

# School Bus Driver Drug & Alcohol Testing Awareness Training

*Created by:*

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*For Exclusive Use By:*

Michigan Educational Transportation Services, Inc.

*"The U.S. Department of Transportation's (DOT) substance abuse testing is crucial for the safety of employees, co-workers and the traveling public. The world's largest drug and alcohol testing program, these regulations cover 12.1 million people.*

*Remember that while our rules' primary purpose is deterrence, they also create prevention and treatment opportunities for workers struggling with drugs and alcohol. Anyone who violates DOT rules is required to undergo evaluation and treatment, and that person is not allowed to return to duty until treatment is successful and a follow-up testing plan is in place."*

**Norman Y. Mineta**  
**Secretary of Transportation**  
U.S. Department of Transportation  
May 2005

This training provides a general overview of the DOT regulations on drug and alcohol use. It is designed to help you familiarize yourself on the reasons for the testing program, the requirements mandated to the employer, and the steps required for you to maintain your own personal compliance to the regulations.

In addition to this training brochure, you will receive a copy of Michigan Educational Transportation Services, Inc. ("M.E.T.S.") Controlled Substance and Alcohol Policy. The policy contains the specific prohibitions and consequences that you are required to comply with. The policy also contains the name of the person (DER) who can answer questions you may have about the drug and alcohol regulations.

### **Terms that you should know**

ASD	Alcohol Screening Device
BAT	Breath Alcohol Technician
CDL	Commercial Driver's License

CMV	Commercial Motor Vehicle
DER	Designated Employer Representative
DHHS	Department of Health and Human Services
DOT	Department of Transportation
EBT	Evidential Breath Testing Device
MRO	Medical Review Officer
NHTSA	National Highway Traffic Safety Administration
SAP	Substance Abuse Professional

- “Commercial Motor Vehicle” (§382.107) a motor vehicle or combination of motor vehicles used in commerce to transport passengers or property if the motor vehicle – has a gross combination weight rating of 26,001 or more pounds inclusive of a towed unit with a gross vehicle weight rating of more than 10,000 pounds or is designed to transport 16 or more passengers, including the driver.
- “Controlled substances” In the regulation, the terms “drugs” and “controlled Substances” are interchangeable and have the same meaning. DOT agency drug testing programs require that employers test for marijuana, cocaine, opiates, amphetamines and phencyclidine (§ 40.85).
- “Designated Employer Representative” (DER) (§382.107) is an individual identified by the employer as able to receive communications and test results from service agents and who is authorized to take immediate action(s) 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 M.E.T.S. Service agents cannot serve as DERs.
- “Driver” means any person who operates or maintains a commercial motor vehicle. This includes, but is not limited to: Full time, regularly employed drivers; casual, substitute, intermittent or occasional drivers; leased drivers and independent owner-operator contractors.
- “Medical Review Officer” (MRO). A person who is a licensed physician and who is responsible for receiving and reviewing laboratory results generated by an employer’s drug testing program and evaluating medical explanations for certain drug test results.
- “Performing” (a safety-sensitive function) means a driver is considered to be performing a safety-sensitive function during any period in which he or she is actually performing, ready to perform, or immediately available to perform any safety-sensitive function.
- “Reasonable suspicion” is the determination, by a Supervisor trained in accordance with 382.603, that the driver has violated the prohibitions concerning alcohol and/or controlled substances. The determination must be based on Specific, contemporaneous, articulable observations concerning the appearance, behavior, speech, or body odors of the driver.
- “Substance Abuse Professional” (SAP) is a person who evaluates employees who have violated a DOT drug and alcohol regulation and makes recommendations concerning education, treatment, follow-up testing, and aftercare. M.E.T.S. will provide a listing of SAPs to each employee who violates a DOT drug and alcohol regulation.
- “Third Party Administrator” (TPA) – M.E.T.S.. will use the following as primary service agents to fulfill the needs of all Controlled Substances and Alcohol testing. Other laboratories, collection sites, or SAP services may be utilized in the event of special circumstances or needs, as they are identified.

