing strong DRE Instructors, Course Managers, Agency Coordinators and Regional Coordinators, building successful partnerships with the media, toxicology, prosecution and judicial groups, and acknowledging and rewarding individuals who make valuable contributions to the success of the DEC Program. Other skills and attributes that are essential to being a successful DRE State Coordinators include familiarizing oneself with:

1. The IACP DEC Program, including the International Standards for the Drug Evaluation and Classification Program;
2. The IACP and NHTSA DRE training curriculum;
3. The NHTSA SFST curriculum;
4. Impaired driving issues and/or impaired driving enforcement;
5. Transportation safety related grants and grant writing;
6. Local and state toxicology procedures;
7. The various laws, rules and court decisions related to and affecting impaired driving enforcement;
8. The IACP DRE Technical Advisory Panel (TAP) and its role in the DEC Program and impaired driving issues.

In my opinion, the importance of the DRE State Coordinator cannot be over emphasized. Success depends on the proper coordination and infrastructure within the state; it begins and ends with the State Coordinator.

The DEC Program is one of the most effective tools in the battle against impaired driving. As a DRE, former DRE State Coordinator and IACP DRE Regional Operations Coordinator, I strive to ensure that police officers receive the training and skills they need to make proper decisions at roadside when dealing with suspected drug impaired drivers. To learn more about the DEC Program, contact the IACP at 1-800-843-4227 or visit their Web site, www.theiacp.org.

APPENDIX A: DRE SYMPTOMATOLOGY MATRIX

INDICATORS CONSISTENT WITH DRUG CATEGORIES

MAJOR INDICATORS	CNS DEPRESSANTS	CNS STIMULANTS	HALLUCINOGENS	PCP	NARCOTIC ANALGESICS	INHALANTS	CANNABIS
HGN	Present	None	None	Present	None	Present	None
VGN	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

NOTES: 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 Droopy eyes Fumbling *NOTE: With Methaqualone, pulse will be elevated and body tremors will be evident. Alcohol and Quaaludes elevate pulse. Soma and Quaaludes dilate pupils.	Restlessness Body tremors Excited Euphoric Talkative Exaggerated reflexes Anxiety Grinding teeth (bruxism) Redness to nasal area Runny nose Loss of appetite Insomnia Increased alertness Dry mouth Irritability	Dazed appearance Body tremors Synesthesia Hallucinations Paranoia Uncoordinated Nausea Disoriented Difficulty in speech Perspiring Poor perception of time and distance Memory loss Disorientation Flashbacks NOTE: With LSD, pilorection may be observed (goosebumps, 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 and 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 and 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 and 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)	Insufflation (snorting) Smoked Injected Oral	Oral Insufflation Smoked Injected Transdermal	Smoked Oral Insufflation Injected Eye drops	Injected Oral Smoked Insufflated	Insufflated (historically; have been taken orally)	Smoked Oral
OVERDOSE SIGNS	Shallow breathing Cold, clammy skin Pupils dilated Rapid, weak pulse Coma	Agitation Increased body temperature Hallucinations Convulsions	Long intense "trip"	Long intense "trip"	Slow, shallow breathing Clammy skin Coma Convulsions	Coma	Fatigue Paranoia

APPENDIX B: SAMPLE DRE EXAMINATION¹

I. Experience, Training and General Background

Officer _____, before we discuss today's case, I'd like to take a few minutes to introduce you to the court and the members of the jury.

1. Please introduce yourself.
2. How are you employed?
3. How long have you worked for the _____ (police or sheriff's department/state police/highway patrol, etc.)?
4. What prior law enforcement experience do you have?
5. What special training and/or experiences, if any, have you had in the field of detecting and apprehending drivers impaired by alcohol or drugs?
 - _____ Police Academy
 - _____ College courses/formal degrees
 - _____ Books read
 - _____ Narcotics training
 - _____ DRE Course/certification
 - _____ DRE Instructor Course
 - _____ Specialized conferences
 - _____ Published articles/classes taught (by the DRE)
6. Have you ever participated in a "drinking lab?"
7. How many times?
8. What is the purpose of a drinking lab?
9. During the lab(s), did you have an opportunity to administer the Standardized Field Sobriety Tests to people and then compare your opinions regarding their levels of impairment to their actual breath alcohol levels?
10. Were you able to accurately and reliably discern their level of alcohol impairment?
11. Have you participated in any labs where subjects were provided illegal or illicit drugs?
12. Why not?
 - *It would be illegal and dangerous.
13. Approximately how many people have you stopped for DUI?

THE DRUG EVALUATION AND CLASSIFICATION (DEC) PROGRAM

14. Did you arrest everyone you stopped whom you initially suspected was DUI?
**No. (Check with the witness prior to asking this question).*
15. Why not?
**If a person passes the Standardized Field Sobriety Tests, I do not arrest him or her.*
16. How many times have you administered the Standardized Field Sobriety Tests?
17. How many people have you arrested for DUI?
18. After you arrested them, did you have an opportunity to give them breath tests?
19. Did you compare your opinions regarding the arrestees' levels of impairment to their actual breath alcohol levels?
20. Based on that comparison, could you tell us whether you were able to make good arrest decisions using the Standardized Field Sobriety Tests?

