

STAT TRUCKING, INC. Alcohol and Drug Policy

Purpose: This policy is designed to meet and exceed the requirements set forth in the Federal Motor Carrier Safety Regulations (FMSCR). Specifically, 49 CFR Parts 40, 382 and any relating parts that coincide with the substance abuse issues and or safety sensitive matters relating to operators of commercial motor vehicles.

Terms and Definitions: Keywords or terminology used in the policy are listed below to assist in fully understanding the policy. An effort has been made to assure you fully understand the policy, although if for any reason you are not clear on an issue please see the Designated Employer Representative (DER) for guidance.

Definitions

Alcohol The intoxicating agent in the beverage alcohol, ethyl alcohol, or other low molecular weight alcohols, including methyl and isopropyl alcohol.

Alcohol Use The drinking or swallowing of any beverage, liquid mixture, or preparation, including any medication, containing alcohol.

Commercial Driver's License (CDL) A license issued by a state or other jurisdiction, in accordance with the standards contained in 49 CFR part 383, authorizing an individual to operate a class of commercial motor vehicle (CMV). The individuals required to have a CDL under 49 CFR part 383 are subject to controlled substances and alcohol testing. Individuals who are required to possess CDLs by virtue of State or local law or by employer policy, but not by Federal regulation, are not subject to the provisions of 49 CFR parts 382 and 383.

Commercial Motor Vehicle (CMV) A motor vehicle or combination of motor vehicles used in commerce to transport passengers or property if the motor vehicle a) Has a gross combination weight rating (GCWR) of 11,794 kilograms or more (26,001 pounds or more) inclusive of a towed unit, with a gross vehicle weight rating (GVWR) of more than 4,536 kilograms (10,000 pounds); or b) Has a GVWR of 11,794 kilograms or more (26,001 pounds or more); or c) Is designed to transport 16 or more passengers, including the driver; or d) Is of any size and is used in the transportation of materials found to be hazardous for the purposes of the Hazardous Materials Transportation Act and is required to be placarded under the Hazardous Materials regulations (49 CFR part 172, subpart F).

Consortium/Third Party Administrator (C/TPA) A service agent that provides or coordinates one or more drug and/or alcohol testing services to D.O.T.-regulated employers. C/TPAs typically provide or coordinate the provision of a number of such services and perform administrative tasks concerning the operation of the employers' drug and alcohol testing programs. This term includes, but is not limited to, groups of employers that join together to administer, as a single entity, the D.O.T. drug and alcohol testing programs of its members (e.g., having a combined random testing pool). C/TPAs are not employers under the rules.

Controlled Substances For the purposes of these guidelines, the terms "drugs" and "controlled substances" are interchangeable and have the same meaning. The D.O.T. is testing only for the following five controlled substances: marijuana (THC), cocaine, opiates, phencyclidine (PCP), amphetamines (including methamphetamines), acetylmorphine (heroin), and MDMA (ecstasy).

Designated Employer Representative (DER) An individual identified by the employer as able to receive communications and test results from service agents and who is authorized to take immediate actions to

remove employees from safety-sensitive duties and to make required decisions in the testing and evaluation processes. The individual must be an employee of the company. Service agents cannot serve as DERs.

Driver Any person (volunteer or paid) who operates a CMV and is required to have a CDL. This includes, but is not limited to:

- Full-time, regularly employed drivers
- Leased drivers
- Independent owner-operator contractors (employed directly or leased)
- Casual, intermittent, or occasional drivers

Drug See Controlled Substances.

Employee See Driver.

Employer (or Motor Carrier) Any person engaged in a business affecting interstate commerce who owns or leases a commercial motor vehicle in connection with that business, or assigns employees to operate it, but such terms does not include the United States, any State, any political subdivision of a State, or an agency established under a compact between States approved by the Congress of the United States.

FMCSA Federal Motor Carrier Safety Administration

FRA Federal Railroad Administration

Gross Combination Weight Rating The total value specified by the manufacturer(s) of the vehicle as the loaded weight of two or more vehicles. In the absence of a value specified by the manufacturer, it will be determined by adding the gross vehicle weight rating of the power unit to the total weight of the towed unit and any load thereon.

Gross Vehicle Weight Rating (GVWR) The value specified by the manufacturer of the vehicle as the loaded weight of a single vehicle.

Designed to Transport The value specified by the manufacturer of the vehicle as the maximum number of persons that may sit in a single vehicle. A commercial motor vehicle that is altered by removing seats continues to be a commercial motor vehicle until the vehicle's seating capacity certification plate is replaced by a manufacturer.

Medical Review Officer (MRO) A licensed physician who is responsible for receiving and reviewing laboratory results generated by the Company's drug testing program and evaluating medical explanations for certain drug test results.

Service Agent Any person or entity, other than an employee of the employer, that provides services specified under the regulations to employers and/or employees in connection with D.O.T. drug and alcohol testing requirements.

Stand-Down The practice of temporarily removing an employee from the performance of safety-sensitive functions based only on a report from a laboratory to the MRO of a confirmed positive test, an adulterated test, or a substituted test, before the MRO has completed verification of the test results.

Complete definitions of terms used in parts 40 and 382 may be found in §40.3 and §382.107.

Administration of the program and who is included:

Designated Employer Representative: For Stat Trucking, Inc. the Designated Employer Representative (DER) is the company Safety Director. Currently that position is held by Jill Wilcox and she can be reached at 310.505.0649 or by e-mail at jwcalresco@verizon.net.

All drivers employed by or leased to Stat Trucking, Inc. are subject to the D.O.T. alcohol and drug testing requirements. Drivers must submit to alcohol and controlled substance tests as required.

Drivers are required to be in compliance with this alcohol and controlled substances policy just before performing a safety-sensitive function, during performance of a safety-sensitive function, and immediately after the performance of a safety-sensitive function. All alcohol and controlled substances tests will be performed during these times. This is to include all on-duty time as defined in CFR 49 382. The drug and alcohol policy must be adhered to at all times.

