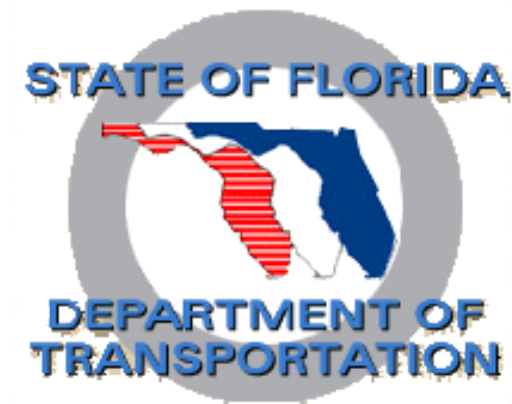


Employee Drug and Alcohol Education and Reference Manual



For DOT covered, safety sensitive employees

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1. Introduction to Workplace Drug and Alcohol Testing

Your company is dedicated to providing safe, dependable, and economical transportation services to its patrons. Your company believes that their employees are a valuable resource and the goal of your company is to provide a safe, healthy, and satisfying working environment for employees.

The regulations requiring drug and alcohol testing can be found in 49 Code of Federal Regulations Part 655, "Prevention of Alcohol Misuse and Prohibited Drug Use in Transit Operations", additional information regarding testing procedures and employee rights can be found in 49 CFR Part 40, "Procedures for Transportation Workplace Drug and Alcohol Testing Programs" which provides uniform procedures and standards for conducting drug and alcohol testing programs. The drug and alcohol testing program of your company will be conducted in accordance with 49 CFR Parts 40 and 655, as amended.

A drug and alcohol testing program does more than just meet the government requirements, it assures that employees are not impaired in their ability to perform assigned duties in a safe, productive, and healthy manner; it creates a workplace environment free from the adverse effects of drug and alcohol abuse or misuse it encourages employees to seek professional assistance anytime personal problems, including alcohol or drug dependency, adversely affects their ability to perform their assigned duties

Drug and alcohol abuse is a threat to both the company and the employee. Below is a list of just some of the ways that a drug and alcohol testing program helps both your company and *you*.

A drug and alcohol testing program:

- Maintains safe company operations by establishing a drug and alcohol free environment to minimize the possibility of a substance abuse related accident;
- Identifies employees who may need assistance with substance abuse problems
- Provides an effective deterrent against experimentation and use of illegal drugs
- Helps to ensure employee productivity
- Guards against liability resulting from the actions of impaired employees;

- Protects company property and other employees against theft by persons who steal to support a drug habit
- Deters illegal activities

2. Drug and Alcohol Statistics

Some of the health hazards that may result from the chronic consumption of alcohol include:

- Decreased sexual functioning.
- Dependency.
- Fatal liver diseases, cancers, kidney disease, ulcers.
- Spontaneous abortion, neonatal mortality, and birth defects.

Statistics measuring the social issues related to chronic consumption of alcohol and the use of illicit drugs include:

- Two-thirds of all homicides are committed by people who drink prior to the crime.
- Two to three percent of the driving population is legally drunk at any one time. This rate is doubled at night and on the weekends.
- Two-thirds of all Americans are involved in an alcohol related vehicle accident during their lifetimes.
- The rate of separation and divorce in families with alcohol dependency problems is seven times the average.
- Forty percent of family court cases are alcohol problem related.
- Alcoholics are 15 times more likely to commit suicide than the other segments of the population.
- More than 60 percent of burns, 40 percent of falls, 69 percent of boating accidents and 76 percent of private aircraft accidents are alcohol related.
- It takes one hour for the average person (150 pounds) to process one serving of an alcoholic beverage from the body.
- Impairment in coordination and judgment can be objectively measured with as little as two drinks in the body.
- A person who is legally intoxicated is six times more likely to have an accident than a sober person.
- One out of every 10 Americans has an alcohol problem.
- One out of every 12 Americans has a problem with illicit drugs.
- Drug and alcohol abusers are involved in four times the number of workplace accidents as non-abusers....or 65% of all work related accidents.
- The cost to the American public is now established to be over \$100 billion.
- It is estimated that drug and alcohol abuse adds \$400-\$800 to the sticker price of every new car manufactured in the United States today.
- In the United States every day there are 500 new cocaine users.
- Each and every day, 2700 planes, boats, and automobiles are engaged in the activity of smuggling illegal drugs into the U.S.
- \$150 billion is grossed annually from the sale of illegal drugs.
- On average, an addicted employee costs his company \$8600 a year.
- The average absentee rate of an addicted employee is 22 days per year.