II. The Instant Case

21. Calling your attention to _____ (date of arrest). Were you working on that date?
22. Where were you at approximately _____?
23. On that date and at that time, did you perform a Drug Influence Evaluation on someone who later became known to you as _____?
24. Do you see that person in the courtroom today?
25. Please point at that person and identify him/her by a unique article of clothing that he/she is wearing.

LET THE RECORD REFLECT THAT OFFICER _____ HAS IDENTIFIED THE DEFENDANT, _____.

III. DRE Testimony

26. Are you familiar with the national Drug Evaluation and Classification Program, also referred to as the DRE Program?
**Yes.*
27. What is the DRE Program?
**The national Drug Evaluation and Classification Program allows specially trained law enforcement officers, called Drug Recognition Experts (Evaluators), or DREs, to accurately and reliably determine whether a person is under the influence of drugs, and, if so, what category of drugs. The program is administered by the International Association of Chiefs of Police (IACP) and funded in large part by NHTSA.*

28. What is NHTSA?
**NHTSA is the National Highway Traffic Safety Administration. It is a federal agency which operates under the auspices of the United States Department of Transportation.*
29. How many states participate in the DRE Program?
**Thirty-eight (38), plus the District of Columbia.*
30. How do the IACP and NHTSA provide for the education and training of DREs?
**They sponsor DRE schools around the country. They also publish the DRE manuals and other materials.*
31. Are you a certified DRE?
**Yes.*
32. Who certified you?
**My state coordinator recommended me; IACP issued the certification.*
33. Did IACP issue you a certification card?
**Yes.*
34. I'm showing you what has been marked as State's exhibit _____ for identification. Do you recognize this exhibit? (WARNING: Prosecutors should NOT introduce an original card into evidence. If they do, the officer may NOT get the card back [though most judges would grant a motion to substitute a copy for the original]). **Yes*
35. Can you tell us what it is?
**Yes. It is my certification card.*
36. Is it an original or a photocopy?
**Photocopy.*
37. Is it a true and exact copy of the original? AT THIS TIME, THE STATE MOVES STATE'S EXHIBIT _____ FOR IDENTIFICATION INTO EVIDENCE AS STATE'S EXHIBIT _____
38. When were you certified as a DRE?
39. How does a law enforcement officer achieve certification as a DRE?
**Officers seeking DRE certification, also called DRE candidates, must attend nine days of classroom DRE training. The classroom training includes field sobriety testing and basic human physiology and drug pharmacology. After completion of the nine day course, DRE candidates must take and pass a written certification examination.*

The candidates that pass the written test must participate in and complete an internship period where they conduct actual drug evaluations under the tutelage of a certified DRE instructor. During this period, DRE candidates must conduct and draft a minimum of 12 drug influence evaluations and must be corroborated by laboratory analysis at least 75 percent of the time when they submit samples to the laboratory. They must also correctly identify three different categories of drugs as confirmed by laboratory analysis. Finally, they must be recommended for certification by at least two certified DRE instructors. DRE candidates who comply with all of these requirements may be recommended for certification by their states (IACP issues the certification number and paperwork).

40. What procedures do DREs use to determine whether or not someone is under the influence of drugs?
**We administer a drug influence evaluation.*
41. What is a drug influence evaluation?
**The drug influence evaluation incorporates the DRE protocol. The drug influence evaluation is a standardized and systematic process for identifying drug influence and impairment. It utilizes a variety of readily observable signs and symptoms that medically are accepted as reliable indicators of drug influence. The examination includes a brief medical history, pulse, blood pressure, body temperature, pupil size and reaction to light. The process allows a trained Drug Recognition Expert to determine whether or not someone is under the influence of a drug or drugs and, if so, what category of drugs. The process is systematic because it is based on a complete set of observable signs and symptoms that are known to be reliable indicators of drug impairment. The process is standardized because it generally is conducted in the exact same way by every DRE for every subject.*
42. Is the DRE Protocol generally accepted to be an accurate and reliable means of identifying drug influence and impairment?
**Yes. In fact, that national DRE Program is recognized by the United States Department of Transportation, the ACLU, the American Bar Association and the International Association of Chiefs of Police. The 1988 Surgeon General's Workshop on Drunk Driving Panel on Law Enforcement also endorsed the program. Miami-Dade County's DRE Program is endorsed by the Dade County Medical Association, the Broward County Medical Association and the Broward County Psychiatric Association.*
43. How many people have you evaluated for drug influence and impairment?
44. Approximately how many times have you determined that a DUI suspect was under the influence of drugs?
45. Have you ever confirmed your opinions by taking urine or blood samples?
46. Based on your training and experience, can you accurately and reliably determine whether someone is under the influence of drugs?
47. Based on your training and experience, assuming a person is impaired, can you accurately and reliably identify the particular drug category or categories causing a person's impairment?
**Yes.*
48. How many drug categories are there?
**Seven.*
49. How are the drugs grouped?
**Drugs are grouped according to common or shared effects, known as signs and symptoms.*
50. What are the seven drug categories?
**They are:*
- 1) Central Nervous System (CNS) Depressants
 - 2) CNS Stimulants
 - 3) Hallucinogens
 - 4) Phencyclidine (or PCP)

