DWI Defense Manual

Bridging the Gap between Drunk Driving and Drugged Driving

By: James A. Davis, II
Davis & Davis, Attorneys at Law, P.C.
215 North Main Street
Salisbury, N.C. 28144

Table of Contents

Police Training and Introduction

1. Preface

A. The information in this Manual comes from a variety of materials whose accuracy cannot reasonably be questioned. Almost nothing is original.

B. My goal is to distill my years of education and experience, as well as 1,136 pages of NHTSA training materials, into one comprehensive easy-to-use Manual. Its focus is on a topic many defense attorneys struggle to understand: Medication and/or drug impairment.

2. Introduction

A. This Manual is comprehensive: It covers the initial standardized field sobriety course all the way through the drug recognition expert course and much more. Some of the information in this Manual is "entry level"; some "highly advanced." Use the table of contents to locate the answers to your questions.

B. Why did I write this Manual? Experience has shown that most prosecutors, defense attorneys, and yes, even judges, believe that if an officer has taken and successfully completed the National Highway Traffic Safety Administration's (hereinafter "NHTSA") DWI Detection and Standardized Field Sobriety Testing (hereinafter "SFST") training course that the officer (a) is qualified and (b) provides a reliable opinion of appreciable impairment for all offenses involving DWI, regardless of the alleged impairing substance involved in the case. Those beliefs, especially in medication DWI cases, are inaccurate. It falls upon the defense bar to closely examine the officer's opinion. As shown in this initial section, the NHTSA DWI Detection and SFST course ***is the initial instructor for SFST's and primarily focuses on training for alcohol related DWI's***. The truth is, with regard to alleged medication impaired driving, law enforcement often has no training about what a person impaired by that specific medication will look like. Moreover, the initial SFST course is ***merely the first of seven*** different DWI training courses an officer has available to law enforcement through NHTSA. Often, the old adage proves correct: "A little knowledge can be a dangerous thing."

C. Below is a common example that shows the limitations of an officer who has merely completed the initial NHTSA DWI Detection and Standardized Field Sobriety Testing course.

i. Facts – Driver is involved in an accident and is injured; driver is clearly "out of it"; officer does not smell alcohol, so he asks the driver if she has taken any medications; driver states she has only taken her prescribed Hydrocodone medication; due to the driver's injuries, the officer is only able to administer the HGN test on the driver; officer claims to have observed 4 (or more) out of 6 clues; officer then charges the driver with DWI based upon the wreck and the "observed HGN which is indicative of impairment".

ii. Problem – Due to the officer's limited training, he does not know there are 7 different and distinct drug categories (CNS Depressants, CNS Stimulants, Hallucinogens, Dissociative Anesthetics, Narcotic Analgesics, Inhalants, and Cannabis); he has only received training for CNS Depressants (among other things, alcohol is a CNS Depressant); he does not know that Hydrocodone is a Narcotic Analgesic; he does not know that there is a difference between the observable effects of a person impaired by alcohol versus Hydrocodone or some other non-CNS Depressant; he does not know that, even if a person is under the influence of a Narcotic Analgesic, they will not exhibit any HGN; he does not know that a person who is under the influence of a Narcotic Analgesic will have pinpoint pupils; he does not know that the individual's pulse rate will be below normal, blood pressure will be below normal, and body temperature will be below normal; the officer assumes that a wreck + medication = impairment, which clearly has a subjective influence on the officer's HGN test and results because he could not possibly see what he believes he saw (4 or more HGN clues).

iii. The Point – In order to effectively recognize whether or not a subject is under the influence of alcohol and/or drugs, ***it is important*** that the charging officer ***be able to identify the effects of the substances in humans***. A.R.I.D.E. Session IV Page 3. This process is dependent on recognizing observable signs and symptoms related to an impaired subject. Id. All drugs affect the body in a predictable fashion ***with different categories affecting the body differently***. Drugs that Impair Driving Session II Page 1.

iv. Thus, as we will see in this Manual, there is a gross miscarriage of justice occurring in our court systems if we treat a drug or medication related impaired driving case like an alcohol related DWI.

3. Seven Different NHTSA Training Courses/Manuals

A. NHTSA DWI Detection and SFST Testing (hereinafter cited as "SFST Student Manual").

i. This is the ***first*** training course in SFSTs as taught by NHTSA. I have found that a large amount of law enforcement officers have ***not completed any*** training in SFSTs. Of the officers that have received training in SFSTs, most (other than State Troopers) have merely completed this course which almost exclusively deals with alcohol impairment. Simply put, a large amount of officers providing a "reliable" lay opinion of appreciable impairment every day in our courts have only completed 1 of the 7 available SFST training courses and have only received training on the observable effects of alcohol impairment (as opposed to drug impairment).

B. SFST Four Hour Refresher.

C. SFST Eight Hour Refresher.

D. Advanced Roadside Impaired Driving Enforcement (A.R.I.D.E.).

i. This is the ***first*** training course as taught by NHTSA that focuses on educating officers on the difference between drunk driving and drugged driving. The course is "intended to bridge the gap between the SFST and DRE courses." A.R.I.D.E. Session I Page 4.

E. Preliminary Training for Drug Evaluation and Classification Program ("The Pre-School").

F. Drugs that Impair Driving.

G. Drug Evaluation and Classification Program ("The Drug Recognition Expert School").

4. Why We Need "Drug Recognition Experts"?

A. A Drug Recognition Expert is an individual who is specially trained to conduct evaluations of suspected drug-impaired subjects. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session I Page 2.

B. Through a series of specific and standardized examination procedures, Drug Recognition Experts are able to reach "reasonably accurate conclusions" concerning the category or categories of drugs causing the impairment in the subject. Id. At Page 3.

C. As set out more fully below, ***there are seven different drug categories and "[e]ach category produces a different set of effects on the human body."*** Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session II Page 4. In other words, "[e]ach category exhibits different signs of drug influence. Id. ***Thus, a person under the influence of Cannabis is not going to look like a person under the influence of a CNS Depressant***.

5. Important Definition

A. Psychoactive – A psychoactive drug or substance is a chemical that alters brain/body function, resulting in temporary changes in perception, mood, consciousness, and behavior. Drugs that Impair Driving Session II Page 1.

Elements of Driving While Impaired

1. Introduction

A. The majority of this Manual focuses on what is usually the most hotly contested issue in a DWI case, namely: ***whether or not the officer's lay opinion of appreciable impairment is sound, reasoned, and most importantly reliable such that the fact finder is fully satisfied and entirely convinced the opinion is accurate***. With that said, it is important to rigorously evaluate each and every element in a given DWI case. A very brief summary of the law pertaining to each element is provided below.

2. Four Elements – A person is guilty of DWI if she:

A. **Drives**

i. A person "drives" when he or she is "in actual physical control of a vehicle which is in motion or which has the engine running." N.C. Gen. Stat. § 20-4.01(7) and (25). The terms "driving" and "operating" are synonymous. N.C. Gen. Stat. §20-4.01(7); State v. Coker, 312 N.C. 432 (1984).

B. **A vehicle**

i. A "vehicle" is defined as "every device in, upon, or by which any person or property is or may be transported or drawn upon a highway, excepting devices moved by human power or used exclusively upon fixed rails or tracks." N.C. Gen. Stat. §20-4.01(49).

ii. Bicycles, however, are specifically included in the definition of a "vehicle" despite being moved by human power. Id.

iii. Horses are not "vehicles" for purposes of the impaired driving offense only. N.C. Gen. Stat. § 20-138.1(e).

iv. Mopeds are "vehicles" but not "motor vehicles." N.C. Gen. Stat. § 20-4.01(21a), (23), and (27d1).

C. **On a street, highway, or public vehicular area**

i. Street/Highway – The terms "street" and "highway" are synonymous. N.C. Gen. Stat. § 20-4.01(13); N.C. Gen. Stat. § 20-4.01(46).

ii. A "highway" is "the entire width between property or right-of-way lines of every way or place of whatever nature, when any part thereof is open to the use of the public as a matter of right for the purposes of vehicular traffic." N.C. Gen. Stat. § 20-4.01(13).

iii. A "public vehicular area" is defined as any area that falls within one or more of the following four categories:

1. Areas used by the public for vehicular traffic at any time. N.C. Gen. Stat. § 20-4.01(32)(a).

a. Examples include a drive, driveway, road, roadway, street, alley, or parking lot on the grounds of any public or private hospital, college, university, school, orphanage, church, or any institution, park or other facility maintained and supported by the State or its subdivisions; any service station, drive-in theater, supermarket, store, restaurant, or office building, or any other business, residential, or municipal establishment providing parking space whether the business or establishment is open or closed; and property owned by the United States and subject to the State's jurisdiction.

2. Beach areas used by the public for vehicular traffic. N.C. Gen. Stat. § 20-4.01(32)(b).

3. Roads used by vehicular traffic within or leading to gated or nongated subdivisions or communities, whether or not the subdivision or community roads have been offered for dedication to the public. N.C. Gen. Stat. § 20-4.01(32)(c).

4. Any portion of private property used by vehicular traffic and designated by the private property owner as a public vehicular area in accordance with N.C. Gen. Stat. § 20-219.4. N.C. Gen. Stat. § 20-4.01(32)(d).

D. **Impairment** – Impairment may be proved by the prosecution in any of three ways:

i. **While "under the influence of an impairing substance."**

1. An "impairing substance" includes:

a. Alcohol;

b. A controlled substance under Chapter 90 of the General Statutes; or

c. Any other drug or psychoactive substance capable of impairing a person's physical or mental faculties, or any combination of the above substances. N.C. Gen. Stat. § 20-4.01(14a).

2. Prescription medication – The fact that a person is legally entitled to use alcohol or a drug is not a defense to DWI. N.C. Gen. Stat. § 20-138.1(b).

3. "Under the influence of an impairing substance" means "the state of a person having his physical or mental faculties, or both, appreciably impaired by an impairing substance." N.C. Gen. Stat. § 20-4.01(48b).

ii. **After consuming a sufficient quantity of alcohol that the person has an alcohol concentration of 0.08 or more at any relevant time after the driving**.

1. "Alcohol" is "any substance containing any form of alcohol, including methanol, propanol, and isopropanol." N.C. Gen. Stat. § 20-4.01(1a).

2. "Alcohol concentration" is "the concentration of alcohol in a person, expressed either as grams of alcohol per 100 milliliters of blood or grams of alcohol per 210 liters of breath." N.C. Gen. Stat. § 20-4.01(1b).

3. A "relevant time after driving" is "any time after driving in which the driver still has in his body alcohol consumed before or during the driving." N.C. Gen. Stat. § 20-4.01(33a).

a. "Relevant time after driving" becomes an issue where there the defendant consumed alcohol after driving. In cases where there is a reported alcohol concentration (via blood or breath), the State carries the burden of entirely convincing the fact finder that the alcohol was in the defendant's body when the driving stopped.

iii. **With any amount of a Schedule I controlled substance or its metabolites in her blood or urine.**

1. For a list of Schedule I controlled substances, see N.C. Gen. Stat. § 90-89.

Physiology of Alcohol

1. There are Three Types of Alcohol – SFST Student Manual Page II-13.

   A. Ethyl alcohol, or ethanol, is the form of alcohol we are most familiar with (e.g., beer, wine, liquor). Id.

   B. Other two types: methyl alcohol, or methanol, is "wood alcohol"; isopropyl alcohol, or isopropanol, is "rubbing alcohol". Id.

2. Which form of ethanol "does the trick" (*i.e.*, impairs) the fastest?

   A. Trick question. Generally a can of beer (12 oz.), glass of wine (4 oz.), and shot of whiskey (1.25 oz and 90 proof) have the same ethanol concentration. SFST Student Manual Page II-13.

3. Physiologic Processes. SFST Student Manual Page II-14.

   A. Ethanol is a Central Nervous System Depressant. Id.

   B. Ethanol doesn't affect the person until it gets in the Central Nervous System. The Central Nervous System is made up by the brain, brain stem, and spinal cord. Ethanol gets to the brain by getting in the blood. Id.

4. Absorption. SFST Student Manual Page II-15.

   A. Absorption = process of ethanol moving into the blood. Id. Note – alcohol can pass directly through the walls of the stomach. Id.

   B. Empty stomach problem. Empty stomach = ideal circumstance for rapid absorption. About 20% will pass directly through the stomach walls; remainder directly through the small intestine (directly because *alcohol does not need to be digested*). Id.

C. **Food in the stomach will affect the absorption of alcohol**. Id. Food has to be at least partially digested before it can pass to the small intestine. When the brain senses food, it causes the pylorus muscle to constrict, cutting off passage to the small intestine. If alcohol is ingested with food, it will also remain trapped behind the pylorus. Some of the alcohol trapped in the pylorus will begin to break down chemically before it ever gets to the blood. Thus, the effect of food being in the stomach at the time of drinking is that **absorption is slowed significantly** (important regarding the issue of "was the defendant impaired at the time of driving"). Id.

5. Distribution. SFST Student Manual Page II-16.

A. Men vs. Women.

i. Alcohol has an affinity for water. There is little water in fat; more water in muscle. Women are naturally built with more fatty tissue. The typical male body is made up of about 68% water. Typical female body is made up of about 55% water. Thus, women have less fluid - pound for pound - in which to distribute the alcohol. This is why between a similarly sized male and female, the male typically has greater tolerance and therefore a lower BAC (because men typically have more water in which to distribute the alcohol). Id.

6. Elimination. SFST Student Manual Page II-16.

A. As soon as alcohol hits the bloodstream, the body starts trying to get rid of it. Most of the alcohol a person drinks is eliminated by metabolism. Id.

B. **Elimination rate**, through metabolism, **varies from person to person**. On the average, however, a person's BAC - after reaching peak value - will drop by about 0.015 per hour. Example - if a person reaches a max BAC of 0.15, it will take about 10 hours to eliminate all of the alcohol. SFST Student Manual Page II-17.

C. 175 lb male example: 2 beers on an empty stomach in quick succession: .04; two more: slightly above .08. Id.

Physiology of Drugs

1. Pharmacology.

A. Introduction

i. Pharmacology is the branch of medicine that studies the effects of drugs.

ii. Pharmacology can be divided into two disciplines: **pharmacokinetics** and **pharmacodynamics**. See Drug Toxicology for Prosecutors, Targeting Hardcore Impaired Drivers, Sarah Kerrigan, Ph.D (October 2004) at Page 13.[1]

B. Pharmacokinetics

i. Introduction

1. Pharmacokinetics is defined as how the drug (*pharmacon*) moves (*kinesis*) about the body. Drug Toxicology at Page 13.

2. A simple way to view pharmacokinetics is "what the body does to the drug" from absorption through elimination Id.

3. The human body recognizes a drug as a foreign substance or *xenobiotic*. The body naturally attempts to break down and eliminate these foreign substances. Drug Toxicology at Page 14.

4. Pharmacokinetics involves four stages:

a. *Absorption* (getting the drug into the body);

b. *Distribution* (movement throughout the body);

[1] This Paper will hereinafter be cited to as "Drug Toxicology".

c. *Metabolism* (breaking it down into other chemical components); and

d. *Elimination* (getting it out of the body). Id.