- 41% of American employees said drug and alcohol abuse by employees in their organization "seriously affects (their own) ability to get the job done."

3. Definitions of Frequently Used Terms and Acronyms

Breath Alcohol Technician (BAT)

This refers to the individual who conducts the breath alcohol testing for your company. This person must be trained in administering the testing to be compliant with the regulations governing DOT breath alcohol testing.

Urine Collector

The technician who is trained to “collect” a urine sample and complete a Federal drug testing custody and control form for DOT required drug testing.

Custody and Control Form (CCF)

Also referred to as a “chain of custody”, this refers to the 5 part form that accompanies the urine specimen from the point of collection to the laboratory for analysis. Each party involved in a Federal Drug test will receive a copy of the form. The five parts of the form will be retained by the five parties involved:

1. Employee
2. Employer
3. Collector
4. Laboratory
5. Medical Review Officer

Designated Employee Representative (D.E.R.)

This refers to the individual who is responsible for handling the drug and alcohol program for your company. This person receives the drug test results, prepares the random testing schedule and is responsible for maintaining compliance with FTA regulations in drug and alcohol testing. This individual may also be referred to as the Drug and Alcohol Program Manager.

DOT= Department of Transportation

Evidentiary Breath Testing Device

This refers to the device used by a breath alcohol technician to test the quantitative levels of alcohol in the lungs

FTA= Federal Transit Administration

Medical Review Officer (MRO)

This is a licensed doctor of medicine or osteopathy who has specific knowledge of substance abuse. The role of the MRO is to conduct an interview with an

employee whose urine sample tested positive, to determine if there is a legitimate medical explanation for the presence of the drug or drug metabolite in the urine sample.

Substance Abuse Professional (SAP)

Under the Federal Regulations, your employer must provide you with a referral to a Substance Abuse Professional upon receipt of a verified positive drug tests from the MRO-regardless of the disciplinary action taken by your employer.

The substance abuse professional must meet the DOT guidelines for training and qualifications to act as a referral source for a DOT employer

4. Test Types

The following is a description of the reasons for test as provided for under the regulations. If your company's substance abuse policy is "zero tolerance"; Return to Duty and Follow Up testing will not be applicable.

Pre-employment tests

Federal Regulations require that an FTA regulated employer must be in receipt of a negative urine drug test before the first performance of a safety-sensitive function by an employee. Additionally, an employee who is on an extended leave for a period of 90 days or more and who has been removed from the random testing pool must also submit to a pre-employment urine drug test prior to performing a safety sensitive function.

Random tests

The current (2008) Federal Regulations require that an FTA regulated employer must test 25% of their average number of safety sensitive employees annually for prohibited drug usage and 10% of the average number of safety sensitive employees annually for alcohol use while performing safety sensitive duties. In random testing, the names of all employees holding safety sensitive positions are loaded into a random selection mechanism, such as a special computer program. Each testing period, every safety sensitive employee has an equal chance of being tested, regardless of whether or not they had been previously selected.

Post-Accident tests

Both urine drug and breath alcohol testing will be required when an accident occurs that meets the threshold for testing as provided by the FTA regulations. Any safety sensitive employee whose performance could have contributed to the accident shall be tested. This may include mechanics, dispatchers and of course, drivers. The testing thresholds are defined as:

- An accident that results in a fatality.
- An accident that results in injuries requiring immediate medical treatment away from the scene
- An accident that results in one or more vehicles incurring disabling damage that requires towing from a site.

The FTA defines disabling damage as:

"Damage that precludes the departure of any vehicle from the scene of an accident in its usual manner in daylight hours after simple repairs".

Disabling damage includes: damage to vehicles that could have been operated, but would have caused further damage if so operated.

Disabling damage does not include: damage that could be remedied temporarily at the scene of the occurrence without special tools or parts, tire disablement without other damage even if no spare tire is available, or damage to headlights, taillights, turn signals, horn, or windshield wipers that makes them inoperable.