- 5) Inhalants
- 6) Narcotic Analgesics
- 7) Cannabis

IV. The DRE Protocol

51. Can you briefly describe how a drug influence evaluation is performed?

**There are 12 stages in a DRE evaluation. They are:*

- 1) Breath Alcohol Test
- 2) Interview of the Arresting Officer
- 3) Preliminary Examination and First Pulse
- 4) Eye Examination
- 5) Divided Attention Psychophysical Tests
- 6) Vital Signs and Second Pulse
- 7) Dark Room Examination
- 8) Examination for Muscle Tone
- 9) Check for Injection Sites and Third Pulse
- 10) Suspect's Statements and Other Observations
- 11) Opinions of Evaluator
- 12) Toxicological Examination

A. Breath Alcohol Test

52. Officer, please describe the first component of the DRE evaluation?

**During the first phase, an officer administers a breath test to the suspect for the purpose of determining the suspect's breath alcohol level (BrAC). Based on the suspect's BrAC, we can determine whether alcohol may be a contributing cause or the sole cause of the suspect's observable impairment.*

53. Was the defendant given a breath test in this particular case?

54. Are you familiar with the defendant's breath test results?

**Yes, I am.*

55. How are you familiar with his or her results?

**I reviewed the breath alcohol test results evidence card that the instrument generated when the defendant blew into it.*

56. What experience, if any, do you have in recognizing alcohol-induced impairment?

57. What did the breath alcohol test results indicate to you as to whether or not alcohol was the sole cause or a contributing factor to the defendant's impairment? **The test indicated that defendant's breath alcohol test results were inconsistent with the defendant's performance on the Standardized Field Sobriety Tests.*

B. Interview of the Arresting Officer(s)

58. Please tell us about the second phase of the DRE examination.

**During the second phase, we discuss the circumstances of the arrest with the arresting officer(s). We ask the arresting officer(s) about the suspect's behavior, appearance, and driving pattern. We also ask the arresting officer(s) whether the*

suspect made any statements and whether the arresting officer(s) found any other relevant evidence like a small pipe or a baggie.

59. Did you interview the arresting officer in this case?

**Yes.*

60. Did the arresting officer tell you how the defendant behaved and what, if anything, he said?

**Yes. (If the judge allows the prosecutor to do so, the prosecutor should ask what the defendant's actions or statements meant to the DRE)*

C. Preliminary Examination and First Pulse

61. Please describe the third phase of the DRE evaluation.

**During the third phase, we ask the suspect a series of standard questions relating to the suspect's health and recent ingestion of food, alcohol and drugs. We make observations regarding the suspect's attitude, coordination, speech, breath and face. We also determine whether the suspect's pupils are equal in size and whether the suspect's eyes can track equally and follow a moving stimulus. Finally, we look for HGN and take the suspect's pulse for the first of three times.*

62. What are the purposes of the preliminary examination?

**There are two main purposes of the preliminary examination. First, we determine whether the suspect may be suffering from an injury or other condition unrelated to drugs. If we believe that this is a possibility, he must seek medical help immediately. If we believe that the suspect's condition is drug related, we continue with the evaluation. Second, we obtain information and make observations that assist us in coming to a conclusion later on.*

63. Did you conduct a preliminary examination in this case?

**Yes.*

64. Did you ask the defendant some questions?

**Yes.*

65. Please tell us what questions you asked the defendant and what answers the defendant gave. *NOTE: The prosecutor may need to refresh the witness' recollection by having the witness refer to the drug influence evaluation form. If that is the case, the prosecutor can use the following predicate:*

a. Would the Drug Influence Evaluation refresh your recollection?

b. I'm showing you what is marked as State's exhibit _____ for identification.

c. Do you recognize it?

d. What is it?

**The Drug Influence Evaluation I filled out in this case. (The officer should review the paperwork)*

e. Is your memory refreshed?

f. Please tell us what questions you asked and the answers the defendant gave.