5) OMS Compliance Services, Inc  
562 South M-75  
PO Box 699  
Boyne City, MI 49712  
231-582-5898

6) Medtox Laboratories, Inc  
402 W County Rd D  
St. Paul, MN 55112  
800-832-3244

7) Dr John Cametas  
Pembroke Occupational Health  
23076 N Parham Road  
Richmond, VA 23229  
800-733-1676

8) Catholic Human Services  
Miscellaneous locations  
800-779-0449

### **Who is covered by the Drug and Alcohol Regulations?**

All drivers who operate commercial motor vehicles that require a commercial driver's license under 49 CFR Part 383 are subject to the FMCSA's drug and alcohol regulation 49 CFR Part 382.

### **What is a Safety Sensitive Function?**

“Safety-sensitive function” means all time from the time a driver begins to work or is required to be in readiness to work until the time he/she is relieved from work and all responsibility for performing work. Safety-sensitive functions include:

- All time at an employer terminal, facility, or other property, or on any public property, waiting to be dispatched, unless the driver has been relieved from duty by the employer;
- All time inspecting equipment as required by §392.7 and §392.8 or otherwise inspecting, servicing, or conditioning any commercial motor vehicle at any time;
- All time spent at the driving controls of a commercial motor vehicle in operation;
- All time, other than driving time, in or upon any commercial motor vehicle;
- All time loading or unloading a vehicle, supervising, or assisting in the loading or unloading, attending a vehicle being loaded or unloaded, remaining in readiness to operate the vehicle, or in giving or receiving receipts for shipments loaded or unloaded; and
- All time repairing, obtaining assistance, or remaining in attendance upon a disabled vehicle.

### **What are the Drug and Alcohol Prohibitions?**

- Use, possession or being under the influence of a prohibited controlled substance while on duty, or on Company premises, property or worksite.
- Prescription and Non-Prescription medicine use that impairs an employee's ability to perform the duties of his or her position.
- Consuming an intoxicating beverage, regardless of its alcohol content, within four (4) hours of reporting for work or operating; and for eight (8) hours following an incident or until a post-incident alcohol test is performed.
- Possessing, consuming or being under the influence of an intoxicating beverage, regardless of its alcohol content while on duty, or on Company premises, property or worksite.
- Refusing to submit to an alcohol or controlled substances test as required by this policy.

***NOTE: M.E.T.S. has implemented a “Zero Tolerance” Policy. This policy means that if a driver is found to have an alcohol concentration of more than 0.00 the driver will be immediately removed from service.***

***NOTE: M.E.T.S. requires that the driver inform them, in writing, the use of any prescribed controlled substance. This must include a written statement from the prescribing Physician that the use of the prescribed substance will not inhibit the driver's ability to perform their job.***

*While a minority of states allows medical use of marijuana, federal laws and policy do not recognize any legitimate medical use of marijuana. Even if marijuana is legally prescribed in a state, DOT regulations treat its use as the same as the use of any other illicit drug.*

**When will I be tested?**

Safety-sensitive employees are subject to drug or alcohol testing in the following situations:

- Pre-employment.
- Reasonable Suspicion/Cause.
- Random.
- Post-Accident.
- Return-to-duty.
- Follow-up.

**Pre-Employment**

As a new hire, you are required to submit to a drug test. Employers may, but are not required to, conduct alcohol testing. Only after your employer receives a negative drug test result may you begin performing safety-sensitive functions. This also applies if you are a current employee transferring from a non-safety-sensitive function into a safety-sensitive position (even if it is the same employer).

An exception is allowed under FMCSA guidelines if certain specific requirements are met. The main criteria being that you have been an active member of a compliant random drug and alcohol-testing program within the 30 days immediately preceding your hiring.