Reasonable Suspicion tests

A covered employee must submit to drug and alcohol testing when a trained supervisor observes articulable, specific, contemporaneous, physical, behavioral, or performance indicators of probable drug and/or alcohol abuse.

Return to Duty tests

When an employee has been suspended from safety sensitive duties because of a positive drug test or a breath alcohol test, the employee must receive an evaluation and treatment from a DOT qualified Substance Abuse Professional. A negative drug and/or alcohol test result is required before the employee can be returned to safety sensitive duties. In accordance with DOT regulations, return to duty urine drug tests will be conducted under direct observation. This means that the collector must directly observe the employee urinate into the collection cup.

Follow-Up Tests

When an employee is allowed to return to a safety sensitive position after undergoing treatment for alcohol or substance abuse, unannounced follow up testing will be done to ensure that the employee is alcohol and drug free and remains so. The Substance Abuse Professional prescribes the number of follow up tests that the employee must submit to. A minimum of 6 tests in 12 months is required by FTA regulations. In accordance with DOT regulations Follow-Up urine drug tests will be conducted under direct observation. This means that the collector must directly observe the employee urinate into the collection cup.

5. Urine Specimen Collections

The collection of your urine will be conducted under procedures mandated by the Department of Transportation. The DOT has issued regulations regarding the training and qualifications of urine collection personnel. The DOT Urine Specimen Collection Guidelines are available at the following web address:

<http://transit-safety.volpe.dot.gov/Publications/Default.asp>

The DOT regulations provide for your individual privacy unless there is reason to believe that you may have altered or substituted the urine specimen or you have previously tested positive on a DOT required tests and are in a return to duty/follow up testing program. In these cases you must submit to a directly observed collection or face the consequence of a refusal to test. The following are the procedures for a routine collection:

1. Present required photo ID to the collector-if you do not have a photo ID, an employer representative will be asked to identify you.
2. You may ask the collector to show his/her identification.
3. Remove any unnecessary outer garments, e.g. coat, jacket, hat. All personal belongings (e.g. purse, briefcase) must remain with outer garments. You may retain your wallet. You may ask for a receipt for the items that remain outside of the testing area.
4. When instructed by collector, wash and dry your hands.
5. You will be provided with a sealed specimen bottle or collection container, or the collector may unwrap it in your presence.
6. You may provide the specimen in the privacy of a stall or otherwise partitioned area that allows for individual privacy.
7. You should observe the entire collection procedure. The collector will check the specimen for volume, temperature and color. The collector will split the specimen and seal the bottles as appropriate.
8. You should initial the identification labels on the specimen bottles to certify that it is your specimen, after they are applied to the specimen containers.
9. You are to complete the information in step 5 of the custody and control form. You will be given a copy of the completed form after the collector has completed his/her certification.

- a. You should **NOT** list medications/prescriptions on any copy of the form other than the one you are given for your own records.

The results of the laboratory analysis will be forwarded to your employer's Medical Review Officer (MRO). If the laboratory results are negative, the MRO will notify your employer. If the laboratory results are positive, the MRO will contact you at the phone number you provided to give you the opportunity to discuss the test results and to submit information demonstrating authorized use of the drug(s) in question.

6. Breath Alcohol Testing

The DOT training requirements for Breath Alcohol Technicians (BATs) ensure that the individual is trained to proficiency in the operation of the EBT he or she is using and in the alcohol testing procedures contained in 49 CFR Part 40. The procedures for breath alcohol testing are as follows:

1. You must provide positive identification, BAT must provide ID if you request them to do so.
2. BAT shall explain procedure.
3. BAT completes section one of test form, employee completes section two of form. **Refusal to sign form in Step Two of the DOT alcohol testing form constitutes a refusal to test.**
4. An individually sealed mouthpiece is opened in your view and placed on EBT machine
5. The BAT instructs you to blow into the machine for at least six seconds.
6. The technician will show you the displayed results
7. The EBT prints the results directly onto a form.
8. If test result is less than .02:

BAT shall date and sign the form in step 3. Employee shall date and sign the form in step 4. Results are then transmitted to the employer.

If the result is .02 or greater, a confirmation test shall be performed.