Prohibited Conduct:

1. No driver shall report for duty or remain on duty to perform safety-sensitive functions while having a saliva or breath alcohol concentration of 0.04 or higher, or while under the influence of any controlled substance.
2. No driver shall remain on duty or operate a Commercial Motor Vehicle while the driver possesses alcohol or any controlled substance, unless the alcohol or controlled substance is manifested and transported as part of the shipment. This includes the possession of medicines containing alcohol, (prescription or over the counter), unless the packaging seal is unbroken. Possession of any controlled substance must be accompanied by a doctor's statement that it will not adversely affect the driver's ability to safely operate a commercial motor vehicle.
3. No driver shall perform a safety sensitive function while using alcohol or controlled substances.
4. No driver shall perform a safety-sensitive function within four hours after using alcohol.
5. No driver required to take a post-accident alcohol test shall use alcohol within 8 hours of the accident or until he/she undergoes a post-accident alcohol and drug test.
6. No driver shall refuse to submit to required alcohol or drug testing.

Types of Testing: 49 CFR Part 40 Requires motor carriers to perform testing. There are six (6) separate situations that a motor carrier may request a driver to participate in a test:

1. Pre-Employment Testing

The applicant must submit to pre-employment drug testing. The drug test will consist of a 7 panel screening for marijuana, cocaine, opiates, heroin, amphetamines, PCP, and MDMA. Applicants testing positive for drugs will be referred to a Substance Abuse Professional for evaluation. The applicant will no longer be considered eligible for hire, per company policy.

2. Post-Accident Testing

All drivers involved in an accident resulting in death will require testing. Accidents resulting in injury or injuries receiving treatment immediately away from the accident scene or resulting in disabling damage to any involved vehicles will subject the driver to testing if the driver received a citation arising from the accident. Alcohol testing must be performed within 2 hours of the accident but no later than 8 hours after the accident. Drug testing must be performed within 32 hours of the accident. Drivers testing positive will

be removed from safety-sensitive functions and referred as soon as possible to a Substance Abuse Professional for evaluation and may be subject to termination, per company policy.

3. Random Testing

The annual percentage rate for random drug testing will be 50% of all driving positions. The annual percentage rate for random alcohol testing will be 10% of all driving positions. The selection process will be truly random and will be spread reasonably throughout the year. Separate selections will be made for alcohol and drug testing, per company policy. Drivers will be notified and must proceed immediately with no undo delay to the clinic or collection site to submit a saliva, breath, or urine sample. Drivers testing positive will be referred to a Substance Abuse Professional for evaluation and may be subject to termination, per company policy.

4. Reasonable Suspicion Testing

Drivers will be subject to reasonable suspicion alcohol and drug testing based on specific, contemporaneous, articulable observations concerning the appearance, behavior, speech, or body odors of that driver. The test must be administered within 2 hours of the observed behavior, but no more than 8 hours after the observation. Transportation will be provided for reasonable suspicion testing. Drivers may not drive themselves to the clinic or collection site for reasonable suspicion testing. Drivers testing positive will be referred to a Substance Abuse Professional for evaluation and may be subject to termination, per company policy.

5. Return to Duty Testing

All drivers that are off duty for 30 days or more are subject to return-to-duty testing before performing a safety-sensitive-function. Alcohol tests must register less than 0.02 alcohol concentrations. Drug tests must be negative. Verified negative results must be on file before the driver is allowed to perform a safety-sensitive function. Drivers testing positive will be terminated, per company policy.

6. Follow-Up Testing

All drivers that failed an alcohol or drug test must complete the evaluation and treatment recommended by the Substance Abuse Professional. Upon successful completion of this treatment, drivers will be subject to a return-to-duty test and follow-up testing. These alcohol or drug tests will be unannounced. There will be at least six tests in the first 12 months and testing may continue for 5 years. The testing will be performed as directed by the Substance Abuse Professional.

Testing procedures:

All Alcohol and Controlled Substance Testing conforms to CFR 49 Parts 40 and 382. The collection sites used by Stat Trucking, Inc. are following standard procedures to:

1. Protect the driver and integrity of the testing process
2. Safeguard the validity of the test results
3. Ensure the results are attributed to the correct driver

The company further understands the issues of confidentiality and adheres to all requirements and necessary measures to assure privacy of all testing records and results are protected. The releasing of any information is only done so under the authority spelled out by the FMCSA.

Laboratory Testing Methodology:

Drug tests will be conducted to screen the presence of the following drugs and their metabolites: marijuana, cocaine, opiates, heroin, amphetamines, PCPs, and MDMAs. All specimens identified as positive on the initial test shall be confirmed using chromatography/mass spectrometry (GC/MS) techniques. Specimens which test negative on either the initial test or the GC/MS confirmatory test shall be reported as negative. Equal to or higher test levels shall constitute a positive test subject to verification by the MRO. The following table establishes the current acceptable cutoff levels for testing purposes, and, if these established cutoff levels are changed, modified or revised by DOT or any other federal regulatory agency, the cutoff levels set forth below will automatically be changed to comply with the revised levels:

Drug	Initial Test Level	Confirmatory Test Level
Marijuana Metabolite	50 ng/ml	15 ng/ml
Cocaine Metabolite(s)	150 ng/ml	100 ng/ml
Opiate Metabolites (Morphine – Codeine)	2,000 ng/ml	2,000 ng/ml
6-Acetylmorphine (Heroin)	10 ng/ml	10 ng/ml
Amphetamines – Methamphetamine(s)	500 ng/ml	250 ng/ml
Phencyclidine (PCP)	25 ng/ml	25 ng/ml
MDMA (MDA – MDEA)	500 ng/ml	250 ng/ml

All testing procedures will be performed in accordance with DOT regulations.