5. These processes largely determine the *efficacy* (the ability of the drug to produce a result) or *effectiveness* of the drug, its *concentration* at the active site (specific brain receptors), and the *duration* of the drug effect. Id.

6. Pharmacokinetic properties are used by pharmacologists, clinical researchers, and toxicologists to develop new therapeutics, understand the factors that govern abuse, determine how drugs can be detected over time and interpret drug effects on human performance. Id.

ii. Route of Administration: How the drug gets into the system. Drug Toxicology at Page 14.

1. The onset of action, duration of effects, intensity and quality of the drug experience may vary depending upon the route of administration. Id.

2. Drugs may get into the user's system a number of ways. Drugs may be:

a. Orally administered (swallowed);

b. Intravenously administered (injected);

c. Snorted; or

d. Smoked.

3. Intravenous drug administration provides maximum drug delivery and rapid onset of effects. However, this bypasses many of the body's natural safeguards and may result in complications of

intravenous drug use. For this reason, inhalation and smoking are popular alternatives. When a drug is smoked, it is rapidly absorbed in the lungs and transported to the brain via the arterial blood supply. Id.

4. In general, the efficiency and speed of drug delivery (the faster it is delivered to the brain) increases the potential for abuse and dependency. Id. Obviously, the faster the drug gets to the brain, the less opportunity the body has to break down the drug. Thus, the faster the delivery to the brain, the higher the potency (or effects).

iii. Absorption. Drug Toxicology at Page 15.

1. For a drug to exert an effect, it must be absorbed into the bloodstream, traverse membranes, and activate specific receptors. Id.

2. This process is largely determined by the physical and chemical properties of the drug. Id.

3. Most drugs can be characterized as acidic, basic or neutral, and unlike alcohol, which is highly water-soluble, many drugs are also soluble in fat or lipids. The degree to which a particular drug is water-soluble or fat-soluble influences how it is *distributed* throughout the body. Id.

iv. Distribution. Drug Toxicology at Page 15.

1. As soon as the drug is absorbed into the bloodstream, it is circulated to surrounding tissues and organs, and the distribution phase begins. Id.

2. Drugs that are lipid (fat) soluble are distributed more readily into the tissues, such as the heart, liver, kidney, brain, and fat. Id.

a. THC is fat-soluble, which means it is distributed and stored in tissues and fat depots within the body, accounting for its

gradual release and long *half-life* (the time it takes to eliminate half of the drug). Id.

v. Metabolism. Drug Toxicology at Page 16.

1. For most drugs, only relatively small amounts are excreted unchanged. Id.

2. To eliminate a drug, our bodies try to make the substance more soluble in water. Id.

3. This process makes it easier for us to eliminate the substance in our urine. Id.

4. Metabolism can affect pharmacological activity – i.e., the way the drug affects the body. Id. Through metabolism, drugs are broken down into metabolites. Metabolites may, or may not be, pharmacologically active (i.e., impairing).

   a. For example, cocaine and THC are broken down in the body to benzoylecgonine and carboxy-THC respectively, both of which are *pharmacologically inactive* (having no effect on the nervous system). Id.

   b. Alternatively, some drug metabolites may be *pharmacologically active*, therefore contributing to the overall effect. Id. Examples include:

      i. Metabolism of diazepam to nordiazepam (an active metabolite of many benzodiazepines)

      ii. Carisoprodol to meprobamate

      iii. Codeine to morphine.

5. There are a number of variables that can affect drug metabolism, including age, sex, genetics, health, disease, and nutrition. Id.

vi. Elimination. Drug Toxicology at Page 16.

1. Elimination is the pharmacokinetic process of getting the drug out of the body. Id.

2. Drugs are eliminated in two major ways: *zero order* and *first order* kinetics or elimination. Id.

a. Zero order kinetics (constant elimination rate)

i. Ethanol is eliminated at a fixed or linear rate which means that the body eliminates it at a relatively constant amount per unit of time. Id.; See also page 8 of this Manual, referencing the 0.015 g/100mL/hour elimination rate for ethanol.

b. First order kinetics (non-constant elimination rate)

ii. Examples include cocaine, methamphetamine, or marijuana. Id.

3. Whether a given substance has a constant elimination rate or not is important. If there is a constant elimination rate, it is possible to extrapolate to determine drug concentration. Id.

4. Drug (not alcohol) elimination is typically characterized by a variable *half-life*. Id.

C. Pharmacodynamics

i. Introduction

1. Pharmacodynamics – How the drug interacts with receptors in the brain (how it affects the brain and consequently the person – mentally and physically). Drug Toxicology at Page 14.

2. This helps answer questions like "What are the effects?" and "How long does it last?" Id.

3. A simple way to view pharmacodynamics is "what the drug does to the body." Id.

ii. The Dose-Response Relationship. Drug Toxicology at Page 18.

1. The *effect* of a drug is a result of the drug's interaction at a given receptor site. Id.

2. A relationship exists between the amount of the drug administered (dose) and the corresponding effect (response) on the body, including the extent to which it may or may not impair normal function. Id.

3. The *duration* of a drug's effects can be estimated, but these may vary with dose. Id.

4. The link between the amount of drug and its effect over time is the basis for establishing therapeutic and toxic drug concentrations. These ranges are widely published for clinical purposes, but there are no "therapeutic concentrations" for many illicit drugs. Id.

   a. Note – A habitual drug user may develop a tolerance to the toxic effects of a drug, allowing him or her to withstand concentrations of drug that may be highly toxic or even fatal in a naïve (inexperienced) subject. Id.

5. The pharmacologic effect experienced by the user may be apparent from vital signs, involuntary reflexes, or behavior. Id. at Page 19.

6. With the exception of ethanol, there is no widely accepted correlation between the drug concentration in blood and a corresponding level of driving impairment among the scientific community. Id. What is more, factors such as tolerance can have a profound effect on the pharmacodynamics response in an individual. Id. A quantity of cocaine sufficient to produce a mild

"buzz" in a chronic user could be acutely cardiotoxic in a naïve (inexperienced) user, resulting in coma and death. Id.

2. Other Miscellaneous Notes from the DRE Manual. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session VI Pages 11-12.

A. Drugs work by artificially creating natural body reactions that are generally associated with the work of neurotransmitters and hormones.

B. **Therapeutic doses** of legitimate prescription drugs and over the counter medications are designed to produce ***carefully controlled simulations*** of natural action of hormones or neurotransmitters to make up for a deficiency in the body's natural supply.

i. A common example of this is the first thing in the morning cup of coffee that is a ritual for many people. When the alarm clock forces us to awake, against out will, our Parasympathetic Nerves are operating in high gear and we are flooded with hormones that induce sleep and relaxation. We use the stimulant caffeine to overcome the body's natural chemicals so that we can get started on the day's work.

ii. Another common example occurs when we find ourselves worried and anxious at the end of the day because of problems on the job, at home, or elsewhere. This is stress, and our brains react to stress by activating the Sympathetic Nerves: we're too "keyed up" to sleep. That is when many people reach for the glass of wine, or the Xanax or Valium tablet, to overcome the body's natural stimulation.

C. One way in which the body may react to the presence of a drug is by producing hormones and neurotransmitters that tend to ***counteract the effects of the drug***. This is because introducing drugs into the body disrupts the body's natural balance; the body is going to react because it must preserve homeostasis. The body's reaction will try to alter its own supply of natural chemicals to accommodate the ones we have introduced.

i. For example, if a person snorts cocaine, their brain might react to the resulting stimulation by sending commands along the Parasympathetic Nerves to depress bodily functions, and by

commanding the endocrine system to release hormones that also will produce depression. This can lead to an interesting situation: The drug may metabolize, i.e., react with oxygen and other chemicals in the body, and dissipate so that its effects are no longer present; but in the meantime, the brain has caused the body to be flooded with natural hormones and neurotransmitters designed to counteract the drug, and they may still be exerting their effects.

ii. We call this situation the "downside of a drug" or the "downside effect". ***When a person is experiencing the downside of a drug or the downside effect they may not be under the active influence of the drug (they're just under the active influence of their body)***. The person may be exhibiting the opposite effects of the drug because of the body's attempt to counteract the effects produced by the drug they consumed.

iii. Two common examples occur with cocaine and methamphetamine. Both of these drugs stimulate the body. The body attempts to counter these stimulant effects by releasing certain hormones and neurotransmitters. As the effects of cocaine or methamphetamine diminish, the hormones and neurotransmitters the brain dispatched to counteract the drug take over and in some cases cause the body to go below the homeostasis level producing an opposite effect or "downside effect". ***Many times the person's signs and symptoms will also mirror a narcotic analgesic or depressant***, i.e., constricted pupils, depressed pulse and blood pressure.

D. There is another way in which the body may react to drugs, especially when the drug is ***routinely used over a period of time***. Because the drug is artificially simulating the actions of certain hormones and neurotransmitters, the body may come to rely on the drug to supply those actions, and may simply cease producing those natural chemicals. This is called "Negative Feedback". It simply means that the brain accommodates the routine presence of a drug by turning off the supply of natural chemicals that correspond to the drug. Evidence of negative feedback clearly occurs in users of heroin and cocaine. The bodies of cocaine and heroin users apparently cease producing the hormones and neurotransmitters needed for proper pain relief, stress reduction, mental stability and motivation. Very quickly, the user simply can't cope without the drug. A similar effect is physical dependence, or addiction to the drug; because the natural chemicals are no longer available, the body needs the drug to provide the functions those natural chemicals used to perform.

E. Another way in which the body may compensate is by developing increased ***tolerance*** to the drug, meaning that ***the same dose of the drug will produce diminishing effects***. To express this another way, a steadily stronger dose of the drug will be needed to produce the same effects. Habitual users of drugs may develop tolerance to the drug and as a result they may exhibit relatively little evidence of impairment on psychophysical tests.

F. The concept of metabolism is important for an understanding of how drugs work in the body. ***Metabolism*** is defined as the combined chemical and physical processes that take place in the body involving the distribution of nutrients and resulting in growth, energy production, the elimination of wastes, and other body functions.

i. There are two basic phases of metabolism: Anabolism, the constructive phase during which small molecules resulting from the digestive process are built up into complex compounds that form the tissues and organs of the body; and catabolism, the destructive phase during which larger molecules are broken down into simpler substances with the release of energy.

ii. A ***metabolite*** is a product of metabolism, the chemical changes that take place when the drug reacts with enzymes and other substances in the body. The body uses chemical reactions to break down the drug and ultimately eliminate it. Sometimes, metabolites of the original drug are themselves drugs and cause impairment. For example, the body quickly metabolizes heroin into morphine, and it is the morphine that actually produces the effects the heroin user experiences.

3. Physician's Desk Reference as a Resource. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session XIII.

A. As a Resource.

i. The PDR is a useful reference source for a DRE. It provides detailed information, including photographs, on virtually every drug available for prescription in the country. Many of these drugs are either CNS Depressants or CNS Stimulants, and others are Narcotic Analgesics, while others are combinations of these.

Numerous trade names exist for certain drugs, since many manufacturers offer competing products.

1. Tip – Pharmacists are required to get a new PDR every year. This book is very expensive. Instead of wasting time or money, ask your pharmacist if you could have his or her old one at the end of the year. They'll likely say yes, as they'll have no use for it.

ii. During the course of an arrest and evaluation of a suspected drug impaired driver, it is not uncommon to discover pills, tablets, etc. on the subject. Reference to the PDR and other resources usually can help to establish the identity and category of these drugs.

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

B. The Contents of the PDR.

i. The PDR contains the following color coded sections:

1. An index of all manufacturers who provided information on their prescription drugs;

2. An index of Product Names (including discontinued products);

3. An index of Products by Category of Drugs;

4. A Generic and Chemical name index;

5. A Product Identification section, including actual size and full color photographs;

6. A Product Information section, describing the drug's composition, action and uses, administration and dosage, precautions, side effects and contraindications, the form in which it is supplied, etc.;

7. A Diagnostic Product Information section;

8. A listing of the locations and emergency telephone numbers of poison control centers; and

9. A guide to the management of drug overdoses.

C. Sample PDR sections are included in this Manual for often used drugs.

Overview of Toxicology

1. Introduction. D.R.E. Student Manual Pages 102-108.

   A. *Toxicology* is the study of poisons and their effects on living organisms. For DRE purposes, poisons are drugs and, in some cases, the metabolites of drugs.

   B. A *metabolite* is a chemical substance derived from a drug that is formed by the action of the body upon that drug.

      i. Note – some metabolites themselves are psychoactive (i.e., cause impairment). Therefore, a metabolite may also be a drug.

      ii. Further Note – The metabolite, and not the original or "parent" drug, may be what is detected in the laboratory.

2. Limitations of Toxicology.

   A. **With the exception of alcohol, toxicology cannot produce "per se" proof of drug impairment**. In other words, the chemist can't analyze the blood or urine and come up with a number that "proves" the person was or wasn't impaired.

   B. Most laboratories don't perform quantitative analyses to determine drug concentrations, but only determine qualitatively the presence or absence of the drugs.

   C. Toxicology doesn't provide evidence of the time at which the drug was ingested. "***In some instances, it is possible that a "positive" chemical test reflects drugs that the subject took long before being arrested, and that were metabolized and no longer causing impairment prior to his or her arrest***." D.R.E. Student Manual Page 103.

      i. I've been told that the State Crime Lab can detect the presence of a drug at somewhere between 3 and 4 half-lives.

ii. Understanding medication half life:

1. Medication half life is the time it takes the body to reduce the medication by half. The amount of medication in the system is directly proportional to the amount of medication being eliminated.

2. Consider the following example of a drug with a 4 hour half life:

a. 8:00 a.m. – Amount of drug in the body initially – 100%

b. 12:00 noon – Amount remaining in the body after 4 hours = 50% (50% has been eliminated)

c. 4:00 p.m. – Amount remaining in the body after 8 hours = 25% (75% has been eliminated)

d. 8:00 p.m. – Amount remaining in the body after 12 hours = 12.5% (87.5% has been eliminated)

i. Somewhere in this area (between 3 and 4 half-lives) is where the State Crime Lab can still detect the presence of the medication. Obviously, at this stage, even if the medication has impairing qualities, those would no longer be observable.

e. 12:00 midnight – Amount remaining in the body after 16 hours = 6.25% (93.75% has been eliminated).

3. Doubling up. The above example on works as long as the person does not take another dose of the medication. For instance, if the person takes a dose at 8:00 a.m. and the medication has a half life of 4 hours and takes another dose in 4 hours and continues to do this every 4 hours then this is what the half life would look like:

a. 8:00 a.m. – Amount in body is initially 100%

b. 12 noon – Amount remaining after 4 hours 50% (Patient takes a 2nd dose, now the medication in the body is actually 150%)

c. 4:00 p.m. – Amount remaining after 8 hours 75% (Patient takes a 3rd dose, now the medication in the body is actually 175%)

d. 8:00 p.m. – Amount remaining after 12 hours 87.5% (Patient takes a 4th dose, now the medication in the body is actually 187.5%)

4. This build up is why medications have specific instructions about how and when they may be ingested, to avoid build-up and dangerous levels of toxicity.