**Reasonable Suspicion/Cause**

You are required to submit to any test (whether drug, alcohol or both) that a supervisor requests based on reasonable suspicion. Reasonable suspicion means that one or more trained supervisors reasonably believes or suspects that you are under the influence of drugs or alcohol. They cannot require testing based on a hunch or guess alone; their suspicion must be based on observations concerning your appearance, behavior, speech and smell that are usually associated with drug or alcohol use.

The supervisor does not have to be a M.E.T.S. employee.

**Random**

You are subject to unannounced random drug & alcohol testing. Alcohol testing is administered just prior to, during or just after performing safety sensitive functions.

No manager, supervisor, official or agent may select you for testing just because they want to. Under DOT regulations, employers must use a truly random selection process. Each employee must have an equal chance to be selected and tested.

Just prior to the testing event, you will be notified of your selection and provided enough time to stop performing your safety sensitive function and report to the testing location. Failure to show for a test or interfering with the testing process can be considered a refusal.

**Post-Accident**

If you are involved in an event (accident, crash, etc.) meeting certain criteria of the DOT, a post-accident test will be required. You will then have to take a drug test and an alcohol test. You are required to remain available for this testing and are not permitted to refuse testing.

**FMCSA Post Accident Guidelines:**

Type of accident involved	Citation issued to the CMV driver	Test required
i. Human fatality	YES	YES
	NO	YES

ii. Bodily injury with immediate medical treatment away from the scene	YES	YES
	NO	NO
iii. Disabling damage to any motor vehicle requiring tow away	YES	YES
	NO	NO

**Return to Duty**

If you have violated the prohibited drug & alcohol rules, you are required to take a drug and/or alcohol test before returning to safety-sensitive functions for any DOT regulated employer. You are subject to unannounced follow-up testing at least 6 times in the first 12 months following your return to active safety-sensitive service.

**Follow-up**

The amount of follow-up testing you receive is determined by a Substance Abuse Professional (SAP) and may continue for up to 5 years. This means the SAP will determine how many times you will be tested (at least 6 times in the first year), for how long, and for what substance (i.e. drugs, alcohol, or both).

Your employer is responsible for ensuring that follow-up testing is conducted and completed, and your employer may have a policy that all follow-up tests are collected under direct observation. Follow-up testing is in addition to all other DOT required testing.

***NOTE: M.E.T.S. policy is to terminate employees who have violated the prohibited drug and alcohol rules. You must still complete a Return to Duty and all required follow up test for any new employer to be able to use you for safety sensitive activities.***

## How is the drug testing done?

The collection of your urine specimen will be conducted under the procedures required by the Mandatory Guidelines for Federal Workplace Drug Testing Programs dated April 11, 1988. (Revised August 1, 2001) These procedures allow for individual privacy unless there is reason to believe that a particular individual may alter or substitute the specimen to be provided. The collection site person will take precautions to ensure that your specimen is not adulterated or diluted during the collection procedure. Your specimen collected must follow strict chain of custody and security procedures.

The following steps will be used to maintain compliance with the above stated guidelines, and other pertinent DOT regulations:

- Photo identification (e.g., driver's license, photo ID, Agency badge) must be presented at the collection site. You must be positively identified as the donor.
- You will be asked to remove any unnecessary outer garments such as coat or jacket. All personal belongings like purses or briefcases will remain with the outer garment. You may retain your wallet.
- You will be asked to empty your pockets and display the contents to insure that no items are present which could be used to adulterate the specimen, after displaying the items you may place them back in your pockets.
- You will be instructed to wash and dry your hands prior to providing a specimen.
- During the collection the toilet will be blue and you will have no access to water.
- The collection site person working with you will be of the same gender as yourself during an observed collection.
- Your specimen will be provided in the privacy of a stall or otherwise partitioned area that allows for individual privacy.
- After handing the specimen bottle to the collector, you should keep the specimen in full view at all times until it is sealed and labeled. This protects you against the wrong label being put on your bottle or someone tampering with your specimen.
- If the collection site person has reason to believe that you may have altered or substituted the specimen, they will notify a higher-level supervisor. Should you tamper, adulterate or in any other way attempt to dilute your specimen, the collection site person must require that a second collected specimen be done under direct observation by a same gender collection site person.