**What time is it now?*

Defendant's answer:

**When did you last sleep?*

Defendant's answer:

**How long did you sleep?*

Defendant's answer:

**Are you sick or injured?*

Defendant's answer:

(NOTE: The questions relating to medical conditions and treatments are important because they allow us to exclude alternate medical explanations for the impairment)

**Are you diabetic?*

Defendant's answer:

**Are you epileptic?*

Defendant's answer:

**Do you suffer from allergies?*

Defendant's answer:

**Do you take insulin?*

Defendant's answer:

**Do you have any physical defects?*

Defendant's answer:

**Are you under the care of a doctor or dentist?*

Defendant's answer:

**Are you taking any medication or drugs?*

Defendant's answer:

66. What observations, if any, did you make of the defendant during the preliminary examination?

_____ Speech

_____ Eyes

_____ Face

_____ Breath

_____ Balance

67. Based upon your training and experience, what did the results of your preliminary examination mean to you?

D. Eye Examination

68. Please describe the fourth phase of the DRE evaluation.

**During the fourth phase, we examine the suspect for horizontal gaze nystagmus, vertical gaze nystagmus, and a lack of convergence.*

1. HGN Test

69. What is the first eye test DREs administer?

**The horizontal gaze nystagmus test, also referred to as the HGN test.*

70. How is the HGN test performed?

**There are three parts to this test. During the first part, we examine the subject's smooth pursuit. We examine the subject's smooth pursuit by moving an object, usually a pen or small flashlight, from a point near the person's nose outwards towards the side of his face so that the eyeball follows it from one side of the eye to the other.*

71. What do you mean by "smooth pursuit?"

**Normally, a person's eyes smoothly track moving objects just as a car's windshield wipers move across a wet windshield. However, if a person is under the influence of depressants, including alcohol, inhalants or phencyclidine, his eyes may exhibit a jerking or tugging motion to the center as his eyes track a moving object. The motion is similar to windshield wipers moving across a dry windshield.*

72. Why is this test important?

**It's important because HGN is an impairment of the eyes' ability to track. In the context of driving, it means that a person may have difficulty observing and tracking other cars or pedestrians.*

73. Can you please demonstrate the smooth pursuit portion of the test to the court?

**We hold a pen or other stimulus 12 to 15 inches from the subject's nose. We move the pen from side to side to see and observe whether or not the subject is able to smoothly follow the moving object.*

74. Did you perform this part of the test on the defendant?

75. Did you perform this part of the test on the defendant's left eye?

76. What observations, if any, did you make?

77. Did you perform this part of the test on the defendant's right eye?

78. What observations did you make?

79. What is the second part of the HGN test?

**During the second part of the test, we examine the subject's eye for distinct and sustained jerkiness at maximum deviation. We hold the pen steady and look to see if the subject's eye jerks at that position. Jerking at this deviation is considered an indicator if it is "distinct."*

80. How long do DREs have a subject hold his eye at the outer corner?
**About four seconds.*
81. Did you perform this portion of the test on the defendant's left eye?
82. What observations did you make?
83. Did you perform this portion of the test on the defendant's right eye?
84. What did you observe?
85. What is the third part of the HGN test?
**During the third part of the test, we determine if and at what angle from the nose the eye begins to jerk.*
86. How is this test performed?
**Again, we place the pen 12 to 15 inches from the subject's nose and slowly move the pen toward the outer corner of his eye. We always start with the left eye. If we see any jerking, we stop moving the pen and hold it steady. We make sure that the eye is really jerking. If it is not, we start moving the pen further towards the outer portion of the eye and again look for jerking. If the eye jerks, we locate the point at which the jerking begins and estimate the angle of onset.*
87. Why do you estimate the angle of onset?
**Research demonstrates that a person's breath or blood alcohol level can be estimated to within 0.02 by subtracting the angle of onset from 50.*
88. Did you perform this portion of the test on the defendant's left eye?
89. What did you observe?
90. Based upon your training and experience, and your familiarity with HGN related research, what, if anything, does this indicate to you?
91. Did you perform this portion of the test on the defendant's right eye?
92. What did you observe?
93. Based upon your training and experience, and your familiarity with HGN related research, what, if anything, did the defendant's performance on the HGN test indicate to you?
- 2.VGN Test
94. What is the second eye test that DREs perform?
**The vertical gaze nystagmus test.*
95. How do DREs perform the VGN test?
**We ask the subject to look at a stimulus and move the stimulus straight up. We check to see whether the subject's eyes jerk while gazing upward.*
96. Did you perform the VGN test in this case?

97. What did you observe?
98. Based upon your training and experience, what did this indicate to you?

3. Convergence Test

99. What is the third eye test that DREs administer?
**The lack of convergence test.*
100. How is this test performed?
**We hold a pen or other stimulus about 15 inches from the subject's face and point the tip of the pen toward the subject's nose. We ask the subject to hold his head still and follow the pen with his eyes. We then move the pen in a slow circle. Once we determine the subject is following the pen, we bring it in slowly and steadily towards the bridge of the subject's nose. We look to see if the subject's eyes converge. A subject's eyes are said to lack convergence if his eyes are unable to converge on the stimulus.*
101. Did you perform this test in this case?
102. What did you observe?
103. Based upon your training and experience, what did this indicate to you?