3. Two Types of Toxicology Analysis – Screening test v. Confirmatory test.

A. There is a vast difference between the *screening test* and the *confirmatory test*. In loose terms, a positive screening test means "it looks like this sort of drug is there." A positive confirmatory test means "this particular drug is definitely there."

B. Suppose the screening test is positive, but the confirmatory test is not positive … what does this mean? **It means the drug isn't there**. Some "screens" will react to substances other than psychoactive drugs. The screening tests are not absolutely indicative of drug presence; if they were, there would be no need for a confirmatory test.

4. What is the Value of the Toxicology Analysis?

A. Fundamentally, toxicology's role is corroborative. It is scientific corroboration that the subject actually ingested a drug.

B. Do not, however, dismiss toxicology's importance in a given DWI case. In some cases, especially where it is in dispute whether the defendant actually ingested an impairing substance or not, the toxicology analysis is very important.

Seven Separate and Distinct Drug Categories

1. Introduction

A. The purpose of this Manual is to educate and put to rest the belief that "an impaired driving case is an impaired driving case is an impaired driving case." At best, the majority of law enforcement has sufficient training to generally recognize the observable signs of impairment by a Central Nervous System Depressant, such as alcohol. It is fair to say the majority of law enforcement has not, however, received training on the observable signs of impairment from impairing substances which do not fall in the category of a Central Nervous System Depressant. In short, proving impairment in a medication impaired driving case should be far more difficult on the State than an alcohol impairment case.

B. There are ***seven separate and distinct drug categories***. ***The categories differ*** from one another ***in terms of how they affect people and in terms of the observable signs of impairment they produce***. SFST Student Manual at Introduction to Drugged Driving Page 2; see also Preliminary Training for Drug Evaluation and Classification Program Page 6.

C. A very brief summary of seven drug categories is below. SFST Student Manual at Introduction to Drugged Driving Pages 6 and 7. Note – these categories are discussed in much greater detail later in this Manual.

i. Central Nervous System Depressants – Slow down the operation of the brain and other parts of the Central Nervous System.

ii. Central Nervous System Stimulants – Impair by "speeding up", or over stimulating the brain.

iii. Hallucinogens – Impair the user's ability to perceive the world as it really is.

iv. Dissociative Anesthetics – Inhibit pain by cutting off or "disassociating" the brain's perception of pain.

v. Narcotic Analgesics – Relieve pain (that is what "analgesic" means).

vi. Inhalants – Impairment comes from breathing in chemicals – usually household items – which are not intended by the manufacturers to be used as drugs.

vii. Cannabis – Marijuana (active ingredient is delta-9 tetrahydrocannabinol, or THC).

Phase One: Vehicle in Motion

1. Introductory Thoughts

A. It is often said by one particularly astute local District Court Judge that in a DWI case the fact finder shouldn't focus on simply one piece of evidence. Instead, each piece of evidence should be used together to paint the entire picture. In many DWI cases, whether your client was pulled over because his tag light was not in proper working condition or because he entered a checkpoint, evidence of good driving (or at least no observed evidence of bad driving) is a key portion of the picture that can often persuade the fact finder of your client's innocence.

B. Great Driving Behavior v. Poor Driving Behavior

i. Law enforcement is taught that impaired individuals have difficulty driving. If the officer did not observe poor driving in your case, use it to your advantage! Eliciting these important facts are crucial for closing argument. However, even if your client did not exhibit the best driving behavior, that doesn't mean you're doomed. Consider the following sample cross-examinations:

Poor Driving NOT Observed

1. Officer, you are taught in your training that driving is a **complex task**, correct? SFST Student Manual Page V-8.

2. Driving is a complex task because it involves a number of subtasks, many of which occur simultaneously, true? Id.

3. The subtasks involved in driving include, but are not limited to, steering, controlling the accelerator, looking for other traffic, identifying stop signs and signal lights, etc. Drugs that Impair Driving Page 9.

4. And you are taught that safe driving requires the driver have the capability to divide his or her attention on two or more things at the same time. SFST Student Manual Page V-9.

5. You are also taught that the effects of alcohol are exhibited in driving, true? SFST Student Manual Page V-8. Alternatively, consider here "one thing all impairing substances have in common is that they impair the person's ability to divide their attention, correct?" Drugs that Impair Driving Page 9.

6. And that drivers who are impaired frequently exhibit signs of impaired driving, such as: slowed reactions; impaired judgment as evidenced by willingness to take risks; impaired vision; and poor coordination. SFST Student Manual Page V-2.

7. You are further taught 24 cues associated with a "high probability that the driver is impaired". Id.

8. [If helpful, go through the cues here].

9. And in fairness to my client, you didn't observe any cues related to impaired driving, true?

10. And based upon the driving you observed and your training, when you stopped my client, you weren't thinking you had stopped an impaired driving, correct?

11. You believed you had stopped someone for a speeding violation (or whatever your facts may present), true?

<u>Poor Driving Observed (such as crossing the center line)</u>

1. What drew your attention to my client's vehicle was that it crossed the center line, correct?

2. Now, this wasn't the first time you've issued a citation for crossing the center line, correct?

3. About how many drivers have you cited for crossing the center line or a similar offense in your career?

4. You didn't charge all of those individuals with driving while impaired did you?

5. In fact, it would be fair to say that a majority of the individuals you've cited for crossing the center line were not arrested for DWI, correct?

6. So it would be fair to say that, in your opinion, crossing the center line does not necessarily mean the driver is under the influence?

7. Now, you were following my client from about "x" feet behind before you activated your blue lights?

8. From your vantage point, you weren't able to actually see whether my client was playing with the radio? Texting on her cell phone? Opening up a piece of gum or a mint?

2. Two tasks for the officer in the Vehicle in Motion phase:

A. **Observe the vehicle in operation to note any initial cues of a possible DWI (24 pre-stop cues of impairment).**

i. Problems maintaining proper lane position.

1. **WEAVING** – Weaving occurs when the vehicle alternately moves toward one side of the roadway and then the other, creating a zig-zag course. The pattern of lateral movement is relatively regular as one steering correction closely followed by another.

a. Tip: Argue driving is, by definition, "controlled weaving." *State v. Tarvin*, 972 S.W.2d 910, 911 (Tex. App. Waco 1998) (recognizing that driving a car, by its very nature, is controlled weaving and such weaving onto the marking lines of a road only becomes illegal if a person poses a danger to traffic). Watch for conclusory "weaving" statements not supported by NHTSA's definition.

2. **WEAVING ACROSS LANE LINES** – Extreme cases of weaving when the vehicle wheels cross the lane lines before correction is made.

3. **STRADDLING A LANE LINE** – The vehicle is moving straight ahead with the center or lane marker between the left-hand and right-hand wheels.

4. **SWERVING** – A swerve is an abrupt turn away from a generally straight course. Swerving might occur directly after a period of drifting when the driver discovers the approach of traffic in an oncoming lane or discovers that the vehicle is going off the road; swerving might also occur as an abrupt turn is executed to return the vehicle to the traffic lane.

5. **TURNING WITH WIDE RADIUS** – During a turn, the radius defined by the distance between the turning vehicle and the center of the turn is greater than normal. The vehicle may drive wide in a curve.

6. **DRIFTING** – Drifting is a straight-line movement of the vehicle at a slight angle to the roadway. As the driver approaches a marker or boundary (lane marker, center line, or edge of the roadway), the direction of drift might change.

7. **ALMOST STRIKING OBJECT OR VEHICLE** – The observed vehicle almost strikes a stationary object or another moving vehicle.

ii. <u>Speed and braking problems.</u>

1. **STOPPING PROBLEMS** – (i.e., too far, too short, too jerky, etc.). Stopping too far from a curb or at an inappropriate angle. Stopping too short or beyond limit line at an intersection. Stopping with a jerking motion or abruptly.

2. **ACCELERATING OR DECELERATING RAPIDLY** – This cue encompasses any acceleration or deceleration that is significantly more rapid than that required by traffic conditions. Rapid acceleration might be accompanied by breaking traction; rapid deceleration might be accompanied by an abrupt stop. Also a vehicle might alternately accelerate and decelerate rapidly.

3. **VARYING SPEED** – Alternating between speeding up and slowing down.

4. **SLOW SPEED** – The observed vehicle is driving at a speed that is more than 10 MPH below the speed limit.

iii. Vigilance problems.

1. **DRIVING IN OPPOSING LANES OR WRONG WAY ON ONE-WAY STREET** – The vehicle is observed heading into opposing or crossing traffic under one or more of the following circumstances: driving in the opposing lane; backing into traffic; failing to yield the right-of-way; or driving the wrong way on a one-way street.

2. **SLOW RESPONSE TO TRAFFIC SIGNALS** – The observed vehicle exhibits a longer than normal response to a change in traffic signal. For example, the driver remains stopped at the intersection for an abnormally long period of time after the traffic signal has turned green.

   a. Tip: C*ompare State v. Barnard*, 362 N.C. 244 (2008) (reasonable suspicion supported an officer's decision to stop the defendant where he remained stopped at a traffic light for approximately 30 seconds before proceeding), *with State v. Roberson*, 163 N.C. App. 129 (2004) (finding no reasonable suspicion where the defendant sat at a green light for 8 to 10 seconds).

3. **SLOW OR FAILURE TO RESPOND TO OFFICER'S SIGNALS** – Driver is unusually slow to respond to an officer's lights, siren or hand signals.

4. **STOPPING IN LANE FOR NO APPARENT REASON** – The critical element in this cue is that there is no observable justification for the vehicle to stop in the traffic lane; the stop is not caused by traffic conditions, traffic signals, an emergency situation, or related circumstances. Impaired drivers might stop in the lane when their capability to interpret information and make decisions becomes impaired. As a consequence, stopping in lane for no apparent reason is likely to occur at intersections or other decision points.

5. **DRIVING WITHOUT HEADLIGHTS AT NIGHT** – The observed vehicle is being driven with both headlights off during a period of the day when the use of headlights is required.

6. **FAILURE TO SIGNAL OR SIGNAL INCONSISTENT WITH ACTION** – A number of possibilities exist for the driver's signaling to be inconsistent with the associated driving actions. This cue occurs when inconsistencies such as the following are observed: failing to signal a turn or lane change; signaling opposite to the turn or lane change executed; signaling constantly with no accompanying driving action; and driving with four-way hazard flashers on.

iv. Judgment problems.

1. **FOLLOWING TOO CLOSELY** – The vehicle is observed following another vehicle while not maintaining the legal minimum separation.

2. **IMPROPER OR UNSAFE LANE CHANGE** – Driver taking risks or endangering others. Driver is frequently or abruptly changing lanes without regard to other motorists.

3. **ILLEGAL OR IMPROPER TURN** (i.e., too fast, jerky, sharp, etc.) – The driver executes any turn that is abnormally abrupt or illegal. Specific examples include: turning with excessive speed; turning sharply from the wrong lane; making a U-turn illegally; or turning from outside a designated turn lane.

4. **DRIVING ON OTHER THAN DESIGNATED ROADWAY** – The vehicle is observed being driven on other than the roadway designated for traffic movement. Examples include driving at the edge of the roadway, on the shoulder, off the roadway entirely, and straight through turn-only lanes or areas.

5. **STOPPING INAPPROPRIATELY IN RESPONSE TO OFFICER** – The observed vehicle stops at an inappropriate location or under inappropriate conditions, other than in the traffic lane. Examples include stopping: in a prohibited zone; at a crosswalk; far short of an intersection; on a walkway; across lanes; for a green traffic signal; for a flashing yellow traffic signal; abruptly as if startled; or in an illegal, dangerous manner.

6. **INAPPROPRIATE OR UNUSUAL BEHAVIOR** (i.e., throwing objects, arguing, etc.) – Throwing objects from the vehicle, drinking in the vehicle, urinating at roadside, arguing without cause, and other disorderly actions.

7. **APPEARING TO BE IMPAIRED** – This cue is actually one or more of a set of indicators related to the personal behavior or appearance of the driver. Examples might include:

    a. Eye fixation;

    b. Tightly gripping the steering wheel;

    c. Slouching in the seat;

    d. Gesturing erratically or obscenely;

e. Face close to the windshield; and

f. Driver’s head protruding from vehicle.

B. **Observe the manner in which the suspect responds to law enforcement's signal to stop (6 post stop cues of impairment (Stopping Sequence)).** SFST Student Manual Page V-10.

i. **AN ATTEMPT TO FLEE**.

ii. **NO RESPONSE** (to blue lights and siren).

iii. **SLOW RESPONSE**.

iv. **AN ABRUPT SWERVE**.

v. **SUDDEN STOP**.

vi. **STRIKING THE CURB OR ANOTHER OBJECT**.

Phase Two: Personal Contact

1. Two tasks for the officer in the Personal Contact phase. SFST Student Manual Page VI-1.

   A. **Approach, observe, and interview the driver.** SFST Student Manual Page VI-3.

      i. Sight – there are a number of things law enforcement is taught to look for during this phase:

         1. Bloodshot eyes;

            a. Practice pointer: On cross examination, point out that there are a number of reasons why an individual's eyes could be red, such as allergies, eye fatigue, dry eyes, swimming, or common eye infections.

         2. Soiled clothing;

         3. Fumbling fingers;

         4. Alcohol containers;

         5. Drugs or drug paraphernalia;

         6. Bruises, bumps or scratches;

         7. Unusual actions.

      ii. Hearing – Law enforcement is taught to look for:

         1. Slurred speech;

a. Practice pointer: On cross examination, in almost all cases the officer will admit that the date of arrest was the first time the officer had met your client; that he is not familiar with your client's normal speech pattern; and that he is unable to say whether the speech he heard is different from your client's normal speech or not.

2. Admission of drinking;

a. Practice pointer: Often the defendant will admit to having "a couple of drinks." Officers usually fail to recall what those drinks were (Beer? Wine? Liquor? Size?) and, more importantly, the time in which they were consumed.

3. Inconsistent responses;

4. Abusive language;

5. Unusual statements.

iii. Smell – Law enforcement is taught to detect:

1. Odor of an alcoholic beverage;

2. Odor of marijuana;

3. "Cover up" odors like breath sprays;

4. Unusual odors.

iv. Pre-Exit interview techniques. SFST Student Manual Page VI-4.

1. Law enforcement is taught to ask for two things at once, such as license AND registration.

2. This type of questioning applies the concept of divided attention, as it requires the driver to concentrate on two or more things at the same time. The driver has to listen to the instructions, comprehend, and then comply as instructed. Driver must produce both documents; not fumble them; etc.

3. **Alphabet test**. SFST Student Manual Page VI-5.

   a. How to conduct the test – Instruct the driver to recite the alphabet beginning with a letter other than A and stopping at a letter other than Z. For example, the officer may say to the driver, "Recite the alphabet, beginning with the letter E and stopping with the letter P.

      i. Notice – Nowhere in law enforcement's training does it say the individual can't "sing" the alphabet recitation.

   b. Divided attention concept – This divides the driver's attention because the driver must concentrate to begin at an unusual starting point and recall where to stop.

      i. Practice pointer: Law enforcement often does not employ the alphabet, count down, or finger count tests. Point out in cross examination that the officer is familiar with these "tests" but failed to employ them. Further point out these tests are generally conducted while the individual is seated in the car and primarily focus on the suspect's mental faculties. Argue in closing it's tests like these that give the court the information it needs to make a sound and reasoned determination regarding whether your client's mental faculties were appreciably impaired. Note – this argument is especially helpful in a case where the client is elderly or overweight and a good candidate to do well on the dexterity tests.