Alcohol tests will be conducted by a certified BAT or STT using a calibrated EBT device or other such device or testing method approved in accordance with applicable DOT regulations. The BAT will first complete a Breath Alcohol Testing Form, which is to be signed by the tested driver. Prior to completing the test, the BAT will require the driver to provide photo identification. The BAT will then explain the alcohol testing procedure to the driver. Refusal by the driver to sign the form shall be regarded as a refusal to take the test. The BAT will next instruct the driver to blow forcefully into the mouthpiece of the testing device for at least six seconds or until the testing device indicates that an adequate amount of breath has been obtained. If the result of the screening test is a breath alcohol concentration of less than 0.02 percent, the BAT shall sign the testing form certification noting the negative result.

Consequences

Criminal penalties may be sought against a motor carrier (employer), its officers or agents, a driver, or other persons when it can be established that violations were deliberate or resulted from a willful disregard for the regulations. Criminal penalties may be sought against a driver only when a causative link can be established between a knowing and willful violation and an accident or the risk thereof.

For this reason, and recognizing the benefits of operating in an alcohol and drug-free environment, Stat Trucking, Inc. its employees, officers and business partners firmly adhere to established regulations concerning substance and alcohol abuse. As will be further addressed under Education and Training, the general public as a whole is better served when consequence of the use of these substance is clearly understood.

Consistent with its established policy and DOT regulations, Stat Trucking, Inc. strictly prohibits its drivers from being on duty and possessing, using, or being under the influence of alcohol or drugs. Drivers engaging in such conduct will be subject to discipline, up to and including termination of employment.

1. All drivers that have an alcohol concentration of 0.02 or more but less than 0.04 will be immediately removed from performing safety-sensitive functions. A confirmation test will be performed no sooner than 15 minutes later and no later than 30 minutes later. The driver may not eat, drink, put any object or substance in his/her mouth, and may not belch during the waiting period. If the confirmation test shows an alcohol concentration of 0.02 or more but less than 0.04 they will be given at least 24 hours off duty.

2. All drivers that have an alcohol concentration of 0.04 or more on a confirmation test will be immediately removed from performing safety-sensitive functions. They will be referred to a Substance Abuse Professional for evaluation. The recommended treatment must be successfully completed before returning to a safety-sensitive function at any company. These drivers will be subject to return-to-duty testing as well as follow-up testing at any company.

3. All drivers with a positive drug test will be contacted by the MRO to discuss the test result. The driver may request within 72 hours that the original sample be sent for re-analysis at a different laboratory. If the re-analysis fails to confirm the drug(s), the test will be canceled and will not be considered a positive result. If the driver refuses the opportunity to discuss the test, the MRO will verify the positive result without a re-analysis. All re-analysis tests will be performed at the driver's expense, per company policy. All drivers with a verified positive drug test result will be removed from performing safety-sensitive functions and will be referred to a Substance Abuse Professional for evaluation. This recommended treatment must be successfully completed before returning to a safety-sensitive function at any company. These drivers will be subject to return-to-duty testing as well as follow-up testing at any company.

4. Refusal to Submit: All refusals to submit to testing will be deemed as a positive test result. A driver will be considered as refusing to submit if:

- The driver fails to provide enough saliva or breath for testing without a valid medical explanation
- The driver fails to provide enough urine or breath for testing without a valid medical explanation
- The driver engages in conduct that clearly obstructs the testing process
- The driver fails to appear at the collection site within a reasonable amount of time after requested by the company
- The driver fails to remain at the testing site until the test is complete
- The driver fails to permit observation if requested
- The driver declines or refuses to take a second test if requested
- The drivers fail to take a physical exam as directed by the doctor to examine a shy bladder or inadequate breath
- The driver fails to attempt to provide saliva or breath for an alcohol test
- The driver fails to sign the forms
- The driver fails to cooperate with any part of the testing process
- The doctor confirms that the specimen was adulterated or substituted
- The driver refuses to take the test

Stat Trucking, Inc. will not assume financial responsibility for referral, evaluation, recommended treatment, rehabilitation, return-to-duty testing, follow-up testing, or re-analysis, per company policy.

Education and Training

The primary objective of Stat Trucking, Inc. controlled substances use and alcohol misuse program is deterrence rather than detection. Public safety is best served if drivers are aware of the effects of alcohol and controlled substances on health, safety, and the work environment. It is for that reason Stat Trucking, Inc. provides this information at the beginning of a drivers' relationship with the

organization and provides additional material periodically.

Following in this section will be educational material regarding effects of alcohol and controlled substance on health, safety, and the work environment. Specific information with regards to the detection period of various substances, description, physical and mental effects and how driving performance is noted under each category of substance listed. Should you need additional information please make request known to your DER.

Detection Periods

Detection periods vary; rates of metabolism and excretion are different for each drug and use and vary by individual. Detection periods should be viewed as estimates. Cases can always be found to contradict these approximations.

Drug	Detection Period
Amphetamines	1 to 2 days
Methamphetamine	1 to 2 days
Cocaine - Benzoylcegonine	2 to 3 days
Cannabinoids (Marijuana) - Casual Use	Up to 7 days
Cannabinoids (Marijuana) - chronic use	Up to 30 days
Alcohol (All Types)	12 to 24 hours
Opiates - codeine	Usually Up to 2 days
Hydromorphone (Dilaidid)	Usually Up to 2 days
Morphine (Heroin)	Usually Up to 2 days
Phencyclidine (PCP) - Casual Use	Up to 8 days
Phencyclidine (PCP) - Chronic Use	Up to 30 days

Alcohol

Alcohol is a drug that has been consumed throughout the world for centuries. It is considered a recreational beverage when consumed in moderation for enjoyment and relaxation during social gatherings. However, when consumed primarily for its physical and mood-altering effects, it is a substance of abuse. As a depressant, it slows down physical responses and progressively impairs mental functions.