7. Refusing to Test

Submitting to DOT required drug and alcohol testing is a condition of your employment as a safety sensitive employee. Refusing to submit to any DOT required drug or alcohol test is a violation of your employer's substance abuse policy and testing program.

The following actions will constitute a "refusal to test" under the DOT regulations. Please be advised that if your company has a Zero Tolerance policy, these actions could result in termination of your employment. *In all circumstances, these actions will result in removal from safety sensitive duty and you will be provided a referral to a Substance Abuse Professional.*

During a urine drug collection, these are the actions that would be considered your "refusal to test":

- Failure to appear at the collection site when directed to report
- Failure to remain at the collection site until testing is completed
- Failure to provide a urine specimen
- Failure to permit a monitored or observed collection when required
- Failure to provide sufficient specimen (40 ml) without medical explanation
- Failure to submit to additional testing as directed by employer or collector
- Failure to undergo a medical evaluation when directed to do so by employer or MRO
- Failure to cooperate with any part of the urine collection process
- The adulteration or substitution of a urine specimen you provided

During a DOT required breath alcohol test, these are the actions that would be considered your "refusal to test":

- Failure to appear for a breath alcohol test when directed to do so
- Failure to remain at the testing location until the test is completed
- Failure to provide an adequate breath sample without medical explanation
- Failure to undergo a medical evaluation when directed to do
- Failure to sign Step Two of the DOT Alcohol Testing Form (ATF)
- Failure to cooperate with any part of the alcohol testing process

8. Consequences for Positive Results and Refusing to Test:

When an employer is notified of an employee's positive drug or alcohol result or a refusal to submit to DOT required testing, the regulations require that the employee be *immediately* removed from safety-sensitive duty and given a referral to a Substance Abuse Professional (SAP) that meets the DOT qualifications for training and education.

The regulations do not prohibit the return of a violating employee to safety sensitive duties, provided that the employee is evaluated by a DOT qualified SAP, has completed the course of treatment prescribed by the SAP and has submitted to a Return to Duty drug or alcohol test with negative results before resuming safety sensitive functions. The violating employee must also adhere to a schedule of Follow Up tests as prescribed by the SAP.

Some employers implement a "Zero Tolerance" policy-- terminating employees that violate the substance abuse policy and/or testing program. Other agencies choose to enact a policy that provides for a "Second Chance"— allowing a violating employee the opportunity to receive treatment and then return to their position. Regardless of which policy statement your agency has adopted; it must be implemented fairly and consistently.

DOT regulations require that you are provided with a copy of your employer's substance abuse policy statement. Please speak with your employer's drug and alcohol program manager or designated employer representative if you have not been provided a copy of the substance abuse policy.

9. Drug and Alcohol Education

Alcohol

Beer, wine, distilled spirits

An estimated 18 million Americans are reported alcoholics or alcohol abusers - a figure that increases by four million each year.

Illnesses resulting from alcohol abuse represent the third leading cause of death in the United States.

Other studies indicate that alcohol abuse results in hospitalization more than any other drug; that alcohol is a contributing factor in 10% of work-related injuries and in 40% of traffic deaths; that up to 68% of people who drown were under the influence of alcohol; that the rate of suicide among alcoholics is 30 times that of the general population; that productivity of an alcoholic employee is 25% to 50% lower than normal productivity.

While alcoholism (physical and psychological dependence on alcohol) is epidemic in our country, high levels of alcohol consumption that fall short of actual alcoholism are also dangerous to the drinker, to his or her family and community, and to safety at work. Excessive drinking (and what is considered "excessive" varies widely depending upon body weight, sensitivity to alcohol, and health factors) in and of itself may result in liver and kidney disease, pancreatitis, chronic gastritis, and cirrhosis.

The standard bar drink is considered a normal dose; it contains 1.5 oz of 80 proof liquor. A 12-oz bottle of beer and a 5-oz glass of wine contain approximately the same amount of alcohol as a standard bar drink.

One to three drinks is considered a moderate dose of alcohol. The first noticeable effects of alcohol ingestion are heightened activity and acting in an uninhibited manner (disinhibition). Individuals react differently: many drinkers tend to feel happy, gregarious, filled with enthusiasm, relaxed and more self-confident, while others become hostile, withdrawn and depressed.