4. **Count Down test**. SFST Student Manual Page VI-5.

a. This technique requires the subject to count out loud 15 or more number in reverse sequence. For example, the officer may say to the driver, "Count out loud backwards, starting with the number 68 and ending with the number 53."

b. Divided attention concept – This divides attention because the driver must continuously concentrate to count backwards while trying to recall where to stop.

5. **Finger Count test**. SFST Student Manual Page VI-6.

a. In this technique, the driver is asked to touch the tip of the thumb in turn to the tip of each finger on the same hand while simultaneously counting up one, two, three, four; then to reverse direction on the fingers while simultaneously counting down four, three, two, one.

B. **Observe the manner in which the driver exits the vehicle.** SFST Student Manual Page VI-6.

i. How the driver steps and walks from the vehicle may provide important evidence of impairment or sobriety. The following are seven "Exit Sequence Cues" law enforcement is taught to look for:

1. Shows angry or unusual reactions;

2. Cannot follow instructions;

3. Cannot open the door;

4. Leaves the vehicle in gear;

5. “Climbs” out of the vehicle;

6. Leans against the vehicle;

7. Keeps hands on vehicle for balance.

Phase Three: Pre-Arrest Screening

1. Introduction

A. The final of the three phases of DWI investigation is pre-arrest screening. This phase is where law enforcement administers its three standardized field sobriety tests and a preliminary breath test (PBT).

B. The three SFSTs are "psychophysical divided attention tests." Psychophysical tests are methods of assessing a suspect's mental and physical impairment.

C. SFSTs focus on the individual's mental and physical capabilities, such as information processing, short term memory, balance, small muscle control, and limb coordination. SFST Student Manual Page VII-4.

2. Horizontal Gaze Nystagmus

A. Overview

i. This section will be broken down into the following:

1. Introduction and science behind the test;

2. How to properly administer the test;

3. How to interpret the test (alcohol vs. drugs); and

4. Limitations on officer training and points of cross-examination.

B. Introduction and the science behind the Horizontal Gaze Nystagmus test

i. "Nystagmus" means an involuntary jerking of the eyes. SFST Student Manual Page VII-2.

ii. HGN refers to an involuntary jerking occurring as the eyes gaze horizontally, or toward the side. Id.

iii. The theory is that as impairment increases, the more likely the "clues" for this test will appear. SFST Student Manual Page VII-3.

iv. There are three "clues" in each eye that the officer is looking for, totaling six possible clues. They are:

1. Lack of Smooth Pursuit – as the eye moves from side to side, does it move smoothly or does it jerk noticeably?

2. Distinct and Sustained Nystagmus at Maximum Deviation – when the eye moves as far to the side as possible and is kept at that position for a minimum of four seconds, does the eye continue to distinctly jerk?

3. Onset of Nystagmus Prior to 45 Degrees – As the eye moves toward the side, does it start (and continue) to jerk prior to a 45 degree angle?

C. How to properly administer the Horizontal Gaze Nystagmus test

i. The suspect is told:

1. "I am going to check your eyes."

2. "Keep your head still and follow this stimulus with your eyes only."

3. "Keep following the stimulus with your eyes until I tell you to stop." SFST Student Manual Page VIII-6.

ii. The stimulus is positioned approximately 12-15 inches from the suspect's nose and slightly above eye level. Id.

iii. The eyes are checked, prior to administration of the HGN test, for *equal pupil size*, *resting nystagmus*, and *equal tracking* (can the subject's eyes follow an object together?). Id.

1. Note – checking for equal tracking is the first "pass" of the eyes.

iv. If the eyes do not track together, or if the pupils are noticeably unequal in size, there is likely a medical disorder or injury. Id.

v. Smooth Pursuit. SFST Student Manual Page VIII-7.

1. Move the stimulus smoothly to the right at a speed that requires approximately two seconds to bring the suspect's eyes as far to the side as they can go. While moving the stimulus, see if the suspect's eye is able to pursue smoothly.[2] Now move the stimulus all the way to the left, back across the suspect's face checking if the right eye pursues smoothly. Movement of the stimulus should take approximately two seconds out and two seconds back for each eye.

2. Repeat the procedure. Id.

a. Note – Each "pass" for this portion of the test should take approximately eight seconds. Two seconds to the right, two seconds back to the middle, two seconds to the left, two seconds back to the middle. Repeat. Accordingly, this portion of the test should take about 16 seconds.

b. If there is a video, it is important to use a stopwatch to see if the officer conducted this portion of the test at the appropriate speed. If not, that to your advantage. Get the officer to agree that HGN is a standardized test; that

[2] Law enforcement is taught that an impaired person's eyes will jerk or "bounce" as they follow a smoothly moving stimulus. The eyes of an unimpaired person will follow smoothly, i.e., a marble rolling across a smooth pane of glass, or windshield wipers moving across a wet windshield. SFST Student Manual Page VIII-5.

because it is standardized, it is supposed to be administered the same way every time and pursuant to his training; that, if it is not administered in the standardized manner, it's not a valid test; get the officer to agree exactly how the test is supposed to be administered, then ask him if that's how he administered the HGN test in this case (he will say it is); now he's trapped. Show him the video and point out how the officer's statements are untrue. This method can effectively be used for all three stages of this test.

vi. Distinct and Sustained Nystagmus at Maximum Deviation. Id.

1. Move the stimulus to the right until the suspect's eye has gone as far to the side as possible. Usually, no white will be showing in the corner of the eye at maximum deviation. Hold the eye at that position for a minimum of four seconds, and observe for distinct and sustained nystagmus. Move the stimulus all the way across the suspect's face to check the right eye holding that position for a minimum of four seconds. Id.

a. The more advanced Drug Recognition Expert Manual says that if this clue is present, the eye will "exhibit a ***distinct, sustained, pulsating, very pronounced jerking***" at maximum deviation. The Drug Recognition Expert School Session IV Page 13. Further, the manual goes on to say that "in order to consider this clue as 'present', you must observe a ***clear, sustained, and unmistakable*** jerking. A slight, barely visible tremor does not constitute 'distinct jerking'." Id.

2. Repeat the procedure. Id.

a. Note – Each "pass" for this portion of the test should *at least* eight seconds, because for each eye the stimulus should be held at maximum deviation for at least four seconds. Accordingly, this portion of the test should take *a minimum of* 16 seconds.

vii. Onset of Nystagmus Prior to 45 Degrees

1. Move the stimulus to the right at a speed that would take approximately four seconds for the stimulus to reach the edge of the suspect's shoulder. Watch the eye carefully for any sign of jerking. If you see jerking, stop and verify that the jerking continues. Then, move the stimulus to the left at a speed that would take approximately four seconds for the stimulus to reach the edge of the suspect's shoulder. If you see jerking, stop and verify that the jerking continues. Id.

2. Repeat the procedure. Id.

a. Note – Unless nystagmus is observed almost immediately, each "pass" on this portion of the test should take at least ten seconds.

b. Accordingly, if the HGN test is conducted properly (and not including the initial pass of the eyes to check for equal tracking), there should be six total passes and the test should take *at least* 52 seconds.

i. Pass 1 – Lack of Smooth Pursuit (8 seconds);

ii. Pass 2 – Lack of Smooth Pursuit (8 seconds);

iii. Pass 3 – Distinct and Sustained Nystagmus at Maximum Deviation (minimum of 8 seconds);

iv. Pass 4 – Distinct and Sustained Nystagmus at Maximum Deviation (minimum of 8 seconds);

v. Pass 5 – Onset of Nystagmus Prior to 45 Degrees (approximately 10 seconds);

vi. Pass 6 – Onset of Nystagmus Prior to 45 Degrees (approximately 10 seconds).

D. How to interpret the Horizontal Gaze Nystagmus test (alcohol vs. drugs)

i. Alcohol

1. Based on the original research, observance of four or more clues means it is "likely" the suspect's BAC is above 0.10. This criteria was determined to be 77% accurate. SFST Student Manual Page VIII-8.

a. Practice pointer: This means that, based on the original research, 23% of the time in testing conditions law enforcement's opinions were wrong. Point this out in cross examination and closing argument.

2. Drug Recognition Experts are taught there is an approximate statistical relationship between blood alcohol concentration (BAC) and the angle of onset of nystagmus. The formula is **BAC = 50 – Angle of Onset**. The Drug Recognition Expert School Session IV Page 13.

a. According to the formula, if the angle of onset were 40 degrees, then the "BAC" would approximately equal 50 minus 40 or 10; that corresponds to a BAC of 0.10. Id.

b. Practice pointer: With appropriate expert testimony, this could be powerful evidence of innocence in a refusal case where no HGN was observed prior to 45 degrees (as, by the formula, the BAC would be .05 or less).

ii. Drugs

1. HGN will be present if the suspect is impaired by CNS Depressants, Dissociative Anesthetics, and most Inhalants. A.R.I.D.E. Session V – Page 10 of 11; The Drug Recognition Expert School Session IV Page 12.

a. For memory – the D*I*D* drugs, if impaired, cause HGN.

2. HGN will not be present, even if the suspect is impaired, if the impairment comes from a CNS Stimulant, Hallucinogen, Narcotic Analgesic, or Cannabis. A.R.I.D.E. Session V – Page 10 of 11; The Drug Recognition Expert School Session IV Page 14.

E. Limitations on officer training and points of cross-examination

i. First and foremost, the best method of cross-examination is if the officer conducted the test in the wrong fashion.

ii. There are over 40 different types of nystagmus. SFST 4 Hour Refresher Page III-5.

iii. The focus of officer training is on two types: horizontal gaze nystagmus and vertical gaze nystagmus.

iv. Law enforcement is not taught how to test for types of nystagmus other than HGN and VGN.

v. Law enforcement is not taught how to distinguish between these other types of bouncing of the eyes (nystagmus) and the types they are looking for.

vi. With regard to nystagmus at maximum deviation, people exhibit slight jerking of the eye at maximum deviation even when unimpaired. SFST Student Manual Page VIII-5.

vii. With regard to the onset of nystagmus prior to 45 degrees, law enforcement does not use a measuring device (such as a protractor) to determine 45 degrees.

viii. When conducting the HGN test, law enforcement does not use a ruler or measuring device to determine 12-15 inches. They estimate. Law enforcement won't be able to say for sure whether the stimulus was 12, 13, 14, or 15 inches away from the face.

ix. How far the stimulus is positioned from the suspect's nose is a CRITICAL FACTOR in estimating the 45 degree angle? SFST Student Manual Page VIII-6. (show example on next page … would cause "45 degrees" to be much wider).

x. Law enforcement almost always has had no schooling or coursework in ophthalmology or neurology.

3. Walk and Turn

A. Introduction

i. Field sobriety tests are divided attention psychophysical tests. This means that they are designed to test the mental and physical capabilities of the suspect. SFST Student Manual Page VII-4.

1. Caveat: The research and literature that supports the science behind the two divided attention psychophysical tests (Walk and Turn and One Leg Stand) is, according to Doug Scott, solely based on alcohol studies. Because alcohol is a CNS Depressant, it is probably safe to say the science behind these studies also applies to CNS Depressant drugs. Upon information and belief, however, there are *no studies* which support the assumption that these principles would also apply to drugs which comprise the other six drug categories. In fact, I think it is important to note that the Walk and Turn and One Leg Stand tests are completely left off of the drug symptomatology matrix. Therefore, I would recommend questioning the officer as follows: PUT MATERIAL HERE.

ii. The Walk-and-Turn test is divided into two stages: (i) the instructions phase and (ii) the walking stage.

iii. The Instructions Stage divides the subject's attention between a *balancing task* (standing while maintaining the heel-to-toe position) and an *information processing task* (listening to and remembering instructions). SFST Student Manual Page VII-5.

1. Practice pointer: This is valuable information to elicit on cross examination when the issue is appreciable impairment of physical and mental faculties and your client *does well* on the dexterity tests.

iv. The Walking Stage divides the subject's attention among a *balancing task* (walking heel-to-toe and turning); a *small muscle control task* (counting out loud); and a *short-term memory task* (recalling the number of steps and the turning instructions). Id.

B. How to Administer the Test

i. There are eight possible clues for this test which are broken down between the instructions phase (first two clues) and walking phase (last six clues):

1. Instructions Phase – The SFST Manual indicates that "typically the impaired person can do only one of these things." SFST Student Manual Page VIII-10. When your client does well and does not exhibit either Instructional Phase clue, use this to your advantage.

a. **Can't balance during instructions**

i. For this clue to be present, *the feet must actually break apart*. This clue is not to be recorded if the suspect sways or uses the arms to balance but maintains the heel-to-toe position. SFST Student Manual Page VIII-10.

b. **Starts too soon**

i. One of the instructions to be given to the suspect is "do not start to walk until told to

do so." SFST Student Manual Page VIII-9. Accordingly, starting early cannot possibly be held against the suspect until after he or she is given this command.

2. Walking Phase

a. **Stops while walking**

i. Only record this as a clue if the suspect *pauses for several seconds*. Do not record this clue if the suspect is merely walking slowly. SFST Student Manual Page VIII-10.

b. **Doesn't touch heel-to-toe**

i. Only record this clue if the suspect *leaves a space of more than one-half inch between the heel and toe on any step*. SFST Student Manual Page VIII-10.

c. **Steps off line**

i. Only record this clue if the suspect *steps so that one foot is entirely off the line*. SFST Student Manual Page VIII-10.

d. **Uses arms to balance**

i. Only record this clue if the suspect *raises one or both arms more than 6 inches from the sides*. SFST Student Manual Page VIII-11.

e. **Loses balance on turn or turns incorrectly** (not as instructed through demonstration)

f. **Takes the wrong number of steps**

C. What Constitutes "Failure"?

i. If the suspect exhibits two or more clues, it is "likely" his or her BAC is above 0.10. SFST Student Manual Page VIII-11.

ii. According to the original research, "likely" is quantified as about 68% accurate. Id. That means that about 32% of the time the test's dictated outcome will be wrong.

D. Noted Issues with Testing

i. The test requires a designated straight line. SFST Student Manual Page VIII-11.

ii. The test should be conducted on a reasonably dry, hard, level, nonslippery surface. Id.

iii. Individuals over 65 years of age have difficulty performing the test. Id.

iv. Individuals with back, leg, or inner ear problems have difficulty performing the test. Id.

v. Heels more than two inches may pose a problem. Id.

4. One Leg Stand

A. Introduction

i. The One Leg Stand test is divided into two stages: (i) the instructions stage and (ii) the balance and counting stage. SFST Student Manual Page VII-6.

ii. The Instructions Stage divides the subject's attention between a *balancing task* (maintaining a stance) and an *information processing task* (listening to and remembering instructions). Id.

1. Practice pointer: This is valuable information to elicit on cross examination when the issue is appreciable impairment of physical and mental faculties and your client *does well* on the dexterity tests.

iii. The Balance and Counting Stage divides the subject's attention between *balancing* (standing on one foot) and *small muscle control* (counting out loud). Id.

B. How to Administer the Test

i. There are four possible clues. SFST Student Manual Page VIII-13.