E. Divided Attention Psychophysical Tests

104. Please describe the fifth component of the drug influence evaluation.
**During the fifth phase of the evaluation, we administer four psychophysical tests: the Romberg Balance; the Walk and Turn; the One Leg Stand; and the Finger to Nose. We can accurately determine whether a suspect is impaired by administering these tests.*
105. Are these tests divided attention tests?
**Yes.*
106. What is a divided attention test?
**A divided attention test is an examination which assesses a subject's ability to perform a mental and a physical task at the same time. For example, on the One Leg Stand, we ask the subject to count out loud while holding one foot approximately six inches off of the ground.*
107. Why are divided attention tests important?
**Driving requires people to perform mental and physical tasks simultaneously all of the time. For example, when a driver approaches a yellow light he needs to consider distance, speed and the traffic at the same time, or shortly afterwards. He or she may need to remove his foot from the accelerator and begin to brake. Thus, examinations that test a driver's divided attention skills tell us a lot about the driver's ability to safely operate a motor vehicle.*
108. Are these psychophysical tests used exclusively by DREs?
**No. DUI officers traditionally rely on some of these same tests to identify alcohol influence and impairment. In addition, medical doctors have relied upon these or similar tests for decades.*

1. Romberg Balance Test

109. What is the first psychophysical test that DREs administer?
**The Romberg Balance Test.*
110. Do DREs instruct each subject how to properly perform the test?
**Yes.*
111. Do DREs demonstrate the test to each subject?
**Yes.*
112. Would you please explain and demonstrate the test for the court in the same manner that DREs do for each subject?
**We ask the subject to stand straight with his feet together and his arms down at his sides. We tell the subject to remain in this position until we tell him to begin. We then ask the subject whether he understands this instruction. This is important because an inability to follow instructions is indicative of impairment.*
- We then tell the subject that when we say to begin, he should tilt his head back slightly and close his eyes. We tell the subject that once he closes his eyes and tilts his head back, he is not to open his eyes until he thinks that 30 seconds have elapsed. We then ask the subject if he understood the directions and tell the subject to begin.*
113. What do DREs look for when administering this test?
**We look for:*
- _____ Body tremors
 - _____ Eyelid tremors
 - _____ Sway (distance and direction)
 - _____ Muscle rigidity/flaccidity
 - _____ Statements or sounds
 - _____ The number of seconds that the subject estimates as 30.
114. Did you administer the Romberg Balance Test in this case?
115. Did you fully explain and demonstrate the test before asking the defendant to perform?
116. In the same manner you described and demonstrated earlier?
117. Did the defendant perform this test?
118. How did the defendant perform?
119. Based upon your training and experience, what did this indicate to you?

2. Walk and Turn Test

120. What is the second psychophysical test that DREs administer?
**The Walk and Turn Test.*
121. Do DREs instruct each subject how to properly perform the test?
**Yes.*
122. Do DREs demonstrate this test to each subject?
**Yes.*
123. Can you please explain and demonstrate the test for the court in the same manner that DREs do for each subject?
**We tell the subject to place his right foot on the line ahead of his left foot with the heel of the right foot against the toe of the left foot. We tell the subject to put his arms down against his sides and keep them there throughout the test. We then make sure that the subject understands these directions. We instruct the subject that when we tell him to begin, he is to take nine heel-to-toe steps up the line. We tell him that, on the ninth step, he is to leave his front foot on the line and turn around, taking a series of small steps with the other foot. We instruct him to take nine heel-to-toe steps back after he completes the turn. We instruct him to watch his feet as he walks and to count off the steps out loud from one to nine. Finally, we tell him that once he begins, he is to keep walking until the test is completed. We then ask him if he understands the instructions.*
124. What do DREs look for when administering the Walk and Turn Test?
**We look for:*
- Keeps balance during the instruction phase
 - Starts too soon
 - Steps off of the line
 - Raises arms while walking
 - Misses heel to toe
 - Stops walking
 - Wrong number of steps
 - Improper turn
 - Body tremors
 - Muscle rigidity/flaccidity
 - Statements/sounds
125. Did you administer the Walk and Turn Test in this case?
126. Did you fully explain and demonstrate the test before asking the defendant to perform?
127. In the same manner you described and demonstrated earlier?
128. Did the defendant perform this test?
129. How did the defendant perform?
130. Based upon your training and experience, what did this indicate to you?

3. One Leg Stand Test

131. What is the third psychophysical test that DREs administer?
**The One Leg Stand.*
132. Do DREs instruct each subject how to properly perform the test?
**Yes.*
133. Do DREs demonstrate this test to each subject?
**Yes.*
134. Can you please explain and demonstrate the test for the court in the same manner that DREs do for each subject?
**We ask the subject to stand straight with his feet together and his arms down at his sides. We tell him to maintain this position while we give him the instructions and emphasize that he is not to start the test until we instruct him to begin. We ask him if he understands.*
- We then tell him that when we tell him to begin, he is to raise his right foot in a stiff leg manner and hold the foot about six inches off of the ground, with the toes pointed outward. We instruct him to keep his arms at his sides and keep looking directly at his foot while counting out 30 seconds or until told to stop as follows: one thousand and one, one thousand and two, one thousand and three, and so on until told to stop. We then ask him once again if he understands. Finally, we tell the subject to begin. After he completes the test while raising his right leg, we then ask him to perform the test again while raising his left leg.*
135. What do DREs look for when administering the One Leg Stand Test?
**We look for:*
- Raises arms
 - Sway
 - Hopping
 - Puts foot down
 - Standing still and straight during instructions
 - Body tremors
 - Muscle rigidity/flaccidity
 - Statements/sounds
136. Did you administer the One Leg Stand in this case?
137. Did you fully explain and demonstrate the test before asking the defendant to perform?
138. In the same manner you described and demonstrated earlier?
139. Did the defendant perform this test?
140. How did the defendant perform?
141. Based upon your training and experience, what did this indicate to you?