Description

Generic/Chemical Names: Beer (about 4.5 percent alcohol), wine (about 14 to 20 percent alcohol), distilled spirits or liquor (about 50 percent alcohol).

Alternative Sources: After-shave lotion, cough medicine, antiseptic mouthwash, vanilla extract, disinfectant, room deodorizer fluid, cologne, breath sprays, shaving creams, rubbing alcohol.

Common Street Names: Booze, juice, brew, grain, shine, hooch

Distinguishing Characteristics: Pure ethanol (sold in some States as “grain alcohol”) is a colorless liquid with a distinctive odor and taste. It has a cooling effect when rubbed on the skin. Most commonly, however, alcohol is consumed as the component of another beverage, and grain alcohol itself is normally diluted with juices or other soft drinks by the consumer. Depending upon the concentration of alcohol in the beverage, the aroma of alcohol may serve as an indicator of the presence of alcohol in a beverage. Since the sale and distribution of all products containing more than a trace amount of ethanol are regulated by Federal and State governments, the best guide to whether a specific beverage contains alcohol will be label information if the original container is available.

Paraphernalia: Liquor, wine, after-shave or cough medicine bottles; drinking glasses; cans of alcohol-containing beverages; can and bottle openers. Paper bags are sometimes used to conceal the container while the drink is being consumed.

Method of Intake: Alcohol is consumed by mouth. It is infrequently consumed as pure (grain) alcohol. It is, however, frequently consumed in the form in which it is sold (e.g., cans of beer, “straight” liquor, glasses of wine). Alcohol is often consumed in combination with other beverages (“mixers”), either to make it more palatable or to disguise from others that alcohol is being consumed.

Duration of Single Dose Effect: Alcohol is fully absorbed into the bloodstream within 30 minutes to 2 hours, depending upon the beverage consumed and associated food intake. The body can metabolize about one quarter of an ounce (0.25 oz.) (roughly half the amount in a can of beer) of alcohol per hour. The effects of alcohol on behavior (including driving behavior) vary with the individual and with the concentration of alcohol in the individual’s blood. The level of alcohol achieved in the blood depends in large part (although not exclusively) upon the amount of alcohol consumed and the time period over which it was consumed. One rule of thumb says that in a 150-pound person, each drink adds 0.02% to blood alcohol concentration and each hour that passes removes 0.01 percent from it.

Generally speaking, alcohol is absorbed into the blood relatively quickly and metabolized more slowly. Therefore, the potential exists for alcohol concentrations to build steadily throughout a drinking session. The table below shows some general effects of varying levels of BAC:

Behavioral Effects of Alcohol:

BAC	Effect
0.02 -0.09%	Loss of muscular coordination, impaired senses, changes in mood or personality
0.10-0.19%	Marked mental impairment, further loss of coordination, prolonged reaction time
0.20-0.29%	Nausea, Vomiting double vision
0.30-0.39%	Hypothermia, blackouts, anesthesia
0.40-7.0%	Coma, respiratory failure, death

Detection Time: The detection time for alcohol depends upon the maximum level of BAC achieved and varies by individual. Since under FMCSA regulations alcohol concentrations as low as 0.02 percent (under D.O.T. testing procedures, breath alcohol concentration is used as a proxy for BAC) require employer action and current technology can reliably detect this level, a driver who had achieved a moderate level of intoxication (i.e., 0.08 percent BAC) would be detectable approximately 8 hours after achieving that level. NOTE: this is detectability after achieving this level and not after commencing or stopping drinking.

Dependency Level: The chronic use of alcohol can produce dependence in some individuals manifested by craving, withdrawal, and tolerance. Despite the fact that many individuals consume alcoholic beverages (more than 90 percent of Americans at some point during their lives), relatively few of them (only about 10 percent of drinkers) develop psychological and physical dependency on it.

Signs and Symptoms of Use

Evidence of Presence of Alcohol: Bottles, cans, and other containers which alcohol-containing beverages may have been purchased and/or consumed in; bottle caps from alcohol containers; bottle or can openers; drivers drinking from paper bags; odor of alcohol on containers or on driver's breath.

Physical Symptoms: Reduction of reflexes, slurred speech, loss of coordination, unsteady gait

Behavioral Symptoms: Increased talkativeness reduced emotional control, distorted judgment, impaired driving ability, gross effects on thinking and memory

Effects of Alcohol on the Individual

The liver is the primary site of alcohol metabolism and can be severely affected by heavy alcohol use. The three primary dangers are fatty liver, alcoholic hepatitis, and cirrhosis.

Heavy alcohol use can also severely affect the gastrointestinal tract, contributing to inflammation of the esophagus, exacerbating peptic ulcers, and causing acute and chronic pancreatitis. It interferes with the absorption of nutrients from food and contributes to malnutrition.

Heavy alcohol use affects the heart and vascular system, contributing to heart attacks, hypertension and stroke.

Either because of direct action or indirectly through the malnutrition, liver disease and other effects it causes, alcohol depresses immune system functioning and increases the likelihood of infection.

There is considerable evidence that alcohol abuse is associated with the incidence of cancer, particularly cancers of the liver, esophagus, nasopharynx and larynx.

Heavy alcohol consumption causes brain damage, manifested through dementia, blackouts, seizures, hallucinations and peripheral neuropathy.

Other Health Effects - In addition to having direct health effects through physiological changes in the drinker's body, alcohol contributes significantly to health problems indirectly:

- One half of all traffic accident fatalities are alcohol-related.
- The risk of a traffic fatality per mile driven is at least eight times higher for a drunk driver than for a sober one.
- Falls are the most common cause of nonfatal injuries in the U.S. and the second-most common cause of fatal accidents. Estimates of the involvement of alcohol in these falls range from 20 to 80 percent. A BAC between 0.05 and 0.10 percent increases the likelihood of a fall by three times. Between 0.10 and 0.15 percent, it increases by a factor of 10, and above 0.16 percent it increases by a factor of 60.