As more alcohol reaches the brain, thinking and memory may become moderately impaired and perceptual and motor functions may be adversely affected. The face and skin may seem warm and flush.

After three or more drinks, motor functions become impaired and reaction time is slowed. Emotions tend to become magnified; depression or rage is common. Symptoms include sweating, "double vision" (an inability to focus well), unsteadiness, dehydration, frequent urination, slurred speech, vomiting, and

sudden, heavy sleep. With very high doses, stupor or coma may occur. An individual may vomit while asleep and be unable to awake, and die as a result.

The physical and psychological dependence on alcohol becomes increasingly likely with chronic use. The chronic drinker suffers from depression, anxiety, confusion, slurring (even when sober), impairment of perceptual/motor functions, and increasing loss of ability to reason, as well as the wide range of serious diseases stated above.

While the "hangover" experienced after a night of drinking is actually a mild withdrawal syndrome, the symptoms experienced by an alcoholic or long-term chronic drinker are extremely serious. With cases of severe alcoholism, the process of detoxification must be carried out under medical supervision. If not handled correctly, severe symptoms may result, such as delirium tremens (DTs), which can be fatal.

One of the most tragic results of the consumption of alcohol is Fetal Alcohol Syndrome (FAS). FAS can cause fetal damage that ranges from low birth weight to mental retardation; it has been shown to be the leading cause of mental retardation in newborns.

Amphetamines ("Speed")

Benzedrine ("Bennies"); Biphphetamine ("Black Beauties"); Methedrine (Desoxyn, "Co-pilots"); Preludin; Methylphenidate (Ritalin); Dextroamphetamine (Dexedrine, "Dex", "Dexies"); Methamphetamine ("Crank", "Crystal", "Meth", "Crystal Meth")

Stimulants work directly on the central nervous system increasing alertness and strength and decreasing hunger. Because of these effects, stimulants tend to be abused by students (to stay awake and focused to study for exams), by long-distance drivers (to stay alert and to combat boredom), and by athletes (to improve performance).

In the 60's, stimulants were widely prescribed to help dieters control their appetites without suffering the fatigue and weakness that stringent dieting causes. However, numerous studies have since proved that, while stimulants may result in modest weight loss over two to four weeks, tolerance to the hunger-reducing effects is rapidly developed and higher levels of the drug must be consumed to continue the weight reduction. This cycle of tolerance followed by increasing levels of a substance leads almost inevitably to physical dependence. Individuals who take stimulants to lose weight will quickly regain the lost weight. Today, most physicians feel that the benefits of stimulants are small and short-lived, and the liabilities so high that prescribing them for weight loss is both inappropriate and, ultimately, ineffective.

Stimulants may be taken by mouth, by nose ("snorted") or injected. When taken in tablet form, the effects last from eight to 12 hours, and from three to four hours when snorted or taken by injection.

To "snort" amphetamines, the user empties a powder-filled capsule (or crushes a tablet) onto a glass surface, shapes it into short lines and inhales it using a straw or tube. In the case of "crystal" (methamphetamine - a more potent form of amphetamine which is purchased in crystalline powder form), the mica-like crystals are chopped with a razor blade, and then shaped and snorted. A runny nose and nosebleeds are common. Some users lose their sense of smell due to the excessive irritation this drug causes to the nasal passages.

"Shooting" a drug comes with its own risks. Those who inject drugs suffer from skin infections at the needle's point of entry. These infections manifest themselves as round, swollen, red areas that are tender to the touch. Infections also travel to other areas of the body, especially the lungs and heart valves. Hepatitis is a common result of shared needles, and now those who inject drugs are faced with death from another direction - AIDS.

Low dose effects include: Increased activity, heart rate and pulse rate; increased blood pressure; decreased appetite; euphoria; constricted blood vessels; dilated pupils; increased alertness, strength, and initiative; self-confidence and ability to concentrate; speech that stumbles over itself in its haste. A sensation of crawling skin, especially on the scalp when fingers are run through the hair is common as is dry mouth and excessive sweating.

In higher doses, headache, palpitations, dizziness, vasomotor disturbances, agitation, confusion, apprehension, paranoia, delirium and fatigue occur.