4. Finger to Nose Test

142. What is the fourth psychophysical test that DREs administer?
*The Finger to Nose Test.
143. Do DREs instruct each subject how to properly perform the test?
*Yes.
144. Do DREs demonstrate this test to each subject?
*Yes.
145. Can you please explain and demonstrate the test for the court in the same manner that DREs do for each subject?
*We ask the subject to place his feet together and stand straight. We then tell him to put his arms by his sides and close his hands. We instruct him to extend his index fingers and to remain in that position until we tell him to begin. We then tell the subject that when we tell him to begin he is to tilt his head slightly back and close his eyes. We instruct the subject that when we tell him to begin, he is to bring the tip of his index finger up to the tip of his nose. We further tell him that as soon as he touches the tip of his nose, he is to return his arm to his side immediately. We tell the subject that we will call out "left" or "right." If we call out "right," he is to bring his right hand index finger forward to his nose; when we tell him "left," he is to move the left hand index finger to his nose. We then ask the subject if he understands the instructions. We then instruct the subject to tilt his head back and close his eyes and to keep them closed until we tell him to open them. We then call out "left... right... left... right... right... left."
146. What do DREs look for when administering the Finger to Nose Test?
*We look for:
- _____ Fingertips touch nose or other parts of face
 - _____ Sway
 - _____ Body tremors
 - _____ Eyelid tremors
 - _____ Abnormal muscle tone
 - _____ Statements/sounds
147. Did you administer the Finger to Nose Test in this case?
148. Did you fully explain and demonstrate the test before asking the defendant to perform?
149. In the same manner you described and demonstrated earlier?
150. Did the defendant perform this test?
151. How did the defendant perform?
152. Based upon your training and experience, what did this indicate to you?

E. Vital Signs and Second Pulse

153. Please describe the sixth phase of the DRE examination.

**During the sixth phase, we take the suspect's blood pressure, temperature and pulse. Some drug categories may elevate the vital signs. Others may lower them and some may have no effect. Vital signs thus provide considerable evidence of the presence and influence of a variety of drugs.*

1. Pulse

154. What is the first vital sign that DREs check?

**The subject's pulse rate.*

155. How do DREs check a subject's pulse rate?

**We check the pulse by placing our fingers on the subject's skin next to an artery. We press down slightly to feel the artery expand as the blood surges through. Each surge is a pulse. We count the pulses that occur in 30 seconds and multiply by two to give us the pulse rate in beats per minute.*

156. How do DREs know that they are feeling an artery rather than a vein?

**Because you can't feel the surge or pulse in a vein.*

157. How often do DREs take a subject's pulse?

**Three times. We take it during the preliminary examination, we take it following the Finger to Nose Test and we take it again during the vital signs examination.*

158. Is there a normal range in which most peoples' pulse rates fall?

**Yes.*

159. What is the normal range?

**From 60 to 90 beats per minute.*

160. Is this a medically acceptable range of normal?

**Yes.*

161. Did you take the defendant's pulse?

**Yes.*

162. How many times?

**Three.*

163. Did you use the same procedure you just described?

164. What were the results?

165. Based upon your training and experience, what did this indicate to you?

2. Blood Pressure

166. What is the next vital sign that you checked?

**Blood pressure.*

167. What is blood pressure?
**Blood pressure is the force that the circulating blood exerts on the walls of the arteries.*
168. What do DREs use to measure a person's blood pressure?
**An instrument called a sphygmomanometer.*
169. What training, if any, do DREs have in the use of this instrument?
**We are trained how to use the instrument during the classroom instruction phases of DRE Pre-School and School.*
170. How do DREs use this device?
**We wrap a special cuff that is attached to the device around the subject's arm. We apply a stethoscope to the subject's brachial artery pulse point and inflate the blood pressure cuff with air. As we pump the air in, the cuff squeezes the subject's arm. When the pressure is high enough, the cuff squeezes the artery completely shut so that no blood flows through it. We then slowly release the air in the cuff until we can hear the blood spurting through the artery when the subject's heart contracts. The point at which we can first hear the blood spurting is the systolic level and the pressure that this occurs is called the systolic blood pressure.
We continue to release the air from the cuff until it drops down to the point where the blood flows continuously through the artery. This level is called the diastolic level and the pressure reading at this point is called the diastolic blood pressure.*
171. How do DREs know when the blood started to spurt, as opposed to when it was flowing?
**We listen to the spurting blood using the stethoscope. When there is no blood flowing, we can't hear anything through the stethoscope. When we release the air from the cuff, we start hearing a spurting sound when the blood starts to spurt. As we continue allowing the air to escape, the blood surges become steadily longer. When we reach the diastolic pressure, the blood flows steadily and the sounds cease.*
172. Is there a normal range in which most peoples' systolic and diastolic blood pressures fall?
**Yes.*
173. What is the normal range for a person's systolic blood pressure?
**From 120 to 140 mmHg.*
174. What is the normal range for a person's diastolic blood pressure?
**From 70 to 90 mmHg.*
175. Are these medically accepted ranges of normal?
**Yes.*
176. Did you take the defendant's blood pressure?
**Yes.*
177. Using the same procedure you just described?
178. What were the results?
179. Based upon your training and experience, what did this indicate to you?