- Research indicates over 60 percent of those dying in nonvehicular fires (fourth leading cause of accidental death in the United States) have BACs over 0.10 percent.
- Approximately 38 percent of those drowning (third leading cause of accidental death in the United States) have been exposed to alcohol at the time of their deaths.
- Between 20 and 36 percent of suicide victims have a history of alcohol abuse or were drinking shortly before their suicides.
- Alcohol also plays a significant role in crime and family violence, including spousal and child abuse.

Effects on Driver Performance

The statistics reported above make it clear that alcohol can have a devastating effect on driver performance. By affecting vision, reflexes, coordination, emotions, aggressiveness, and judgment, alcohol deprives the professional driver of most of the tools he or she relies upon to perform safely.

Hangovers also present a risk to driving behavior, as would other illnesses. The sick feeling associated with hangovers, including headaches, nausea and other symptoms, can distract a driver's attention and lead to accidents even though alcohol may no longer be detectable in the body.

Overdose Effects - Unconsciousness, coma, death

Withdrawal Syndrome - Repeated use of alcohol results in tolerance, with increasing consumption necessary to attain its characteristic effects. Alcohol at a given blood level produces less impairment in heavy drinkers than it does in lighter drinkers. Alcohol is toxic by itself and, coupled with the malnutrition common in alcoholics, can lead to kidney disease, deterioration of mental faculties, and psychotic episodes (the "DTs") if the alcohol is withdrawn. The DTs are characterized by hallucinations and extreme fear, and their presence is a clear indication of alcohol dependence. Withdrawal and the associated DTs can be fatal.

Amphetamine

Amphetamines are central nervous system stimulants that speed up the mind and body. The physical sense of energy at lower doses and the mental exhilaration at higher doses are the reasons for their abuse. Although widely prescribed at one time for weight reduction and mood elevation, the legal use of amphetamines is now limited to a very narrow range of medical conditions. Most amphetamines that are abused are illegally manufactured in foreign countries and smuggled into the United States or clandestinely manufactured in crude laboratories.

Description

Generic/Chemical Names: Include amphetamine and methamphetamine. Trade names include: Desoxyn, Dexapex, Fastin, Vasotilin, Dexedrine, Delcobese, Fetamine, Obetrol.

Common Street Names: Uppers, speed, bennies, crystal, black beauties, Christmas trees, white crosses, mollies, bam, crank, meth, ice, LA ice.

Distinguishing Characteristics: In their pure form, amphetamines are yellowish crystals. They are manufactured in a variety of forms, including pill, capsule, tablet, powder, and liquid. Amphetamine ("speed") is sold in counterfeit capsules or as white, flat, double-scored "mini bennies." Methamphetamine is often sold as a creamy white, granular powder or in lumps wrapped in aluminum foil or sealable plastic bags.

Paraphernalia: Needles, syringes and rubber tubing for tourniquets, used for the injection method.

Method of Intake: The most common forms of amphetamines are pills, tablets, or capsules, which are ingested. The less frequent forms, liquid and powder, are injected or snorted.

Duration of Single Dose Effect: 2 to 4 hours

Detection Time: 1 to 2 days after use

Dependency Level: Psychological dependence on amphetamines is known to be high. Physical dependence is possible.

Signs and Symptoms of Use

Evidence of Presence of Amphetamines: Most frequently pills, capsules, or tablets; envelopes, bags, vials for storing the drug; less frequently syringes, needles, tourniquets.

Physical Symptoms: Dilated pupils, sweating, increased blood pressure, palpitations, rapid heartbeat, dizziness, decreased appetite, dry mouth, headaches, blurred vision, insomnia, high fever (depending on the level of the dose)

Behavioral Symptoms: Confusion, panic, talkativeness, hallucinations, restlessness, anxiety, moodiness, false sense of confidence and power; “amphetamine psychosis” which might result from extended use (see health effects)

Effects of Amphetamine Use on the Individual

Physical Health Effects: Regular use produces strong psychological dependence and increasing tolerance to drug. High doses may cause toxic psychosis resembling schizophrenia.

Intoxication may induce a heart attack or stroke due to spiking of blood pressure.

Chronic use may cause heart and brain damage due to severe constriction of capillary blood vessels.

The euphoric stimulation increases impulsive and risk-taking behaviors, including bizarre and violent acts.

Long-term heavy use can lead to malnutrition, skin disorders, ulcers, and various diseases that come from vitamin deficiencies.

Lack of sleep, weight loss, and depression also result from regular use.

Users who inject drugs intravenously can get serious and life-threatening infections (e.g., lung or heart disease, kidney damage) from non-sterile equipment or contaminated self-prepared solutions.

Effects on Mental Performance:

- Anxiety, restlessness
- Moodiness
- False sense of power

Large doses over long periods can result in:

- Hallucinations
- Delusions
- Paranoia
- Brain damage

Effects on Driver Performance

Amphetamines cause a false sense of alertness and potential hallucinations, which can result in risky driving behavior and increased accidents. Drivers who fail to get sufficient rest may use the drug to increase alertness. However, although low doses of amphetamines will cause a short-term improvement in mental and physical functioning, greater use impairs functioning. The hangover effect of amphetamines is characterized by physical fatigue and depression, which make operation of equipment or vehicles dangerous.

Overdose Effects

- Agitation
- Convulsions
- Increase in body temperature
- Death
- Hallucinations

Withdrawal Syndrome

- Apathy
- Depression
- Long-term periods of sleep
- Disorientation
- Irritability

Workplace Issues

Because amphetamines alleviate the sensation of fatigue, they may be abused to increase alertness due to unusual overtime demands or failure to get rest.