***NOTE: A higher-level supervisor shall review and concur in advance with any decision by a collection site person to obtain a specimen under direct observation by a same gender collection site person.***

- You will be asked to initial the identification label on the specimen bottle for the purpose of certifying that it came from you.
- Your sample will be shipped, overnight using strict chain of custody rules, to a DHHS laboratory.
- Your sample will be tested for marijuana, cocaine, opiates, amphetamines and phencyclidine per the guideline limits established by the DOT.
- If, after laboratory analysis, the specimen is found to contain any drugs of abuse, the results will be disclosed only to your company's Medical Review Officer (MRO). Prior to making a final decision to verify a positive test result, the MRO shall give you an opportunity to discuss the test results and submit medical documentation of legally prescribed medication.
- Records concerning your collection and testing are covered under the Privacy Act 5ISC 522a. Employee records shall be maintained and used with the highest regard for your privacy.

***NOTE: Any employee, upon written request, has access to any records relating to his or her drug tests. The results of a drug test may not be disclosed without your prior written consent, unless it is to:***

- Your Medical Review Officer

- The Administrator of any Employee Assistance Program in which you are receiving counseling or treatment or are otherwise participating.
- A management official having authority to take adverse personnel action against you.
- Defend the U.S. Government against any challenge against adverse personnel action.

If you have any concerns or questions about the collection process, you should immediately bring them to the attention of your supervisor, on-site collection coordinator or your DER.

***What if I am unable to give a sample?***

*If you do not provide a sufficient specimen within three hours, you must obtain a medical evaluation within five days to determine if there is an acceptable medical reason for not being able to provide a specimen. If it is determined that there is no legitimate physiological or pre-existing psychological reason for not providing a urine specimen, it will be considered a refusal to test.*

*The physical exam is scheduled after the designated employer representative consults with the medical review officer. The physician chosen to complete the evaluation must have expertise in the medical issues raised and be acceptable to the Medical Review Officer.*

**Testing at the Laboratory**

At the laboratory, the staff will:

- Determine if flaws exist. If it does, the specimen is rejected for testing.
- Open only the A bottle and conduct a screening test. Specimens that screen positive will be analyzed again using a completely different testing methodology to confirm the initial result.
  - If the specimen tests negative in either test, the result will be reported as a negative.
  - Only if the specimen tests positive under both methods will the specimen be reported to the medical review officer as a positive test.
- Report the findings of the analysis of the A bottle to the Medical Review Officer (MRO),
- Store the A and B bottles for any reported positive, adulterated, or substituted result for at least 12 months.

**Review by the Medical Review Officer (MRO)**

Upon receipt of the test result from the laboratory, the MRO will:

- Review paperwork for accuracy.
- Report a negative result to the Designated Employer Representative (DER);
- If the result is positive, conduct an interview with you to determine if there is a legitimate medical reason for the result. If a legitimate medical reason is established, the MRO will report the result to the DER as negative. If not, the MRO will report the result to the DER as positive.
- If the result is an adulterated or substituted test, conduct an interview with you to determine if there is a legitimate medical reason for the result. If a legitimate medical reason is established, the MRO will report the result to the DER as cancelled. If not, the MRO will report the result to the DER as a refusal.
- Report a non-negative test result to the DER if:
  - You refused to discuss the results with the MRO;
  - You did not provide the MRO with acceptable medical documentation to explain the non-negative test result.
- Inform you that you have 72 hours from the time of the verified result to request to have your B “split” bottle sent to another certified lab for analysis for the same substance or condition that was found in the A “primary” bottle.

**How do you know if you are taking a federal or a private company drug test?**  
**All DOT drug tests are completed using the Federal Drug Testing Custody and Control Form. Those words appear at the top of each form.**



## How is an alcohol test administered?

The DOT performs alcohol testing in a manner to ensure the validity of the testing as well as provide confidentiality of the employee's testing information.