3. Temperature

180. What is the next vital sign that you checked?
**Body temperature.*
181. How do you determine a subject's body temperature?
**We measure body temperature with a thermometer.*
182. Do DREs rely on a range of normal in which most peoples' body temperature falls?
**Yes.*
183. What is that range?
**Between 97.6 and 99.6 degrees.*
184. Is that a medically accepted range of normal?
**Yes.*
185. Did you take the defendant's body temperature?
**Yes.*
186. Using the same procedure you described earlier?
187. What were the results?
188. Based upon your training and experience, what did this indicate to you?

F. Dark Room Examinations

189. Please describe the seventh component of the drug influence evaluation.
**During the seventh phase of the evaluation, we estimate the size of the subject's pupils under three different lighting conditions to determine whether the subject's pupils are dilated, constricted, or normal. Some drugs increase pupil size. Others may decrease pupil size. We also check the eyes' reaction to light. Certain drugs may slow the eyes' reaction to light. Finally, we examine the suspect's nasal and oral cavities for signs of ingestion.*

1. Eye Examinations

190. How do DREs determine the size of a suspect's pupils?
**We estimate pupil size with a pupilometer*
 MARK AND INTRODUCE THE PUPILOMETER
191. How does the pupilometer work?
**The eye gauge has a series of dark circles. The diameters of the circles range from 1.0 mm to 9.0 mm, in half mm increments. We hold the eye gauge along side the subject's eye and move the gauge up or down until we identify the circle closest in size to the subject's pupil.*
192. Under what lighting conditions do DREs examine a person's eyes?
**We examine each subject's eyes under three different lighting conditions: room light, near total darkness, and direct light.*

a. Room Light

193. How do DREs perform the room light portion of this test?
**We simply estimate the size of the subject's pupils in room light.*
194. Did you perform the room light portion of the test in this case?
195. Using the same procedure you just described?
196. What did you observe?
197. Based upon your training and experience, what did this indicate to you?

b. Darkness

198. How do DREs perform the near total darkness portion of the evaluation?
**We take the subject into a room that is almost completely dark. We then wait 90 seconds to allow the subject's eyes to adapt to the dark. We then examine the subject's eyes with a penlight. We cover the tip of the penlight with our fingers so that only a reddish glow emerges. We move the glowing tip of the light toward the subject's left eye and estimate it. We then repeat the process on the right eye.*
199. Did you perform the near total darkness portion of the test in this case?
200. Using the same procedure you just described?
201. What did you observe?
202. Based upon your training and experience, what did this indicate to you?

c. Direct Light

203. How do DREs perform the direct light portion of the test?
**We shine a penlight into the subject's left eye and estimate the pupil. We then repeat the test on the right eye.*
204. Did you perform the direct light portion of the test in this case?
205. Using the same procedure you just described?
206. What did you observe?
207. Based upon your training and experience, what did this indicate to you?
2. Nasal and Oral Examination
208. You stated earlier that DREs also check each subject's nasal and oral cavities during the dark room examination. What do you look for?
**We look for signs that the subject has been using drugs.*

209. What kinds of things do DREs look for?

**We examine the tongue to see if the taste buds are raised. We check to see if the tongue is coated and what color it is. We look for residue in the teeth, gums and nose. We look for nasal irritation and perforation of the septum. Different categories of drugs have different effects. For example, certain kinds of drugs will have a distinct odor. Others may cause the nose to run. The existence or absence of any of these signs is helpful in determining what category of drugs may be causing a subject's impairment.*

210. Did you examine the defendant's nasal and oral cavities?

211. What did you observe?

212. Based upon your training and experience, what did this signify to you?

G. Examination for Muscle Tone

213. Please describe the eighth component of the DRE evaluation.

**During the eighth phase, we examine the subject's muscle tone. Certain categories of drugs may cause the muscles to become rigid. Other categories may cause the muscles to become very loose and flaccid.*