Tolerance develops to some of the central effects of amphetamines (primarily the euphoric and appetite-decreasing effects), leading the user to increase the dose to obtain the same effect. Additional symptoms caused by chronic use include sleep deprivation and sleep disturbances; paranoid delusions; auditory hallucinations; panic states; suicidal and homicidal tendencies.

Withdrawal symptoms can include irritability, fatigue, depression, weakness, and increased appetite. These may last for two or three days, or they may last for several weeks, depending upon the length of use, the amount of stimulant used, and the individual's physical variables.

Marijuana

("Pot", "Weed", "Grass", "Reefer", "Dope", "Thai Sticks", "Ganja", "Acapulco Gold"); Hashish ("Hash")

Marijuana, the dried leaves of the Cannabis Sativa plant, has been used for its intoxicating effects for more than 4000 years by the Chinese, although it wasn't introduced into America until the late 1930's. It became widely used in the 1960's, and in the years since then marijuana's popularity has remained fairly constant. Cross-breeding and significant underground research into optimal growing conditions have considerably increased the potency of the drug. Today, marijuana is as much as ten times more potent than the marijuana used in the early 70's.

The main psychoactive ingredient in marijuana and hash is a mild hallucinogen called delta-9-tetrahydrocannabinol (THC), but more than 400 other chemicals are also present in the tropical plant. Although it is classed as a hallucinogen, it differs from the other drugs in this class (such as LSD) both because it is much less potent and because it induces much more sedation.

Sinsemilla ("Sinse"), a seedless marijuana which is valued by users for its high potency, has an average THC content of 6-7%.

Hashish (hash) is a concentrated form of marijuana that is made by taking the resin from the leaves and flowers of the Cannabis Sativa plant and pressing it into cakes. Hashish in this cake form is a brown, sticky, crumbling substance, similar to a crumbled bouillon cube, and can contain as much as ten times the amount of THC found in the marijuana used to make it. Hash oil can contain as much as 50% THC.

THC in a **pure** state is almost never available except for research. The "THC" powder sold illegally is almost always something else - often PCP.

Marijuana is usually smoked- rolled in a very thin paper like a cigarette, or in a water pipe called a "bong". Sometimes other substances, such as PCP or powdered sedatives, are sprinkled on the marijuana prior to smoking it. Hashish is smoked in a small pipe. The smell produced by the smoke of marijuana or hashish is distinctively sweet.

Some low dose effects of marijuana include: mild euphoria, sedation, increased pulse, disturbance in short-term memory (a user may have difficulty recalling something said only minutes earlier), dry and bloodshot eyes, mild perceptual and sensory distortions (for example, lights and colors may appear brighter than they really are, or an enormous amount of time may seem to go by between the time that one person speaks and another person answers), spontaneous laughter, sudden hunger, reduced attention span, dry mouth that is not easily alleviated by drinking water, slowed reaction time, and mild impairment of cognitive and motor functions.

Some people have an adverse reaction to marijuana, involving an "acute panic anxiety reaction" (paranoia). This may occur only the first time a person tries the drug, or every time.

In higher doses, a user can experience mental confusion, impaired performance of simple motor tasks, paranoia, increased desire for sleep. In very large doses, the impaired cognitive and motor abilities, the mental confusion and resultant mild depression may last for several weeks after termination of use.

Studies indicate that marijuana smoking, like tobacco, leads to chronic bronchitis, emphysema, and lung cancer. Marijuana users who have cardiovascular disease are at greater risk of developing angina, possibly due to the elevation in heart rate that occurs when smoking the drug. In addition, chronic users of marijuana often develop what is known as "a motivational syndrome", characterized by lethargy/low motivation to engage in productive work, boredom, mild depression, and difficulty in concentrating and remembering.

While there are no observed withdrawal symptoms from the use of marijuana, there is an effect known as the "marijuana hangover". This is characterized by cloudy-headedness, slowed reaction time, and lowered concentration which lasts as long as 24 hours after the use of the drug is discontinued.

Cocaine

"Coke", "Snow", "Uptown", "Toot", "Blow", "Flake", "Nose Candy", "Snort"

Although cocaine was the drug epidemic of the 80's and 90's, it isn't a new drug of abuse. Spanish explorers in South America 400 years ago described natives who continually chewed the leaves of the coca plant to stay in a state of perpetual intoxication.