1. **Sways while balancing**

a. This refers to side-to-side or back-and-forth motion while the suspect maintains the one-leg stand position (subjective).

2. **Uses arms for balance**

a. Only record this clue if the suspect *moves arms 6 or more inches* from the side of the body in order to keep balance. Id.

3. **Hopping**

4. **Puts foot down**

C. What Constitutes "Failure"?

i. If the suspect exhibits two or more clues, it is "likely" his or her BAC is above 0.10. SFST Student Manual Page VIII-13.

ii. According to the original research, "likely" is quantified as about 65% accurate. Id. That means that about 35% of the time the test's dictated outcome will be wrong.

D. Noted Issues with Testing

i. The test should be conducted on a reasonably dry, hard, level, nonslippery surface. SFST Student Manual Page VIII-13.

ii. Individuals over 65 years of age have difficulty performing the test. Id.

iii. Individuals who are overweight by 50 or more pounds have difficulty performing the test. Id.

iv. Individuals with back, leg, or inner ear problems have difficulty performing the test. Id.

v. Heels more than two inches may pose a problem. Id.

Twelve Step Drug Influence Evaluation Checklist

1. Introduction

   A. This is a truly important section. To have a complete appreciation of the complexity of drug impaired driving, it is valuable to first understand *how* a DRE evaluation is conducted (and *why* each portion is important). Only after learning about each step of the evaluation can one truly be cognizant of *what* a person impaired by a specific substance is supposed to look like (i.e., what are the observable signs of impairment from that substance?).

2. Twelve Step Drug Influence Evaluation

   A. Step One – Breath Alcohol Test. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session IV Page 5.

      i. The first step is to administer a breath alcohol test to determine the subject's blood alcohol concentration.

      ii. Essentially, the purpose of the initial breath test is for the DRE to make an immediate determination whether the concentration of alcohol, if any, is:

         1. Not a cause of the perceived impairment;

         2. A contributing, but not sole cause, of the perceived impairment; or

         3. The sole cause of the perceived impairment.

   B. Step Two – Interview the Arresting Officer. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session IV Page 5; Pages 8-9.

i. Most arresting officers are not as knowledgeable about drugs as a DRE and often the DRE is not the arresting officer.

ii. Accordingly, during this step the DRE learns about what the arresting officer may have seen or heard during earlier contact with the subject.

iii. Questions the DRE is supposed to ask the arresting officer are broken down into three categories:

1. <u>Inquiries concerning the subject's behavior</u>

a. Was the subject operating a vehicle?

b. What vehicle/operator actions, maneuvers, etc. were observed? (This may disclose evidence of impaired divided attention ability, relaxed inhibitions, etc.).

c. Was there a crash? (This can indicate whether the subject may have suffered injuries that could confound the drug evaluation).

d. Was the subject observed smoking, drinking, or eating?

e. Was the subject inhaling any substance?

f. How did the subject respond to the arresting officer's stop?

g. Did the subject attempt to conceal or throw away any items or materials?

h. What has been the subject's attitude and demeanor during contact with the arresting officer and have there been any changes?

2. Inquiries concerning the subject's statements

a. Has the subject complained of an illness or injury?

b. Has the subject used any "street terms" or slang associated with drugs or drug paraphernalia?

c. How has the subject responded to the arresting officer's questions?

d. Was the subject's speech slurred, slow, rapid, thick, mumbled, incoherent, etc.? (Various types of drugs may affect speech in various ways).

e. What, specifically, has the subject said to the arresting officer?

3. Inquiries concerning physical evidence

a. What items or materials were uncovered during the search of the subject and/or vehicle?

b. Were any smoking paraphernalia uncovered?

c. Was there any injection related material?

d. Were there any balloons, plastic bags, small metal foil wrappings, or any similar items?

e. What was the subject's blood alcohol concentration?

C. Step Three – Preliminary Examination and First Pulse. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session IV Page 5; Pages 9-11.

i. Consists of a series of questions; observations of the subject's face, breath, and speech; an initial series of checks of the subject's eyes; and the first of three checks of the subject's pulse rate.

ii. Questions – Standard questions asked directly to the subject (as opposed to the arresting officer). Depending on the subject's answers, follow up questions may be needed.

1. Are you sick or injured?

2. Do you have any physical defects?

3. Are you diabetic or epileptic?

4. Do you take insulin?

5. Are you under a doctor's or dentist's care?

6. Are you taking medication?

iii. Observations of the suspect's face, breath, and speech.

1. Face – flushed or pale? Perspiring?

2. Breath – Any noteworthy odors, such as alcoholic beverages; marijuana; or chemical odor?

3. Speech – Is it in any way distorted or not normal?

iv. Initial checks of the subject's eyes

1. Pupil size – Do the subject's pupils appear to be equal in size? If not, a further check is necessary.

a. Pupil size is determined by using a "pupillometer", which has a series of small circles. The diameter of the small circles is measured in millimeters. By holding the pupillometer alongside the subject's eye, the DRE can determine which circle is approximately the same size as the pupil. Both pupils must be checked.

2. Equal tracking – This is the same as the "equal tracking" portion of the HGN test. If the two eyes do not exhibit the same tracking ability, this may indicate a possible head injury or medical problem.

3. HGN test (conducted as stated above).

a. The only difference between this HGN test and the one stated above is that this test is taught to be more specific. If nystagmus is present, the DRE is taught to estimate the angle of onset prior to 45 degrees (remember the formula above: 50 minus degree of angle of onset = BAC). ***If there is a significant disparity between the nystagmus angle of onset and what would be expected from the known BAC, the DRE should be alert to the possible present of some other nystagmus causing drug***.

b. Remember – as stated below, some drugs do not cause nystagmus even if the suspect is impaired. See below.

4. Check the suspect's eyelids.

a. Many drugs will cause the eyelids to droop as the user exhibits a sleepy appearance.

b. A drooping of one eyelid, but not the other, possibly signifies an injury or other medical problem. The medical, or technical, term for droopy eyelids is Ptosis.

v. Take the subject's first pulse

i. ***Pulse rate is one of the vital signs that serve as very reliable indicators of the possible presence of certain drug categories***.

ii. Pulse rate can also be affected by anxiety, and it is common for an arrested subject to experience anxiety while being examined by a police officer. For this reason, pulse rate is measured near the beginning of the drug evaluation, again during the middle, and finally near the end.

D. Step Four – Eye Examinations. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session IV Page 5; Pages 11-16.

i. Horizontal Gaze Nystagmus (HGN) – See above (specifically cite page).

ii. Vertical Gaze Nystagmus (VGN).

1. VGN, like HGN, is a jerking of the eyes.

2. VGN is an involuntary jerking of the eyes (up and down) which occurs when the eyes gaze upward at maximum elevation.

3. VGN is associated with the same drugs that cause HGN.

a. Thus, VGN may be present if the suspect is impaired by a drug from the DID category (CNS Depressants; Inhalants; Dissociative Anesthetics).

i. Remember, for VGN to be present, the drug or drugs must be in high doses for that individual. Therefore, it is not uncommon to encounter subjects who exhibit HGN, but

do not exhibit VGN. In practice, VGN is usually associated with gross impairment.

b. VGN would not be present, even if the suspect is impaired, from a drug or drugs in the following categories: CNS Stimulants; Hallucinogens; Narcotic Analgesics; and Cannabis.

4. To check for VGN, hold a stimulus horizontally in front of the subject approximately 12-15 inches in front of the subject's nose. Direct the subject to focus his/her eyes at a specific point on the stimulus. Instruct the subject to hold his/her head steady and to follow the stimulus with their eyes only. Elevate the stimulus until the eyes are raised as far as possible and hold them at that position for a minimum of four seconds. Observe the eyes to see if any up and down jerking occurs.

5. There is no drug that will cause VGN that will not cause HGN.

iii. <u>Lack of Convergence (LOC)</u>

1. In simplest terms, LOC means an inability to cross the eyes.

2. Position the stimulus approximately 12-15 inches in front of the subject's nose in the same starting position used for the HGN test. The stimulus is then moved in a circle in front of the subject's face either clockwise or counterclockwise (it doesn't matter) to verify that the subject's eyes are tracking the stimulus. Then the stimulus is moved directly towards in between the suspect's eyes, stopping approximately two inches from the bridge of the nose.

3. If the eyes are able to cross (converge), i.e., if they come together at a minimum of two inches (2") from the bridge of the nose, Lack of Convergence is "not present."

4. But if one eye drifts away or outward toward the side instead of converging to the bridge of the nose or to the point of convergence, Lack of Convergence is "present".

5. Note – The manual reminds DREs of the following: "You should be aware that ***many people have difficulty crossing their eyes even when they are totally drug free, and it is not uncommon to find unimpaired individuals who exhibit LOC***." Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session IV Page 16.

E. Step Five – Administer Divided Attention Psychophysical Tests. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session IV Page 6; Pages 16-24.

i. Romburg Balance Test

1. Introduction

a. This test requires the subject to stand with his/her feet together, head tilted slightly back, eyes closed and estimate the passage of thirty seconds. When the subject believes that the thirty seconds have passed, he or she is to tilt the head forward, open the eyes, and say "Stop".

2. Administrative Procedures

a. Tell the subject to stand straight with his/her feet together and his/her arms down at their sides.

b. Tell the subject to maintain that position while you give the instructions. Emphasize that he or she must not start the test until you say "begin".

c. Tell the subject that they must tilt their head back and close their eyes. Demonstrate how the head should be tilted.

d. Tell the subject when you say “Start” they must keep their head back with their eyes closed until they think that 30 seconds have gone by. Do not tell the subject to “count to thirty seconds” or to use any other specific procedure to keep track of time. Simply say, “keep your head tilted back with your eyes closed until you think that thirty seconds have gone by”.

e. Tell the subject that, when they think 30 seconds have gone by, they must bring their head forward, open their eyes and say “Stop”.

f. Tell the subject to begin.

g. Keep track of time while the subject performs the test.

h. When the subject opens his/her eyes, ask them “how much time was that?”

i. If 90 seconds elapses before the subject opens his/her eyes, stop the test.

3. Important features of the Romburg Balance Test

a. This test measures the subject’s internal clock (i.e., is the subject’s internal clock slow, normal, or fast?)

i. If the suspect’s estimation of time is between 25-35 seconds, then their internal clock is considered acceptable. A.R.I.D.E. Session V Page 9.

b. Note if the subject is unable to stand still or steady with the feet together.

c. Note body tremors.

d. Note eyelid tremors.

e. Note muscle tone.

f. Note any statements or unusual sounds made by the subject while performing the test.

ii. Walk-and-Turn Test. See (pages above in this manual).

iii. One Leg Stand Test. See (pages above in this manual).

iv. Finger to Nose Test.

1. Introduction

a. The Finger to Nose test means just that: the subject is required to bring the tip of his/her index finger up to touch the tip of their nose.

b. They will perform this test with their eyes closed and their head tilted slightly back, standing in a manner identical to that required for Romburg balance (feet together and arms at their sides).

c. The subject will attempt this six times, three with each hand.

d. The officer instructs the subject which hand to use each time ("left … right … left … right … left … right").

2. Administrative Procedures

a. Tell the subject to place his/her feet together and stand straight.

b. Tell the subject to place his/her arms down at their sides, close their hands with the index finger extended and rotate the palms forward.

c. Tell the subject that, when you say “begin”, he/she will tilt their head slightly back and close their eyes. Demonstrate.

d. Inform the subject that you will instruct them to bring the tip of the index finger up to touch the tip of their nose. Demonstrate.

e. Tell the subject that, as soon as they touch their finger to their nose, they must return the arm to their side.

f. Tell the subject that, when you say “right”, they must move the right hand index finger to their nose; when you say “left”, the subject must move the left hand finger to their nose.

3. <u>Important features of the Finger to Nose Test</u>

a. It has not been scientifically validated.

b. Manual indicates experience shows persons who are impaired by alcohol or other drugs sometimes miss the tip of the nose and sometimes fail to use the proper finger.

c. Draw on the diagram a line indicating where the fingertip landed.

d. Note body sway.

e. Note body tremors.

f. Note eyelid tremors.

g. Note muscle tremors.

F. Step Six – Examine the Suspect's Vital Signs. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session IV Page 6; Page 24; Session VII Pages 1-8.

i. Pulse Rate

1. "Normal" pulse rate – 60 – 90 beats per minute

a. Tachycardia – Abnormally rapid heart rate.

b. Bradycardia – Abnormally slow heart rate.

c. Arrhythmia – Abnormal heart rhythm.

2. When measuring pulse rate, count the beats for 30 seconds then multiply by two.

3. Procedures for measuring pulse rate:

a. Three arteries which can be used:

i. Radial Artery – Located in or near the natural crease of the wrist, on the side of the wrist next to the thumb. To use the radial artery pulse point, have the subject hold his or her arm straight out with the palm of their hand facing down. Place the tips of your

index and middle fingers into the crease of the subject's wrist, near the base of the thumb, and exert a slight pressure. Allow the subject's hand to droop down from gravity; this will tighten the pressure on your finger tips and aid you to feel the pulse.

ii. Brachial Artery – Located in the crook of the arm, halfway between the center of the arm and the side of the arm closest to the body.

iii. Carotid Artery – Located in the neck, on either side of the "Adam's Apple".

b. Key Points:

i. Do not use the thumb to feel someone's pulse because there is an artery in the thumb. If you apply pressure with the thumb, the "beat" you feel may be your own pulse, and not the subject's.

ii. If you use the Carotid Artery pulse point, don't apply pressure to both sides of the "Adam's Apple". Doing so can cut off the supply of blood to the brain.

ii. Blood Pressure

1. "Normal" systolic blood pressure is 120-140; "Normal" diastolic blood pressure is 70-90.

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

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

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

2. Blood pressure is measured through use of a sphygmomanometer. Note – Per Doug Scott, these instruments aren't calibrated after being provided to the DRE.

3. Technical terms

a. Hypertension – abnormally high blood pressure.

b. Hypotension – abnormally low blood pressure.

iii. Body Temperature

1. "Normal" body temperature is 98.6 degrees Fahrenheit plus or minus 1 degree.

2. Body temperature is measured using an oral thermometer.

G. Step Seven – Dark Room Examinations. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session IV Page 6; Pages 24-26.

i. Estimating Pupil Size

1. Introduction

a. The pupils of our eyes continually adjust in size to accommodate different lighting conditions. When we are in a darkened environment, the pupils expand or "dilate" to allow the eyes to capture as much light as possible. When lighting conditions are very bright, the pupils shrink, or "constrict", to keep the eyes from being overloaded. This process of constriction and dilation normally occurs within normal limits.

b. Pupil size estimates are made under three different lighting conditions – room light, near total darkness, and direct light – and are measured in millimeters through a pupillometer device.