214. How do DREs examine the subject's muscle tone?

**We examine the subject's arms, legs and neck visually and by touch.*

215. Did you examine the defendant's muscle tone?

216. Using the same procedure you just described?

217. What did you observe?

218. Based upon your training and experience, what did this indicate to you?

H. Check for Injection Sites and Third Pulse

219. What is the ninth component of the DRE evaluation?

**During the ninth phase of the evaluation, we examine the suspect for injection sites. Injection sites may indicate the recent or patterned use of certain types of drugs. We also take the suspect's pulse for the third and final time.*

225. How do DREs examine a subject for injection sites?

**We check the subject's arms and neck. We look for needles marks.*

220. Specifically, what procedure do DREs use?

**We run our hands over the subject's arms and necks and feel for bumps because bumps may indicate needle marks. Once we locate a possible injection site, we verify it by using a lighted magnifying glass to see if the bump is from a needle.*

221. How do DREs determine whether bumps were caused by a needle or other things?

**By using a light and a magnifying lens.*

222. Did you examine the defendant for injection sites?
223. What did you observe?
224. Based upon your training and experience, what did this indicate to you?

I. Suspect's Statements and Other Observations

(*WARNING:* Prosecutors should skip to Section J, Opinions of the Evaluator, if the defendant did not waive *Miranda*)

225. Please describe the tenth component of the drug influence evaluation.
*During the tenth phase, we read *Miranda*, if we have not done so previously, and ask the suspect a series of questions. We also confirm our prior observations.
226. Did you read the defendant his *Miranda* rights?
227. Did you tell the defendant that he has a right to remain silent?
228. Did you tell the defendant that anything he said could be used against him in court?
229. Did you tell him that he has a right to an attorney?
230. Did you explain to him that if he could not afford a lawyer, one would be appointed for him at no cost?
231. Did you ask him whether or not he understood these rights?
232. What did he say?
233. Did he voluntarily, knowingly, and intelligently waive these rights?
234. Did you ask the defendant a series of questions?
*Yes.
235. Please tell us what questions you asked the defendant, and what answers the defendant gave.
(*NOTE: If the DRE is unable to remember the questions and answers, prosecutors should refresh his or her memory as described under Section C, Preliminary Examination*)

**Have you eaten today?*

Defendant's answer:

**When?*

Defendant's answer:

**What have you been drinking?*

Defendant's answer:

**How much?*

Defendant's answer:

*Time of last drink?

Defendant's answer:

*Time now?

Defendant's answer:

(Prosecutors should ask the officer what the actual time was)

*When did you last sleep?

Defendant's answer:

*How long?

Defendant's answer:

*Were you driving?

Defendant's answer:

*Do you feel that you are under the influence?

Defendant's answer:

*What medicine or drug have you been using?

Defendant's answer:

*How much?

Defendant's answer:

*Time of use?

Defendant's answer:

*Where were the drugs used?

Defendant's answer:

J. Opinions of the Evaluator

236. Please describe the eleventh component of the DRE examination.

**During the eleventh phase, we form an opinion, based on the totality of the evaluation, as to whether the suspect is impaired. If we determine that the suspect is impaired, we indicate what category or categories of drugs may explain the suspect's impairment.*

237. Did you form an opinion in this case?

238. What is that opinion?

239. What are you basing that opinion on?

(If there is a positive toxicological result or someone found a particular drug in the defendant's possession or there is other circumstantial evidence as to the specific drug the defendant consumed, the prosecutor should ask the following questions. If not, the prosecutor should proceed to Section K, Toxicological Examination)

THE DRUG EVALUATION AND CLASSIFICATION (DEC) PROGRAM

240. Officer, are you familiar with the drug _____?
*Yes.
241. Is that drug within the category of drugs that you believe was influencing the defendant?
NOTE: Prosecutors should pre-try the DRE on the following two questions:
242. How long does it take for that drug to have an effect on an individual, once he has taken it into his body?
243. How long will the effects of that drug last?

K. Toxicological Examination

244. Please describe the twelfth component of the DRE evaluation.
**During the twelfth phase, we request a urine or blood sample from each suspect. We then send the sample to the toxicology lab for analysis.*
245. Did you request a urine or blood sample in this case?
246. Did you inform the defendant that, if he refused, he would lose his license for _____?
247. Did you obtain a _____ (blood or urine) sample? *(If no, the prosecutor should ask why not and skip the next series of questions)*
248. Please describe how you obtained the sample?
249. Did you witness the defendant provide the sample?
250. What did you do with the sample after you obtained it?
251. What happened to the sample after you logged it in?
252. Did this complete your evaluation of the defendant?

¹ Numerous police officers and prosecutors drafted sample DRE examinations during the past 15 years. This examination is a compilation of their combined efforts, but is largely based on former Assistant City (Phoenix) Attorney Cliff Vanell's predicates. Other contributors include: Samuel Bejar, Michael E. Gilfarb, Chuck Hayes, Karen Herland, Steven Liebowitz, Tom Page, Frank Pichel, Hal Ruffner, Sandy Richardson and Stephen K. Talpins.