Low-dose amphetamine use will cause a short-term improvement in mental and physical functioning. With greater use or increasing fatigue, the effect reverses and has an impairing effect. Hangover effect is characterized by physical fatigue and depression, which may make operation of equipment or vehicles dangerous.

Cocaine

Cocaine is used medically as a local anesthetic. It is abused as a powerful physical and mental stimulant. The entire central nervous system is energized, muscles are more tense, the heart beats faster and stronger and the body burns more energy. The brain experiences an exhilaration caused by a large release of neurohormones associated with mood elevation.

Description

Generic/Chemical Names: Cocaine hydrochloride or cocaine base.

Common Street Names: Coke, crack, snow, blow, flake, “C”, toot, rock, base, nose candy, snort, white horse.

Distinguishing Characteristics: Cocaine is an alkaloid (organic base) derived from the coca plant. In its more common form, cocaine hydrochloride or “snorting coke” is a white to creamy granular or lumpy powder chopped fine before use. Cocaine base, rock or crack is a crystalline rock about the size of a small pebble.

Paraphernalia: Cocaine hydrochloride - single-edged razor blade, a small mirror or piece of smooth metal; a half straw or metal tube, and a small screw-cap vial or folded paper packet containing the cocaine (used for snorting), needles, tourniquets (used for injecting). Cocaine base - “crack pipe” (small glass smoking device for vaporizing the crack crystals); a lighter, alcohol lamp or small butane torch for heating the substance

Method of Intake: Cocaine hydrochloride is snorted into the nose, rubbed on the gums, or injected into the veins. Cocaine base is heated in a glass pipe and the vapor is inhaled.

Duration of Single Dose Effect: 1 to 2 hours.

Detection Time: Up to 2 to 3 days after last use.

Dependency Level: Research indicates possible physical dependence. Although there is insufficient evidence for humans, animal studies indicate “reverse tolerance,” in which certain behavioral effects become stronger with repeated use of cocaine. Psychological dependence on cocaine is known to be high.

Signs and Symptoms of Use

Evidence of Presence of Cocaine: Small folded envelopes, plastic bags, or vials used to store cocaine; razor blades; cut-off drinking straws or rolled bills for snorting; small spoons; heating apparatus.

Physical Symptoms: Dilated pupils, runny or irritated nose, profuse sweating, dry mouth, tremors, needle tracks, loss of appetite, hyper-excitability, restlessness, high blood pressure, heart palpitations, insomnia, talkativeness, formication (sensation of bugs crawling on skin).

Behavioral Symptoms: Increased physical activity, depression, isolation and secretive behavior, unusual defensiveness, frequent absences wide mood swings, difficulty in concentration, paranoia, hallucinations, confusion, false sense of power and control.

Effects of Cocaine Use on the Individual

Physical Health Effects

Research suggests that regular cocaine use may upset the chemical balance of the brain. As a result, it may speed up the aging process by causing irreparable damage to critical nerve cells. The onset of nervous system illnesses such as Parkinson’s disease could also occur.

Cocaine use causes the heart to beat faster and harder and rapidly increases blood pressure. In addition, cocaine causes spasms of blood vessels in the brain and heart. Both effects lead to ruptured vessels causing strokes or heart attacks.

Strong psychological dependency can occur with one “hit” of crack. Usually, mental dependency occurs within days of using crack or within several months of snorting coke. Cocaine causes the strongest mental dependency of any known drug.

Treatment success rates are lower than those of other chemical dependencies.

Cocaine is extremely dangerous when taken with depressant drugs. Death due to overdose is rapid. The fatal effects of an overdose are not usually reversible by medical intervention.

Effects on Mental Performance

- Paranoia and hallucinations
- Hyper-excitability and overreaction to stimulus
- Difficulty in concentration
- Wide mood swings
- Withdrawal leads to depression and disorientation

Effects on Driver Performance

Cocaine use results in an artificial sense of power and control, which leads to a sense of invincibility. Lapses in attention and the ignoring of warning signals brought on by cocaine use greatly increase the potential for accidents. Paranoia, hallucinations and extreme mood swings make for erratic and unpredictable reactions while driving.

The high cost of cocaine frequently leads to workplace theft and/or dealing. Forgetfulness, absenteeism, tardiness, and missed assignments can translate into lost business.

Overdose Effects

- Agitation
- Convulsions
- Increase in body temperature
- Death
- Hallucinations

Withdrawal Syndrome

- Apathy
- Depression
- Long periods of sleep
- Disorientation
- Irritability

Cannabinoids (Marijuana)

Marijuana is one of the most misunderstood and underestimated drugs of abuse. People use marijuana for the mildly tranquilizing, mood and perception-altering effects it produces.

Description

Generic/Chemical Name: Dronabinol, marinol, nabilone

Common Street Names: Pot, dope, grass, hemp, weed, hooch, herb, hash, joint, Acapulco gold, reefer, sinsemilla, Thai sticks

Distinguishing Characteristics: Like tobacco, marijuana consists of dried, chopped leaves that are green to light tan in color. The seeds are oval with one slightly pointed end. Marijuana has a distinctly pungent aroma resembling a combination of sweet alfalfa and incense.

Less prevalent, hashish is a compressed, sometimes tar-like substance ranging in color from pale yellow to black. It is usually sold in small chunks wrapped in aluminum foil.

Paraphernalia: Cigarette papers, roach clip holders, and small pipes made of bone, brass or glass are commonly found. Smoking “bongs” (large-bore pipes for inhaling large volumes of smoke) can easily be made from soft drink cans and toilet paper rolls.

Method of Intake: Marijuana is usually inhaled in cigarette or pipe smoke. Occasionally, it is added to baking ingredients (e.g., brownies) and ingested.

Tetrahydrocannabinol (THC), the active chemical detected in urinalysis, is released by exposure to heat.

Duration of Single Dose Effect: The most obvious effects are felt for 4 to 6 hours. Preliminary studies suggest that performance impairment lasts longer. The active chemical, THC, is stored in body fat and slowly metabolized over time.