From the South American tropics to the board rooms of corporate America, cocaine has proved to be one of the most highly addictive drugs known. In recent experiments, animals allowed to choose freely between food, water, or cocaine chose cocaine repeatedly, ignoring food and water until they would have died.

Cocaine is a white powder typically mixed with various white cutting agents. It can be administered in a number of ways: inhalation ("snorting"), injection ("shooting up"), free-basing, or smoking as crack.

To "snort" cocaine, abusers use a razor blade to chop the cocaine/cutting agent mixture on a glass surface, and shape the finely chopped powder into a line. The amount of the dose is roughly judged by the size of the line, and a small straw or tube is held to the nose and the line of powder inhaled.

Cocaine snorters often develop nose and throat trouble due to the irritation caused to these passages when snorted. Bloody nasal discharge, runny nose, infections of the sinuses and frequent coughing are common. Some users lose all sense of smell as a result of this practice.

"Shooting up" is often the method of choice for cocaine addicts, as the onset of the drug is almost instantaneous and the initial euphoria more intense. A small amount of cocaine is put in a spoon, or small container, enough water is added to dissolve the drug and a needle placed into the liquid sucks it up into the syringe. The liquid is then injected, usually into the vein on the inside of the elbow, a vein in the leg, or some other easily accessible vein. The drug takes effect so quickly that in the case of an overdose a person may have a heart-attack or seizure while the needle is still in his or her arm. In addition to these dangers, a user who injects any drug risks hepatitis, infections of the skin which can travel to the lungs and heart valves, and AIDS.

A "speedball" is an injection of cocaine and heroin combined. As the name implies, such a combination produces an extremely intense reaction, and is even more dangerous than cocaine alone.

"Free-basing" is the term used for the process of smoking cocaine that has been purified through a chemical process. The risks associated with free-basing are cardiac arrhythmia, suppression of respiration, seizures, convulsions, and a dangerous chemical reaction that can result in fire or explosion.

At low doses users can experience a euphoria lasting approximately 20 minutes when snorted, and less long when free-based or smoked; constricted blood vessels; increased pulse and blood pressure; increased energy, strength and alertness; decreased appetite; lowering of inhibitions.

Some reactions to higher doses include; confusion, paranoia, hallucinations and impulsive behavior (mental effects identical to the symptoms of paranoid schizophrenia); seizures due to the stimulation of the nervous system; irregular heartbeat; heart attack; inflammation of the heart muscle; cardiovascular collapse; cardiac arrest; and sudden death.

Cocaine use produces an extremely high risk of addiction. The time from first use to full-blown addiction can be very short - a matter of weeks or months. Tolerance to the euphoric effects occurs very quickly.

A person withdrawing from cocaine will experience irritability, weakness, marked reduction in energy, increased desire for sleep, depression, loss of concentration, and increased appetite.

Cocaine use during pregnancy can lead to fetal damage, premature delivery, low birth weight, respiratory difficulties, and increased risk of Sudden Infant Death Syndrome (SIDS).

Opiates

Heroin ("Smack", "Junk", "Downtown", "Horse", "Scag", "Stuff"); Morphine ("M", "Miss Emma", "Morph"); Opium ("Blue Velvet", "Black Stuff"); Codeine ("Schoolboy")

Opiates are narcotic drugs derived from opium, a black, sticky substance that is produced when the pod of the poppy plant is slashed at a certain time of the year. All opiates act in a similar manner, but the intensity of the effects (and, therefore, the abuse potential) differs from drug to drug.

Opiates are prescribed for their pain-killing abilities. Codeine is the least strong of the opiates, and is often found in cough syrups and mild analgesics (such as the prescription Tylenol/Codeine combination). Morphine, on the other hand, may be used to combat pain following surgery.

Studies have shown that approximately 3.9% of the young adult population (18-34) use heroin at least once a month. This figure has stayed fairly consistent over several decades, suggesting that a certain number of people will always be drawn to and addicted by the drug. A dose of heroin lasts two to six hours when injected, and injection is the primary method of use (bringing with it all the dangers of hepatitis and AIDS). US troops stationed in Vietnam smoked heroin, but the drug obtainable there was extremely pure (90 to 95% pure), compared to the highly adulterated heroin available in this country.