2. Estimate pupils in three different lighting conditions

a. <u>Estimation of Pupil Size Under Room Light</u>

i. Normal sizes for the pupil in room light is approximately **4.0 mm** with the average range of normal pupil sizes ranging from **2.5 to 5.0 mm**. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session V Page 8.

ii. Have the subject look straight ahead at a point or location behind the DRE and slightly above the subject's eye level. ***Care should be taken to ensure the subject is not staring at a light source***. Check the eyes. After checking both eyes turn off the lights and wait 90 seconds to allow the eyes to adapt to the dark.

b. <u>Estimation of Pupil Size Under Near Total Darkness</u>

i. Normal sizes for the pupil in near total darkness is approximately **6.5 mm** with the average range of normal pupil sizes ranging from **5.0 to 8.5 mm**. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session V Page 8.

ii. Completely cover the tip of the penlight with your finger or thumb so that only a reddish glow and no white light emerges. Bring the glowing red tip up toward the subject's left eye until you can distinguish the pupil from the colored portion of the eye (iris). Continue to hold the glowing red tip in that position and bring the pupillometer up alongside the subject's left eye and locate the circle/semi-circle that is closest in size to the pupil. Repeat for the right eye.

c. <u>Estimation of Pupil Size Under Direct Light</u>

i. Normal sizes for the pupil in direct light is approximately **3.0 mm** with the average range of normal pupil sizes ranging from **2.0 to 4.5 mm**. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session V Page 8.

ii. Leave the tip of the penlight uncovered and bring the light from the side of the subject's face and shine it directly into their left eye. Position the penlight so that it illuminates and approximately fills the subject's eye socket. Hold the penlight in that position for 15 seconds with the pupillometer up alongside the left eye, and find the circle/semi-circle that is closest in size to the pupil. Repeat for the right eye.

iii. While observing the eye for 15 seconds with the pupillometer in position, you should also

check for rebound dilation.[3] Rebound dilation has been reported with persons under the influence of Cannabis, CNS Stimulants, and/or Hallucinogens. If rebound dilation is observed, it should be recorded by indicating the smallest or constricted size and the largest or dilated size (e.g., 3.0 – 4.5mm). Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session V Page 7.

iv. In this phase, evaluate the pupil's reaction to light. ***If a person is not under the influence of any drug, his or her pupils should constrict within one second when the penlight's beam strikes the eye directly***. No category of drugs will speed up the reaction of the pupils, but some will slow it down. CNS Depressants, CNS Stimulants, and some Inhalants will slow the pupil's reaction. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session V Page 8.

H. Step Eight – Examine of Muscle Tone. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session IV Page 6; Page 26.

i. Certain categories of drugs will cause the muscles to become rigid, while others may cause the muscles to become flaccid (as opposed to normal).

ii. Examination of a subject's muscle tone is done by checking their left arm, firmly grasping the upper arm and slowly moving down

[3] Rebound Dilation is defined as a period of pupillary constriction followed by a period of pupillary dilation where the pupil steadily increases in size and does not return to its original constricted size. Rebound dilation is observed only with the estimation of pupil size under the Direct Light procedure. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session V Page 10.

to determine whether the muscle tone is flaccid, near normal, or rigid.

I. Step Nine – Examination for Injection Sites. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session IV Page 6; Page 27.

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

J. Step Ten – Subject's Statements and Other Observations. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session IV Page 6; Page 27.

i. Based on the nine previous components of the drug influence evaluation, the DRE should have formed at least an articulable suspicion as to the category or categories of drugs that may be present. The DRE then can proceed, ***in full conformance with the subject's Miranda rights***, to attempt to interview the subject concerning the drug or drugs involved.

K. Step Eleven – Opinion of the Evaluator. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session IV Page 7; Page 27.

i. Based on all of the evidence and observations obtained during the preceding ten steps, the DRE should be able to reach an informed opinion concerning:

1. Whether the subject is under the influence of a drug or drugs; and if so

2. The category or combination of categories of drugs that is the cause of the subject's impairment.

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

L. Step Twelve – Toxicological Examination. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session IV Page 7; Page 27.

i. A chemical test or test that can provide scientific, admissible evidence to substantiate the DRE conclusions.

Central Nervous System (CNS) Depressants

1. Introduction

A. In order for a drug to be classified as a CNS Depressant, it must depress the activity of the user's brain and Central Nervous System. A.R.I.D.E. Session VI Page 3.

B. As the dosage increases (amounts usually greater than therapeutic doses), impairment of the body's autonomic nervous system, such as heartbeat, body temperature, and breathing may be observed. Id.

C. The depressant category includes:

i. Alcohol;

ii. Anti-anxiety tranquilizers;

iii. Anti-psychotic tranquilizers;

iv. Antidepressants;

v. Barbiturates;

vi. Non-barbiturates;

D. People under the influence of CNS Depressants will likely look and act like people impaired by alcohol. Id. In other words, alcohol impairment should be used as a model. A.R.I.D.E. Session VI Page 4.

2. Indicators of Appreciable Impairment from a CNS Depressant

A. Eye Indicators. A.R.I.D.E. Session VI Page 4.

i. HGN – Present.

ii. VGN – May be present, especially in high doses.

iii. Pupil Size – Normal (exception: Soma and Quaaludes may cause dilation).

iv. Lack of Convergence – Present.

B. General Indicators. Id.

i. Wide variety of emotional effects (euphoria, depression, and laughing or crying for no apparent reason);

ii. Reduced ability to divide attention;

iii. Disoriented;

iv. Sluggish;

v. Thick, slurred speech;

vi. Drunk like behavior;

vii. Droopy eyes;

viii. Fumbling;

ix. Relaxed inhibitions;

x. Slowed reflexes;

xi. Uncoordinated;

xii. Drowsiness;

xiii. Gait ataxia (rubber legged).

C. Pupil Reaction to Light, Vital Signs, and Muscle Tone. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session IX Pages 7-8.

i. Pupil's reaction to light – Slow.

ii. Pulse rate – Down (however, with Quaaludes and ETOH the pulse rate may be elevated).

iii. Blood pressure – Down.

iv. Temperature – Normal.

v. Muscle tone – Flaccid.

3. Onset and Duration of Effects

A. There are *four different subcategories of depressants*. These subcategories are based on their onset properties. A.R.I.D.E. Session VI Page 5.

i. Long Acting – 8 to 14 hours;

ii. Intermediate Acting – 6 to 8 hours;

iii. Short Acting – 4 hours or less;

iv. Ultra Short Acting (surgical anesthesia) – Very Rapid.

B. Specific examples. A.R.I.D.E. Session VI Page 5.

i. Barbiturates – 1 to 16 hours;

ii. Tranquilizers – 4 to 8 hours;

iii. GHB – 3 to 5 hours;

iv. Rohypnol – Peak 1-2 hours.

C. Note – ***The duration of effects of CNS Depressants can vary widely***. A.R.I.D.E. Session VI Page 5. Important considerations include dosage amounts, age of the suspect, weight of the suspect, tolerance, and other variables dictate whether the individual would be impaired and, if so, the length of time the individual would be impaired. Id.

4. Conditions That May Mimic Drug Impairment by a CNS Depressant. A.R.I.D.E. Session VI Page 5.

A. These may include, but not be limited to:

i. Extreme fatigue;

ii. Very recent head injuries;

iii. Diabetic reactions;

iv. Hypotension (low blood pressure);

v. Inner ear disorders; and

vi. Severe depression.

Central Nervous System (CNS) Stimulants

1. Introduction

A. CNS Stimulants relieve fatigue, aid in weight reduction, reduce the need for sleep, and increase energy and confidence levels. A.R.I.D.E. Session VI Page 7.

B. CNS Stimulants are commonly known as "uppers". As stimulants "wear off", the subject can exhibit signs and symptoms similar to those associated with depressants since some of the body's systems may experience a "crash". Id.

C. Some specific CNS Stimulants include:

i. Cocaine;

ii. Amphetamines;

iii. Methamphetamine;

iv. Ephedrine;

v. Pseudoephedrine;

vi. Ritalin;

vii. Adderall;

viii. Dexedrine.

2. Indicators of Appreciable Impairment from a CNS Stimulant. A.R.I.D.E. Session VI Page 8.

A. Eye Indicators. Id.

i. HGN – None.

ii. VGN – None.

iii. Pupil Size – Dilated.

iv. LOC – None.

B. General Indicators. Id.

i. Restlessness;

ii. Body tremors;

iii. Excitedness;

iv. Euphoria;

v. Talkative;

vi. Exaggerated reflexes;

vii. Anxiety;

viii. Grinding teeth (bruxism);

ix. Redness to the nasal area;

x. Runny nose;

xi. Loss of appetite;

xii. Increased alertness;

xiii. Dry mouth;

xiv. Irritability.

C. Pupil Reaction to Light, Vital Signs, and Muscle Tone. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session X Page 7.

i. Pupil's reaction to light – Slow.

ii. Pulse rate – Up.

iii. Blood pressure – Up.

iv. Temperature – Up.

v. Muscle tone – Rigid.

3. Onset and Duration of Effects. A.R.I.D.E. Session VI Page 9.

A. Cocaine – A fairly fast acting, but short duration drug. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session X Page 5.

i. Effects are only felt for 5-10 minutes (when smoked);

ii. Effects are felt for 45-90 minutes (when injected);

iii. Effects are felt for 30-90 minutes (when snorted).

B. Amphetamines – 4-8 hours.

C. Methamphetamine – A fairly fast acting drug, and its effects are very similar to Cocaine's. However, Methamphetamine's effects last a good deal longer. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session X Page 6.

i. When injected, Methamphetamine's effects begin to be felt within a few seconds. The user experiences an intense "rush", which lasts at the high level of intensity for 5-30 seconds. Subsequently, the user stays "high" or "wired" for 4-8 hours, with residual effects lasting up to 12 hours. Id.

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

iii. When taken orally, the onset of effects is delayed, the "rush" is much less intense and the effects last longer. Id.

iv. When snorted, the onset of effects is not quite as rapid as with smoking or injecting. The onset of effects are within 30 seconds, the rush is not as intense and the effects last between 30 and 90 minutes. Id.

D. Ritalin, Adderall, Dexedrine – Varies depending on form, strength, and time release.

E. Note – ***The duration of effects of CNS Stimulants can vary widely***. A.R.I.D.E. Session VI Page 9. Important considerations include dosage amounts, age of the suspect, weight of the suspect, tolerance, and other variables dictate whether the individual would be impaired and, if so, the length of time the individual would be impaired. Id.

4. Conditions That May Mimic Drug Impairment by a CNS Stimulant. A.R.I.D.E. Session VI Page 9.

A. Hyperactivity;

B. Nervousness;

C. Stress;

D. Fear; and

E. Hypertension (high blood pressure).

Hallucinogens

1. Introduction. A.R.I.D.E. Session VI Page 10.

   A. Hallucinogens are drugs which affect a subject's perceptions, sensations, thinking, self-awareness and emotional state. Id.

   B. One of the significant effects of these drugs is hallucinations. A hallucination is a sensory experience of something that does not exist outside the mind (e.g., the suspect might hear a telephone ring, and "see" a flash of a brilliant color). Id.

   C. Some specific Hallucinogens include:

      i. Peyote (a cactus containing mescaline);

      ii. Certain types of mushrooms;

      iii. Jimson Weed seeds;

      iv. Morning Glory seeds;

      v. There is also a toad (Bufo Alvarius) which releases a hallucinogenic secretion when threatened;

      vi. LSD; and

      vii. MDMA or Ecstasy.

   D. The effects vary widely; however, the drug generally intensifies the mood of the user at the time of ingestion. Id. If the user is depressed, you could observe a deeper depression; and if the user is feeling pleasant, you could see a heightened pleasure. Id.

2. Indicators of Appreciable Impairment from a Hallucinogen. A.R.I.D.E. Session VI Page 11.

A. Eye Indicators. Id.

i. HGN – None.

ii. VGN – None.

iii. Pupil Size – Dilated.

iv. LOC – None.

B. General Indicators. Id.

i. Hallucinations;

ii. Paranoia;

iii. Nausea;

iv. Perspiring;

v. Dazed appearance;

vi. Flashbacks;

vii. Body tremors;

viii. Uncoordinated;

ix. Disoriented;

x. Memory loss;

xi. Synesthesia (mixing of the senses); and

xii. Difficulty in speech.

C. Pupil Reaction to Light, Vital Signs, and Muscle Tone. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session XIV Page 8.

i. Pupil's reaction to light – Normal. However, certain Psychedelic amphetamines may cause slowing of the pupil's reaction to light.

ii. Pulse rate – Up.

iii. Blood pressure – Up.

iv. Temperature – Up.

v. Muscle tone – Rigid.

3. Onset and Duration of Effects. A.R.I.D.E. Session VI Page 12.

A. LSD – Effects begin to be felt in 30-45 minutes. Pulse rate, blood pressure, and temperature rise. The pupils dilate. The hair starts to stand on end. Nausea, dizziness, and headache develop. The effects reach their peak in about 4-6 hours. After 7-9 hours, the effects diminish. ***The user generally feels normal after 10-12 hours***. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session XIV Page 7.

B. Ecstasy (MDMA) – Effects usually begin within several minutes to a half hour if taken orally. It often results in severe dehydration and heat stroke in the user. The drug can heat the user's body up to a temperature well over 100 degrees. It causes hyperthermia, muscle breakdown, seizures, stroke, kidney and cardiovascular system failure, as well as permanent brain damage from repetitive use. The psychological effects of Ecstasy

include confusion, depression, anxiety, sleeplessness and paranoia. ***The duration of effects can last from 1-12 hours depending on the dosage.*** Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session XIV Page 7.

C. Psilocin (mushrooms) – Effects start to develop in about one-half hour. The user first experiences dizziness, a light headed feeling, and giddiness. The extremities begin to feel very light or very heavy. After about 30-60 minutes, vision blurs. Colors become brighter and leave longer lasting after images. Objects take on sharp visual definition and hearing becomes more acute. 60 to 90 minutes after eating the mushrooms, color patterns and shapes start to develop. The surfaces of objects become wary. Feelings of euphoria develop. Shortly thereafter, body sensations increase, along with mental perceptions. The user often becomes introspective. ***After 2-3 hours, the effects begin to diminish***. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session XIV Page 7.

D. Peyote – Effects generally begin to be felt within one-half hour after eating the cactus. The initial effects often include nausea, possible vomiting, mild rise in blood pressure, pulse rate, and temperature. And, the pupils dilate. After about one hour, sensory changes begin. The user experiences visual distortions, accompanied by rich colors. Objects take on new forms and begin to move. Shapes "come alive". The sensory changes reach their peak in about 3-4 hours, with synesthesia occurring at about that time period. ***After about 10 hours there will be a gradual decline in effects, with near total recovery in about 12 hours***. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session XIV Page 7.

4. Conditions that May Mimic Drug Impairment by a Hallucinogen. A.R.I.D.E. Session VI Page 12.

A. High fever; and

B. Mental illnesses.

Dissociative Anesthetics (DA)

1. Introduction. A.R.I.D.E. Session VI Pages 12-13.

   A. The Dissociative Anesthetic category includes Phenyl Cyclohexyl Piperidine (PCP) along with its analogs[4], as well as dextromethorphan (DXM). Id.

   B. PCP can be found as a powder or a liquid. Ketamine (Ketalar) is an analog of PCP and is still used in pediatric and animal surgery. DXM is found in many over-the-counter anti-tussive cold medications such as Robitussin, Coricidin Cough and Cold, and Dimetapp. A.R.I.D.E. Session VI Page 13.