Detection Time: Traces of marijuana will remain in the urine of an occasional user for up to 1 week, and, in the case of a chronic user, for 3 to 4 weeks.

Dependency Level: Evidence indicates moderate psychological dependence.

Signs and Symptoms of Use

Evidence of Presence of Marijuana: Plastic bags (commonly used to sell marijuana); smoking papers; roach clip holders; small pipes of bone, brass, or glass; smoking bongs; distinctive odor.

Physical Symptoms: Reddened eyes (often masked by eye drops); stained fingertips from holding “joints,” particularly for nonsmokers; chronic fatigue; irritating cough; chronic sore throat; accelerated heartbeat; slowed speech; impaired motor coordination; altered perception; increased appetite.

Behavioral Symptoms: Impaired memory, time-space distortions, feeling of euphoria, panic reactions, paranoia, “I don’t care” attitude, false sense of power.

Effects of Marijuana Use on the Individual

General Health Effects

When marijuana is smoked, it is irritating to the lungs. Chronic smoking causes emphysema-like conditions. One joint causes the heart to race and be overworked. People with undiagnosed heart conditions are at risk.

Marijuana is commonly contaminated with the fungus *Aspergillus*, which can cause serious respiratory tract and sinus infections.

Marijuana smoking lowers the body's immune system response, making users more susceptible to infection. The U.S. Government is actively researching a possible connection between marijuana smoking and the activation of AIDS in positive human immunodeficiency virus (HIV) carriers.

Pregnancy Problems and Birth Defects: The active chemical, THC, and 60 other related chemicals in marijuana concentrate in the ovaries and testes.

Chronic smoking of marijuana in males causes a decrease in the male sex hormone, testosterone, and an increase in estrogen, the female sex hormone. The result is a decrease in sperm count, which can lead to temporary sterility. Occasionally, the onset of female sex characteristics, including breast development, occurs in heavy users.

Chronic smoking of marijuana in females causes a decrease in fertility and an increase in testosterone.

Pregnant women who are chronic marijuana smokers have a higher-than-normal incidence of stillborn births, early termination of pregnancy, and higher infant mortality rate during the first few days of life.

In test animals, THC causes birth defects, including malformations of the brain, spinal cord, forelimbs, liver and water on the brain and spine.

Offspring of test animals that were exposed to marijuana have fewer chromosomes than normal, causing gross birth defects or death of the fetus. Pediatricians and surgeons are concluding that the use of marijuana by either or both parents, especially during pregnancy, leads to specific birth defects of the infant's feet and hands.

One of the most common effects of prenatal cannabinoid exposure is underweight newborn babies.

Fetal exposure may decrease visual functioning and cause other ophthalmic problems.

Mental Function

Regular use can cause the following effects:

- Delayed decision-making
- Diminished concentration
- Impaired short-term memory, interfering with learning
- Impaired signal detection (ability to detect a brief flash of light), a risk for users who are operating machinery.
- Impaired tracking (the ability to follow a moving object with the eyes) and visual distance measurements
- Erratic cognitive function
- Distortions in time estimation

Long-term negative effects on mental function known as "acute brain syndrome," which is characterized by disorders in memory, cognitive function, sleep patterns, and physical condition.

Effects on Driver Performance

The mental impairments resulting from the use of marijuana produce reactions that can lead to unsafe and erratic driving behavior. Distortions in visual perceptions, impaired signal detection, and altered reality can make driving a vehicle very dangerous.

Overdose Effects

- Aggressive urges
- Immobility
- Anxiety
- Mental dependency
- Confusion
- Panic
- Fearfulness
- Paranoiac reaction
- Hallucinations
- Unpleasant distortions in body image
- Heavy sedation

Withdrawal Syndrome

- Sleep disturbance
- Irritability
- Hyperactivity
- Gastrointestinal distress
- Decreased appetite
- Salivation, sweating, and tremors

Workplace Issues

The active chemical, THC, is stored in body fat and slowly releases over time. Marijuana smoking has a long-term effect on performance.

A 500 to 800 percent increase in THC concentration in the past several years makes smoking three to five joints a week today equivalent to 15 to 40 joints a week in 1978.

Combining alcohol or other depressant drugs and marijuana can produce a multiplied effect, increasing the impairing effect of both the depressant and marijuana.

Opiates (Narcotics)

Opiates (also called narcotics) are drugs that alleviate pain, depress body functions and reactions, and, when taken in large doses, cause a strong euphoric feeling.

Description

Generic/Chemical Names: Natural and natural derivatives include opium, morphine, codeine, and heroin (semi synthetic). Synthetics include meperidine (Demerol), oxymorphone (Numorphan), and oxycodone (Percodan).

Common Street Names: Big M, micro, dots, horse, “H”, junk, smack, scag, Miss Emma, dope, China white.

Distinguishing Characteristics: Because of the variety of compounds and forms, opiates are more difficult to clearly describe in terms of form, color, odor, and other physical characteristics. Opium and its derivatives can range from dark brown chunks to white crystals or powders. Depending on the method of intake, they may be in powder, pill, or liquid form.

Paraphernalia: Needles, syringe caps, eyedroppers, bent spoons, bottle caps, and rubber tubing (used in the preparation for and injection of the drug).

Method of Intake: Opiates may be taken in pill form, smoked, or injected, depending upon the type of narcotic used.

Duration of Single Dose Effect: 3 to 6 hours.

Detection Time: Usually up to 2 days.

Dependency Level: Both physical and psychological dependence on opiates are known to be high. Dependence on codeine is moderate.

Signs and Symptoms of Use

Evidence of Presence of Drug: In addition to paraphernalia enumerated above, the following items may be present: foil, glassine envelopes, or paper “bindles” (packets for holding drugs); balloons or prophylactics used to hold heroin; bloody tissues used to wipe the injection site; a pile of burned matches used to heat the drug prior to injection.