In low doses, suppression of pain, feeling of well-being, relaxation in some people and activity in others, mental cloudiness, euphoria, possible decreased appetite, nausea and vomiting can be experienced.

Higher doses of opiates can result in decreased sensitivity and emotional response to pain, impaired concentration, deep sleep, stupor, coma, death due to suppression of respiratory functions.

Tolerance (more drug must be taken to obtain the desired effect), and addiction are likely in most users.

Withdrawal can begin eight hours after the last dose of the drug. The symptoms include uneasiness, restlessness and anxiety, watery eyes, runny nose, loss of appetite, sweating, nausea, tremors, stomach cramps, vomiting, diarrhea, and panic. Another symptom of withdrawal is gooseflesh, which makes the skin of an individual resemble a plucked turkey or chicken. It's this phenomenon which gave

rise to the expression "cold turkey" as a way of describing a sudden and difficult withdrawal from a substance.

Withdrawal can last days or weeks, depending upon the level of abuse. While withdrawing from narcotics can be extremely uncomfortable and temporarily debilitating, it is rarely fatal unless the individual had a pre-existing serious medical problem, such as heart disease.

Because of the rapid onset of withdrawal symptoms, an addicted employee may, and probably will, experience these symptoms on the job. To try to avoid this, many addicts will inject themselves just prior to reporting for work, or will bring a small quantity of the drug with them. An employee experiencing the effects of narcotics while at work is a safety hazard due to the sedative effects of the drug.

Phencyclidine

("PCP", "Angel Dust", "Hog", "Mist", "Crystal", "Peace Pill", "Tranq", "Animal Tranq")

PCP was developed in the 1950's as a surgical anesthetic. However, when patients began to report hallucinations while under the drug, its use in human medicine was discontinued.

PCP is still used as a tranquilizer in veterinary medicine - which is why it is sometimes referred to as "Animal Tranq".

In medicine, PCP is classed as a hallucinogen because of the hallucinations that are so frequently reported with its use. It differs, however, from other hallucinogens in that it also acts as a stimulant, a depressant, and an analgesic.

PCP is a powder - it is usually taken orally, inhaled through the nose ("snorted"), injected, or sprinkled on tobacco, marijuana, or parsley, and smoked in cigarette form. When smoked in this way, the drug is called "angel dust", and users are referred to as "dusters".

The acute drug reactions usually last four to six hours, but the effects of PCP have a unique pattern: they "come and go" - the hallucination may suddenly become very strong, and then fade away, and then reoccur. The reason for this is that the drug is absorbed by a person's body fat; then released into the blood stream; then metabolized, and released again, prolonging the drug's effects.

Low dose effects include: euphoria, delusions, hallucinations (especially visual), impaired short term memory and judgment, staggering walk, numbness of hands and feet, slurred speech, confused thinking patterns, apathy. Aggressive, hostile, and even psychotic behavior is not unusual.

In higher doses, increased heart rate and blood pressure, drooling, fever, sweating, muscular rigidity is experienced. Other reactions may be anxiety, depression, paranoia that is schizophrenic in intensity, homicidal and suicidal behavior, stupor, coma (although the eyes remain open), and convulsions.

Half of PCP users claim to take it once a week or less. "Runs" can occur in which the user takes the drug constantly for two or three days with little sleep or food.

Abrupt withdrawal after chronic use results in fearfulness, tremors and facial twitches.

PCP may be the most toxic drug that has ever been abused.

10. Additional Resources:

In support of raising alcohol free children:

<http://www.alcoholfreechildren.org>

National Institute on Alcohol Abuse and Alcoholism

<http://www.niaaa.nih.gov>

Alcoholics Anonymous:

<http://www.alcoholics-anonymous.org/>

For the family coping with an alcoholic loved one:

<http://www.al-anon.org/>

Cocaine Anonymous:

<http://www.ca.org/>

Marijuana Anonymous:

<http://www.marijuana-anonymous.org/>

The Cope Line (crisis assistance, information and referral services for substance abuse treatment) 1-888-285-5665

C.A.R.E. 24/7 Addiction Help in the state of FL

<http://www.careflorida.com/index.html>

1-866-494-0866