2. Indicators of Appreciable Impairment from a Dissociative Anesthetic

   A. Eye Indicators. A.R.I.D.E. Session VI Page 14.

      i. HGN – Present.

      ii. VGN – Present.

      iii. Pupil Size – Normal.

      iv. LOC – Present.

   B. General Indicators. A.R.I.D.E. Session VI Pages 13-14.

      i. Perspiring;

      ii. Blank stare;

[4] An analog of a drug is one with a similar chemical composition. A.R.I.D.E. Session VI Page 12. Analogs have slightly different chemical structures but produce the same effects. Id.

iii. Cyclic behavior;

iv. Chemical odor;

v. Increased pain threshold;

vi. Incomplete verbal responses;

vii. Warm to the touch;

viii. Repetitive speech;

ix. Hallucinations;

x. Confusion;

xi. Possibly violent and combative; and

xii. "Moon walking".

C. Pupil Reaction to Light, Vital Signs, and Muscle Tone. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session XVI Page 8.

i. Pupil's reaction to light – Normal.

ii. Pulse rate – Up.

iii. Blood pressure – Up.

iv. Temperature – Up. However, it is not uncommon for persons under the influence of PCP to remove most or all of their clothing in an effort to cool down.

v. Muscle tone – Rigid.

3. Onset and Duration of Effects. A.R.I.D.E. Session VI Page 14.

A. PCP. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session XVI Page 7.

i. When smoked or injected, PCP's effects generally are felt within 1-5 minutes.

ii. When snorted, the onset occurs in about 2-3 minutes.

iii. The effects reach their peak in about 15-30 minutes.

iv. If taken orally, PCP's effects are generally felt in 30-60 minutes.

v. ***The effects generally last 4-6 hours***, but they can last somewhat longer.

B. Ketamine. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session XVI Page 7.

i. Effects generally last 30 to 45 minutes (injected);

ii. Effects generally last 45 to 60 minutes (snorted); and

iii. Effects generally last 1 to 2 hours (orally).

C. DXM – DXM is rapidly absorbed from the gastrointestinal tract and peak plasma concentrations are reached in approximately 2.5 hours. It is widely distributed, and is rapidly and extensively metabolized by the liver. DXM is demethylated to dextrophan, an active metabolite, and 3-methoxymorphinan and 3-hydroxymorphinan. It exerts its antitussive effects within 15-30 minutes of oral administration. The duration of action is approximately 3-6 hours with conventional dosage forms. Drug

Evaluation and Classification Program ("The Drug Recognition Expert School") Session XVI Page 7.

4. Conditions that May Mimic Drug Impairment by a Dissociative Anesthetic. A.R.I.D.E. Session VI Page 15.

A. Mental illnesses may mimic impairment by Dissociative Anesthetics.

Narcotic Analgesics

1. Introduction. A.R.I.D.E. Session VI Page 15.

   A. Drugs in the Narcotic Analgesics category relieve pain.

   B. Narcotic Analgesics are also included in the opiate family and are both legal prescription medications as well as illegal drugs.

   C. Specific drugs in this category include, but are not limited to:

      i. Heroin;

      ii. Hydrocodone;

      iii. Vicodin;

      iv. Lortab;

      v. Tylenol 3 (with codeine);

      vi. Darvocet;

      vii. Morphine; and

      viii. Oxycontin.

   D. Narcotic Analgesics enable the subject ***to develop a tolerance*** to the drug. Each time the drug is taken, a larger dose is required to achieve a similar sensation.

2. Indicators of Appreciable Impairment from a Narcotic Analgesic

A. Eye Indicators. A.R.I.D.E. Session VI Page 16.

i. HGN – None.

ii. VGN – None.

iii. Pupil Size – Constricted.

iv. LOC – None.

B. General Indicators. A.R.I.D.E. Session VI Page 16.

i. Droopy eyelids;

ii. "On the nod";

iii. Drowsiness;

iv. Depressed reflexes;

v. Dry mouth;

vi. Low, raspy, slow speech;

vii. Euphoria;

viii. Fresh puncture marks;

ix. Itching;

x. Nausea; and

xi. Track marks.

C. Pupil Reaction to Light, Vital Signs, and Muscle Tone. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session XVII Pages 8-9.

i. Pupil's reaction to light – Little to none visible.

ii. Pulse rate – Down.

iii. Blood pressure – Lowered.

iv. Temperature – Down.

v. Muscle tone – Flaccid.

3. Onset and Duration of Effects. A.R.I.D.E. Session VI Page 16.

A. Heroin. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session XVII Pages 7-8.

i. Heroin users generally experience certain psychological effects immediately after injection. These include a feeling of pleasure or euphoria; relief from withdrawal symptoms; and relief from pain.

ii. Physical effects, ***if they are evident at all***, typically will become evident after 5-30 minutes. ***But remember, physical effects may not be evident if the user is tolerant and has taken a normal dose***.

iii. The physical effects usually will be observable for up to 4-6 hours with new users.

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

B. Hydrocodone – 6 to 8 hours.

C. Dilaudid – 5 hours.

D. Percodan – 4 to 6 hours.

E. Methadone – 12 to 18 hours.

4. Conditions that May Mimic Drug Impairment by a Narcotic Analgesic. A.R.I.D.E. Session VI Page 17.

A. Fatigue;

B. Very recent head injuries;

C. Diabetic reactions;

D. Hypotension (low blood pressure); and

E. Severe depression.

Inhalants

1. Introduction. A.R.I.D.E. Session VI Page 18.

   A. Inhalants vary widely in terms of the chemicals involved and the specific effects they produce.

   B. Three sub-categories:

      i. Volatile solvents – Usually inhaled directly from their source. Examples include gasoline, paint thinners, fingernail polish remover, cleaning fluid, dry erase markers, paint, and glue.

      ii. Aerosols – Usually inhaled from a secondary source such as a soaked rag, paper bag, or plastic bag. Examples include hair sprays, deodorants, vegetable frying pan lubricants, insecticides, and spray paint.

      iii. Anesthetic gases – Can be inhaled from the source directly. Examples include chloroform, amyl nitrite, butyl nitrite, isobutyl nitrite, and nitrous oxide.

2. Indicators of Appreciable Impairment from an Inhalant. A.R.I.D.E. Session VI Page 19. [Tip: The Inhalant abuser will generally appear similar to someone who is impaired by alcohol. A.R.I.D.E. Session VI Page 18]

   A. Eye Indicators. Id.

      i. HGN – Present.

      ii. VGN – Present (in high doses for the particular individual).

      iii. Pupil Size – Normal (may be dilated).

      iv. LOC – Present.

B. General Indicators. Id.

i. Confusion;

ii. Flushed face;

iii. Intense headaches;

iv. Bloodshot, watery eyes;

v. Lack of muscle control;

vi. Odor of substance;

vii. Non-communicative;

viii. Disorientation;

ix. Slurred speech;

x. Possible nausea; and

xi. Residue of substance around mouth and nose.

C. Pupil Reaction to Light, Vital Signs, and Muscle Tone. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session XIX Page 5.

i. Pupil's reaction to light – Slow.

ii. Pulse rate – Up.

iii. Blood pressure – Up or down.

1. Volatile Solvents and Aerosols usually will cause elevated blood pressure.

2. Anesthetic Gases usually will lower the blood pressure.

iv. Temperature – Up, down, or normal depending on the substance.

v. Muscle tone – Flaccid or normal (Anesthetic Gases may cause muscles to be flaccid).

3. Onset and Duration of Effects. A.R.I.D.E. Session VI Page 19.

A. Volatile Solvents – 6 to 8 hours.

B. Anesthetic Gases/Aerosols – Very short (minutes).

C. Nitrous Oxide – Less than 5 minutes.

D. Amyl Nitrite/Butyl Nitrite – Few seconds to 20 minutes.

4. Conditions that May Mimic Drug Impairment by an Inhalant. A.R.I.D.E. Session VI Page 20.

A. Severe head injuries; and

B. Inner ear disorders.

Cannabis

1. Introduction. A.R.I.D.E. Session VI Pages 20-21.

   A. The primary psychoactive ingredient in Cannabis is Delta-9 Tetrahydrocannabinol (THC).

   B. Different varieties of Cannabis contain various concentrations of THC.

   C. The Cannabis category includes marijuana, hash, hash oil, and the synthetic drugs Marinol (Dronabinol).

   D. The effects of Cannabis depend on the strength of the THC in the dose consumed. Concentrations vary from relatively low levels (3-6%) to more than 30%.

2. Indicators of Appreciable Impairment from Cannabis.

   A. Eye Indicators. A.R.I.D.E. Session VI Page 22.

      i. HGN – None.

      ii. VGN – None.

      iii. Pupil Size – Dilated (Can be normal).

      iv. LOC – Present.

   B. General Indicators. A.R.I.D.E. Session VI Page 21.

      i. Marked reddening of the conjunctiva;

      ii. Odor of marijuana;

iii. Marijuana debris in the mouth;

iv. Body tremors;

v. Increased appetite;

vi. Relaxed inhibitions;

vii. Disoriented;

viii. Possible paranoia;

ix. Impaired perception of time and distance; and

x. Eyelid tremors.

C. Pupil Reaction to Light, Vital Signs, and Muscle Tone. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session XXI Page 6.

i. Pupil's reaction to light – Normal.

ii. Pulse rate – Up.

iii. Blood pressure – Up.

iv. Temperature – Normal.

v. Muscle tone – Normal.

3. Onset and Duration of Effects. A.R.I.D.E. Session VI Page 22.

   A. When marijuana is smoked, the user will experience peak effects within 10 to 30 minutes. Typical marijuana users usually exhibit the effects for 2 to 3 hours, with most behavioral and physiological effects dissipating after 3 to 6 hours.

   B. Dronabinol/Marinol has an onset of 30 minutes to 1 hours with peak effects occurring between 2 and 4 hours.

4. Conditions that May Mimic Drug Impairment by Cannabis. A.R.I.D.E. Session VI Page 22.

   A. Generally speaking, none.

   B. However, a subject who has been diagnosed with an attention deficit disorder may mimic a cannabis user's inability or unwillingness to pay attention.

Drug Combinations

1. Introduction

A. Many substance abusers routinely use more than one drug at a time. "Polydrug use" is defined as ingesting drugs from two or more drug categories. A.R.I.D.E. Session VII Page 3. When a person ingests drugs from two or more *different drug categories* into their body, each drug may work independently, but what the body will exhibit, however, is a combination of the effects of each drug. Id.

i. Note – Polydrug use does not refer generally to ingesting more than one type of drug. It refers to an individual who has ingested drugs from two or more categories.

B. When law enforcement comes in contact with a polydrug user, ***a combination of effects*** may be observed in the suspects. The effects may vary widely, depending on:

i. Exactly which combination of drugs is involved;

ii. How much of each drug was ingested (dose levels); and

iii. When they were ingested (time);

iv. A subject's metabolism; and

v. Environment. A.R.I.D.E. Session VII Page 7.

C. There are four types of potential combined effects regarding polydrug use: Null Effect, Overlapping Effect, Additive Effect, and Antagonistic Effect. A.R.I.D.E. Session VII Page 3.

2. Null Effect. A.R.I.D.E. Session VII Page 4.

A. "No action plus no action equals no action." Id.

B. Examples of null effects.

i. CNS Stimulant and Narcotic Analgesic. Neither drug causes nystagmus, therefore you will not see nystagmus with this combination. Id.

ii. Another example from the Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session XXIV Page 3 – One of the first things a DRE does when examining a subject is to check for HGN. We know that many drugs do not affect nystagmus. For instance, if we examined a subject that was under the influence of a CNS Stimulant and nothing else, we would not expect to observe nystagmus. Likewise, if we examined someone who was under the influence of Cannabis and nothing else, no nystagmus would be present. What do you expect we would see when we check for nystagmus in the eyes of someone who has used a CNS Stimulant and Cannabis in combination? Since neither drug independently has any effect on nystagmus, the combination also would not affect nystagmus: Nothing plus nothing equals nothing.

iii. Yet another example from the Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session XXIV Pages 3-4 – Another example of the Null Effect would be found when we check the pupil size of a subject who was under the influence of a Dissociative Anesthetic and a CNS Depressant. Dissociative Anesthetics generally do not affect pupil size; neither does a CNS Depressant. The combination of these drugs will not affect the size of the pupils.

3. Overlapping Effect. A.R.I.D.E. Session VII Page 5.

A. "Something plus nothing equals something" or 1 + 0 = 1. Id.

B. The overlapping effect comes into play when one drug does affect an indicator of impairment and the other drug has no effect on that indicator. Id.

C. Examples of overlapping effects.

i. Dissociative Anesthetic and Narcotic Analgesic. A Dissociative Anesthetic will enhance nystagmus, which a Narcotic Analgesic does not cause nystagmus. Therefore, you will see nystagmus if the suspect is appreciably impaired. Id.

ii. Another example from the Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session XXIV Page 4 – Consider the example of a combination of a CNS Stimulant and Cannabis. We know this combination produces a Null Effect as far as nystagmus is concerned. But what about when we examine the subject's eyes for Lack of Convergence? Cannabis does produce a Lack of Convergence; a CNS Stimulant doesn't. Therefore, the subject who is under the combined influence of Cannabis and a CNS Stimulant will exhibit a Lack of Convergence due to the independent effect of the Cannabis.

iii. Yet another example from the Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session XXIV Page 4 – Consider the example of a combination of a Dissociative Anesthetic and a Narcotic Analgesic. A Dissociative Anesthetic doesn't have any effect on pupil size. Narcotic Analgesics cause constricted pupils. Therefore, the combination would also cause the pupils to constrict.

4. Additive Effect. A.R.I.D.E. Session VII Pages 5-6.

A. "Action plus action equals greater action." Id.

B. The additive effect occurs when two drug categories affect the same indicator in the same way. In other words the effects "add together" or reinforce each other to produce a greater effect than one of the drugs could produce individually. Id.

C. Examples of additive effects.

i. CNS Stimulants and Hallucinogens both cause pupil dilation. Thus, pupils would be dilated if the suspect is appreciably impaired. Id.

ii. CNS Depressant and Dissociative Anesthetic both cause HGN. Thus, HGN would be present if the suspect is appreciably impaired.

1. Note – the A.R.I.D.E. manual also uses this principle strictly with CNS Depressants: "The combination of Alcohol and other CNS Depressants typically cause exaggerated indicators, for example HGN will be present with alcohol, but will not be consistent with the BAC when used in combination with other CNS Depressants." A.R.I.D.E. Session VII Page 6.

iii. Another example from the Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session XXIV Page 4 – Consider the example of a combination of a CNS Stimulant and Cannabis. What will we find when we check the subject's pulse rate? Cannabis produces Tachycardia; so does a CNS Stimulant. When the two drugs are taken together, we can expect to observe tachycardia because the drugs reinforce each other for that particular indicator of impairment. That is, the effect is additive.

5. Antagonistic Effect. A.R.I.D.E. Session VII Page 6.

A. "Action plus an opposite action equals anything." Id.

B. An antagonistic effect occurs when two drug categories affect some indicator in exactly opposite ways. Id.

C. The observable signs of impairment will be dependent upon which drug is more psychoactive in the body at any given time. Id.