Physical Symptoms: Constricted pupils, sweating, nausea and vomiting, diarrhea, needle marks or “tracks,” wearing long sleeves to cover “tracks”, loss of appetite, slurred speech, slowed reflexes, depressed breathing and heartbeat, and drowsiness and fatigue.

Behavioral Symptoms: Mood swings, impaired coordination, depression and apathy, stupor; euphoria.

Effects of Narcotics Use on the Individual

IV needle users have a high risk for contracting hepatitis and AIDS due to the sharing of needles.

Narcotics increase pain tolerance. As a result, people could more severely injure themselves or fail to seek medical attention after an accident due to the lack of pain sensitivity.

Narcotics’ effects are multiplied when used in combination with other depressant drugs and alcohol, causing increased risk for an overdose.

Effects on Mental Performance

- Depression/apathy
- Wide mood swings
- Slowed movement and reflexes

In addition, the high physical and psychological dependence level of opiates compounds the impaired functioning.

Effects on Driver Performance

The apathy caused by opiates can translate into an “I don’t really care” attitude toward performance. The physical effects as well as the depression, fatigue, and slowed reflexes impede the reaction time of the driver, raising the potential for accidents. Although opiates have a legitimate medical use in alleviating pain, workplace use may cause impairment of physical and mental functions.

Social Issues

There are more than 500,000 heroin addicts in the United States, most of whom are IV needle users.

An even greater number of medicinal narcotic-dependent persons obtain their narcotics through prescriptions.

Because of tolerance, there is an ever-increasing need for more narcotic to produce the same effect.

Strong mental and physical dependency occurs.

The combination of tolerance and dependency creates an increasing financial burden for the user. Costs for heroin can reach hundreds of dollars a day.

Workplace Issues

Unwanted side effects such as nausea, vomiting, dizziness, mental clouding, and drowsiness place the legitimate user and abuser at higher risk for an accident.

Narcotics have a legitimate medical use in alleviating pain. Workplace use may cause impairment of physical and mental functions.

Phencyclidine (PCP)

Phencyclidine (PCP) was originally developed as an anesthetic, but the adverse side effects prevented its use except as a large animal tranquilizer. Phencyclidine acts as both a depressant and a hallucinogen, and sometimes as a stimulant. It is abused primarily for its variety of mood-altering effects. Low doses produce sedation and euphoric mood changes. The mood can change rapidly from sedation to excitation and agitation. Larger doses may produce a coma like condition with muscle rigidity and a blank stare with the eyelids half-closed. Sudden noises or physical shocks may cause a “freak-out,” in which the person has abnormal strength, extremely violent behavior, and an inability to speak or comprehend communication.

Description

Generic/Chemical Names: Phencyclidine.

Common Street Names: Angel dust, dust, peace pills, hog, killer weed, mint, monkey dust, super-grass, Tran Q, weed

Distinguishing Characteristics: PCP is commonly sold as a creamy, granular powder. It is either brown or white and often packaged in one-inch-square aluminum foil or folded paper packets. Occasionally, it is sold in capsule, tablet, or liquid form. It is sometimes combined with procaine, a local anesthetic, and sold as imitation cocaine.

Paraphernalia: Foil or paper packets; stamps (off which PCP is licked); needles, syringes, and tourniquets (for injection); leafy herbs (for smoking).

Method of Intake: In pill, capsule, or tablet form, PCP may be ingested. It is commonly injected as “angel dust.” It may be smoked or snorted when applied to leafy materials or combined with marijuana or tobacco.

Duration of Single Dose Effect: Days.

Detection Time: Up to 8 days.

Dependency Level: Psychological dependence on PCP is known to be high. Physical dependence is unknown.

Signs and Symptoms of Use

Evidence of Presence of PCP: Packets, stamps, injection paraphernalia, herbs

Physical Symptoms: Dilated or floating pupils, blurred vision, nystagmus (jerky eye movement), drooling, muscle rigidity, profuse sweating, decreased sensitivity to pain, dizziness, drowsiness, impaired physical coordination (e.g., drunken-like walk, staggering), severe disorientation, rapid heartbeat.

Behavioral Symptoms: Anxiety, panic/fear/terror, aggressive/violent behavior, distorted perception, severe confusion and agitation, disorganization, mood swings, poor perception of time and distance, poor judgment, auditory hallucinations.

Health Effects: The potential for accidents and overdose emergencies is high due to the extreme mental effects combined with the anesthetic effect on the body.

PCP is potentiated by other depressant drugs, including alcohol, increasing the likelihood of an overdose reaction.

Misdiagnosing the hallucinations as LSD-induced, and then treating with Thorazine, can cause a fatal reaction.

Use can cause irreversible memory loss, personality changes and thought disorders.

There are four phases to PCP abuse. The first phase is acute toxicity. It can last up to three days and can include combativeness, catatonia, convulsions and coma. Distortions of size, shape, and distance perception are common. The second phase, which does not always follow the first, is a toxic psychosis. Users may experience visual and auditory delusions, paranoia, and agitation. The third phase is a drug-induced schizophrenia that may last a month or longer. The fourth phase is PCP-induced depression. Suicidal tendencies and mental dysfunction can last for months.

Effects on Mental Performance

- Irreversible memory loss
- Personality changes

- Thought disorders
- Hallucinations

Effects on Driver Performance

The distortions in perception and potential visual and auditory delusions make driver performance unpredictable and dangerous. PCP use can cause drowsiness, convulsions, paranoia, agitation, or coma, all obviously dangerous to driving.

Overdose Effects

- Longer, more intense “trip” episodes
- Psychosis
- Coma
- Possible death

Withdrawal Syndrome - None reported

Workplace Issues

PCP abuse is less common today than in the recent past. It is not generally used in a workplace setting because of the severe disorientation that occurs.