D. Examples of Antagonistic Effect.

i. Consider an individual who has presented general indicators consistent with the CNS Stimulant and Narcotic Analgesic categories. Typically, Stimulus use results in dilated pupils while Narcotic Analgesics generally cause pupils to be constricted. Based on an individual under the influence of a combination of a Stimulant and a Narcotic Analgesic, the officer may observe normal pupils due to the antagonistic effect, the pupils may be dilated due to the effect of the Stimulant, or the pupils may be constricted due to the effect of the Narcotic Analgesic. Id.

ii. Another example from the Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session XXIV Page 4 – Consider the example of a combination of a Narcotic Analgesic and a CNS Stimulant. The fact is, we're likely to find just about anything at all. The Narcotic Analgesic, independently, tends to produce hypotension; the CNS Stimulant, independently, usually produces hypertension. The two drugs may offset each other, as far as blood pressure is concerned, and the subject's blood pressure may wind up normal. On the other hand, if the CNS Stimulant effects are starting to wear off and the Narcotic Analgesic is still active in the subject's body, we might find the blood pressure down. Conversely, if the CNS Stimulant is active but the Narcotic Analgesic effects have not yet reached their peak, we might find the blood pressure up. When we deal with an Antagonistic Effect, we simply can't predict what the outcome will be.

6. Common Drug Combinations. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session II Pages 4-5.

   A. Alcohol and virtually any other drug.

   B. Marijuana and PCP. A common way of ingesting PCP is to sprinkle it on a marijuana cigarette and smoke it.

   C. Cocaine and Heroin. This combination is commonly called a "speedball."

   D. Heroin and Amphetamine. This combination is commonly called "a poor man's speedball."

   E. Heroin and PCP. Sometimes called a "fireball."

   F. Crack Cocaine and PCP. Sometimes called a "space base."

   G. Crack Cocaine and Marijuana. Sometimes called "primo."

   H. Crack Cocaine and Methamphetamine. Sometimes called "croak."

7. Specific Examples of Drug Combinations

   A. Attach Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session XXIV Pages 9-10.

Conditions which may Mimic Drug Impairment[5]

1. Head Trauma

   A. A severe blow or bump to the head may injure the brain and create **disorientation, confusion, lack of coordination, slowed responses, speech impairment, and other gross indicators similar to those of alcohol and/or drug impairment**. Sometimes the pupils will be noticeably different in size or one eyelid may droop while the other appears normal. Additionally, the eyes may not be able to track equally while focusing on the stimulus.

2. Stroke

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

3. Diabetes

   A. A diabetic is most likely to be confused with a person impaired by alcohol or drugs when he or she has taken too much insulin, so that the blood sugar levels become dangerously low. This condition is called **insulin shock**. A diabetic in insulin shock may appear very confused, may be non-responsive, sweat profusely and exhibit elevated pulse rate and blood pressure. A way to test whether the suspect is going through insulin shock or not is to give them a glass of orange juice or bite of candy and see if their condition improves.

[5] A.R.I.D.E. Session IV Page 8.

4. Conjunctivitis (or "pink eye")

A. An inflammation of the mucous membrane that lines the inner surface of the eyelids giving a red, bloodshot appearance of the conjunctiva of the eyes. This may appear similar to the bloodshot conditions associated with impairment by alcohol or cannabis.

5. Multiple Sclerosis or other Degenerative Muscular Disorder

A. These individuals may lack coordination or exhibit gait ataxia, tremors, slurred or garbled speech, and many of the other gross motor indicators of intoxication.

6. Other Medical Conditions

A. Other medical conditions that may cause signs and symptoms similar to drug impairment include: carbon monoxide poisoning, seizures, endocrine disorders, neurological conditions, psychiatric conditions, and infections.

7. Behavioral Conditions

A. Some behavioral conditions may affect demeanor, general appearance, and vital signs. Some examples include fear, anxiety, and depression.

8. Bipolar Disorder (Manic-Depression). Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session VI Page 13.

A. Bipolar Disorders. All information under this subsection on bipolar disorders comes from the American Psychiatric Association, Desk Reference to the Diagnostic Criteria from DSM-5 (2013).

i. Bipolar I Disorder[6]

1. Manic Episode ("mania")

a. A person diagnosed with Bipolar I disorder **must meet criteria i. through v. for a manic episode**:

i. Abnormally and persistently elevated, expansive, or irritable mood;

ii. Abnormally and persistently increased activity or energy, lasting at least 1 week and present most of the day, nearly every day.

iii. During the period of mood disturbance or increased activity, **three or more** of the following seven symptoms are present to a significant degree and represent a **noticeable change from usual behavior** (remember, "noticeable" distinguishes mania from hypomania):

1. Inflated self-esteem or grandiosity;

2. Decreased need for sleep (e.g., feels rested after only 3 years of sleep);

3. More talkative than usual;

4. Flight of ideas or racing thoughts;

[6] As you study the difference between bipolar I disorder and bipolar II disorder, an extremely simplistic approach (remember, I'm not a psychiatrist) is that an individual who suffers from bipolar I may experience both mania and hypomania; an individual who suffers from bipolar II merely experiences hypomania. Internet searches indicate hypomania could be called "mania light": all the crazy with half the impairment. Notice that mania causes ***marked impairment in functioning***; hypomania ***is not severe enough to cause marked impairment in functioning***.

I elected to include detailed information regarding bipolar disorder because I have encountered a number of clients charged with DWI who have been adamant they were not impaired; rather, they were going through a manic episode. Use this outline to as a tool to gauge the credibility of your client's analysis.

5. Distractibility (i.e., attention too easily drawn to unimportant or irrelevant external stimuli);

6. Increase in goal-oriented activity (either socially, at work, at school, or sexually) or **psychomotor agitation** (i.e., purposeless non-goal directed activity);

7. Excessive involvement in activities that have a high potential for painful consequences (e.g., engaging in buying sprees, sexual indiscretions, or foolish business investments);

iv.. The mood disturbance is sufficiently severe to cause **marked impairment in functioning** or there are psychotic features; and

v. The episode is not attributable to the physiological effects of a substance (e.g., a drug abuse, a medication, other treatment) or to another medical condition.

b. **Criteria i. through v. constitute a manic episode.** At least one lifetime manic episode is required for the diagnosis of bipolar I disorder.

2. Hypomanic Episode ("hypomania")

a. **Criteria i. through vi. below constitute a hypomanic episode**. Hypomanic episodes are common in bipolar I disorder but are not required for the diagnosis of a bipolar I disorder.

i. For a period of at least 4 consecutive days, and present most of the day, a distinct period of abnormally and persistently elevated, expansive, or

irritable mood and abnormally increased activity or energy;

ii. During the period of mood disturbance or increased activity, **three or more** of the following symptoms are present to a significant degree and represent a **noticeable change from usual behavior**:

1. Inflated self-esteem or grandiosity;

2. Decreased need for sleep (e.g., feels rested after only 3 years of sleep);

3. More talkative than usual;

4. Flight of ideas or racing thoughts;

5. Distractibility (i.e., attention too easily drawn to unimportant or irrelevant external stimuli);

6. Increase in goal-oriented activity (either socially, at work, at school, or sexually) or **psychomotor agitation** (i.e., purposeless non-goal directed activity);

7. Excessive involvement in activities that have a high potential for painful consequences (e.g., engaging in buying sprees, sexual indiscretions, or foolish business investments);

iii. Unequivocal change in functioning that is uncharacteristic of the individual when not symptomatic;

iv. The mood disturbance and change in functioning are able to be observed by others;

v. Episode is **not severe enough to cause marked impairment in functioning**; and

vi. The episode is not attributable to the physiological effects of a substance (e.g., a drug abuse, a medication, other treatment) or to another medical condition.

3. Major Depressive Episode

a. **Criteria i. through iii. below constitute a major depressive episode**. Hypomanic episodes are common in bipolar I disorder but are not required for the diagnosis of a bipolar I disorder.

i. For a period of the same 2 week period, **five or more** of the following symptoms have been present and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure:

1. Depressed mood most of the day (via subjective reports or observation by others);

2. Diminished interest or pleasure in all, or almost all, activities of the day (via subjective reports or observation by others);

3. Significant weight loss when not dieting or weight gain, or noticeable change in appetite;

4. Insomnia or hypersomnia;

5. Psychomotor agitation or retardation (observable by others; not merely subjective

feelings of restlessness or being slowed down);

6. Fatigue or loss of energy;

7. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional);

8. Diminished ability to think or concentrate, or indecisiveness (via subjective reports or observation by others);

9. Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.

ii. The symptoms cause clinically **significant** distress or **impairment** in social, occupational, or other important areas of **functioning**.

iii. The episode is not attributable to the physiological effects of a substance or another medical condition.

ii. Bipolar II Disorder

1. For diagnosis of bipolar II disorder, it is **necessary to meet the following criteria** for a current or past hypomanic episode **and** the following criteria for a current or past major depressive episode:

a. Hypomanic Episode

i. For a period of at least 4 consecutive days, and present most of the day, a distinct period of abnormally and persistently elevated, expansive, or irritable mood and abnormally increased activity or energy;

ii. During the period of mood disturbance or increased activity, **three or more** of the following symptoms are present to a significant degree and represent a **noticeable change from usual behavior**:

1. Inflated self-esteem or grandiosity;

2. Decreased need for sleep (e.g., feels rested after only 3 years of sleep);

3. More talkative than usual;

4. Flight of ideas or racing thoughts;

5. Distractibility (i.e., attention too easily drawn to unimportant or irrelevant external stimuli);

6. Increase in goal-oriented activity (either socially, at work, at school, or sexually) or **psychomotor agitation** (i.e., purposeless non-goal directed activity);

7. Excessive involvement in activities that have a high potential for painful consequences (e.g., engaging in buying sprees, sexual indiscretions, or foolish business investments);

iii. Unequivocal change in functioning that is uncharacteristic of the individual when not symptomatic;

iv. The mood disturbance and change in functioning are able to be observed by others;

v. Episode is **not severe enough to cause marked impairment in functioning**; and

vi. The episode is not attributable to the physiological effects of a substance (e.g., a drug abuse, a medication, other treatment) or to another medical condition.

b. Major Depressive Episode

i. **Criteria 1-3 below constitute a major depressive episode**.

1. For a period of the same 2 week period, **five or more** of the following symptoms have been present and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure:

a. Depressed mood most of the day (via subjective reports or observation by others);

b. Diminished interest or pleasure in all, or almost all, activities of the day (via subjective reports or observation by others);

c. Significant weight loss when not dieting or weight gain, or noticeable change in appetite;

d. Insomnia or hypersomnia;

e. Psychomotor agitation or retardation (observable by others; not merely subjective feelings of restlessness or being slowed down);

f. Fatigue or loss of energy;

g. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional);

h. Diminished ability to think or concentrate, or indecisiveness (via subjective reports or observation by others);

i. Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.

2. The symptoms cause clinically **significant** distress or **impairment** in social, occupational, or other important areas of **functioning**.

3. The episode is not attributable to the physiological effects of a substance or another medical condition.

The Log of Drug Influence Evaluations ("Rolling Log")

1. **The Log of Drug Influence Evaluations ("Rolling Log")**. Drug Evaluation and Classification Program ("The Drug Recognition Expert School") Session XXX Pages 14-15.

A. Introduction

i. Beginning with a DRE's first night of Certification Training, and ***continuing throughout the career of a DRE***, a DRE is required to maintain a log of all persons examined for possible drug impairment.

ii. Purpose of the Rolling Log is three-fold:

1. Determines whether or not the DRE's instructors can recommend the officer for initial certification as a DRE;

a. Under the International Standards for the Drug Evaluation and Classification Program (IACP), instructors cannot certify a DRE unless their Rolling Log of drug influence evaluations is up-to-date, complete, and accurate.

b. To attain certification, the DRE must conduct a minimum of 12 DRE evaluations with an instructor. The DRE only has to be the evaluator on at least six of the evaluations, and only 75% or better of his or her opinions must be corroborated by toxicological results. Id. at Page 16.

2. Determines whether or not the DRE qualifies for re-certification when the initial certification expires; and

a. The Rolling Log is key for re-certification. It proves that the DRE has maintained his or her proficiency in the field.

3. May determine whether or not the trial judge in a particular drug impairment case qualifies the DRE as an expert and thus allows the rendering of a DRE opinion as evidence.

a. A DRE "must" bring his or her Rolling Log each time she goes to court as a DRE.

B. <u>What is the Rolling Log?</u>

i. "Control Number" box – In the "Control Number" box, the DRE will print the number that the DRE assigns to the evaluation; i.e., if this is the seventh examination in which the DRE participated in 2005, the control number would be 2005-7.

1. Note – an examination always appears in this box, ***even if the DRE at issue was not the individual who actually conducted the examination***. See below.

2. If the DRE was the actual examining DRE for the particular case, he or she need not print anything other than the control number in that box.

3. If the DRE served only as the recorder, the DRE must print "RECORDER" in the box immediately below the control number.

4. If the DRE served only as a witness, the DRE must print "WITNESS" in the box immediately below the control number.

ii. In the box to the right of the control number, the DRE prints the subject's full name and case number if one exists.

iii. The next box shows the date on which the evaluation began.

iv. In the next box, the DRE's opinion is recorded in "complete detail." If the DRE concludes the subject is not impaired, that is what will be recorded. If the DRE concludes the person is under the influence of alcohol only, that is what will be recorded. If the DRE believes the subject is suffering from an injury or illness, the DRE prints "Medical Rule Out" in the box.

Otherwise, the DRE records the category or combination of categories of drugs that the DRE believes is causing the impairment. If the subject has a positive BAC, the DRE includes alcohol as a cause of impairment.

v. In the "Toxicologic Results" box, the DRE prints the outcome of all chemical tests performed on the subject (Note – this is where you get to see the reliability of the DRE's opinions … in other words, how often is the DRE accurate in his or her conclusions?).

vi. In the final box, print the names of persons who witnessed the evaluation and any other appropriate comments.

vii. Put example of Rolling Log here. Id. at Page 17.

C. Practice Pointer

i. Subpoena the DRE's Rolling Log and specifically ask for it in discovery!

Summary Checklist in Evaluating a Drug or Medication Impaired Driving Case

1. This checklist relates to "impairment" only. It does not outline the myriad of other issues that may arise in a given DWI case.

2. Checklist:

   A. Is there evidence that the defendant was under the influence of an alleged impairing substance?

   B. If so, what are the alleged impairing substances?

      i. If the alleged impairing substances are medications, look them up in the Physician's Desk Reference. If you need help, consider consulting the defendant's prescribing physician or a local pharmacist to obtain a better understanding of the medication.

   C. Did the defendant make a statement regarding (a) the time and (b) the strength of his or her last dose of the alleged impairing substances?

   D. What length of time are the alleged impairing substances' half-lives? In other words, how many hours (or days) would these substances continue to be present in an individual's blood?

   E. What drug category or categories do the alleged impairing substances fall under?

   F. What are the observable signs of impairment that are consistent with medication or drugs in that category or categories?

   G. Are the officer's observations of the defendant consistent with the type of intoxication the State is trying to prove?

H. Did the defendant suffer from any conditions which may mimic drug impairment? Are there any other reasonable explanations for the officer's observations?