At the start of the test, a Screening Test Technician (STT) or a Breath Alcohol Technician (BAT), using only a DOT approved device, will:

- Establish a private testing area to prevent unauthorized people from hearing or seeing your test result.
- Require you to sign Step #2 of the Alcohol Testing Form (ATF).
- Perform a screening test and show you the test result. If the screening test result is an alcohol concentration of less than 0.02, no further testing is authorized, and there is no DOT action to be taken. The technician will document the result on the ATF, provide you a copy and provide your employer a copy.

If the screening test result is 0.02 or greater, you will be required to take a confirmation test, which can only be administered by a BAT using an Evidential Breath Testing (EBT) device.

The BAT will:

- Wait at least 15-minutes, but not more than 30 minutes, before conducting the confirmation test. During that time, you are not be allowed to eat, drink, smoke, belch, put anything in your mouth or leave the testing area.  
**Remember:** Leaving the testing area without authorization may be considered a refusal to test.
- Perform an "air blank" (which must read 0.00) on the EBT device to ensure that there is no residual alcohol in the EBT or in the air around it.
- Perform a confirmation test using a new mouthpiece.
- Display the test result to you on the EBT and on the printout from the EBT.
- Document the confirmation test result on the ATF, provide you a copy and provide your employer a copy.
- Report any result of 0.02 or greater immediately to the employer.
- If after several attempts you are unable to provide an adequate amount of breath, the testing will be stopped. You will be instructed to take a medical evaluation to determine if there is an acceptable medical reason for not providing a sample. If it is determined that there is no legitimate physiological or psychological reason, the test will be treated as a refusal to test.

**How do you know if you are taking a federal or a private company alcohol test?**  
***All DOT alcohol tests are documented with a form with the words Department of Transportation at the top.***

**Should I refuse a test if I believe I was unfairly selected for testing?**

***Rule of Thumb: Comply then make a timely complaint.***

If you are instructed to submit to a DOT drug or alcohol test and you don't agree with the reason or rationale for the test, take the test anyway. Don't interfere with the testing process or refuse the test.

After the test, express your concerns to your employer through a letter to your company's Human Resources office, by following agreed upon company procedures. You can also express your concerns to the appropriate DOT agency drug & alcohol program office.

***Whomever you decide to contact, please contact them as soon as possible after the test.***

## **What is a refusal to submit to a test?**

DOT regulations prohibit you from refusing a test. The following are some examples of conduct that the regulations define as refusing a test (See 49 CFR Part 40 Subpart I & Subpart N):

- Fails to appear for any test (except a pre-employment test) within a reasonable time, as determined by the employer, consistent with applicable DOT agency regulations, after being directed to do so by the employer. This includes the failure of an employee (including an owner-operator) to appear for a test when called by a C/TPA (see §40.61(a) of this title);
- Fails to remain at the testing site until the testing process is complete. Provided, that an employee who leaves the testing site before the testing process commences (see §40.63(c) of this title) a pre-employment test is not deemed to have refused to test.
- Fails to provide a urine specimen for any drug test required by this part or DOT agency regulations. Provided, that an employee who does not provide a urine specimen because he or she has left the testing site before the testing process commences (see §40.63(c) of this title) for a pre-employment test is not deemed to have refused to test;
- In the case of a directly observed or monitored collection in a drug test, fails to permit the observation or monitoring of the driver's provision of a specimen (see §§40.67(l) and 40.69(g) of this title);
- Fails to provide a sufficient amount of urine when directed, and it has been determined, through a required medical evaluation, that there was no adequate medical explanation for the failure (see §40.193(d)(2) of this title);
- Fails or declines to take a second test the employer or collector has directed the driver to;
- Fails to undergo a medical examination or evaluation, as directed by the MRO as part of the verification process, or as directed by the DER under §40.193(d) of this title. In the case of a pre-employment drug test, the employee is deemed to have refused to test on this basis only if the pre-employment test is conducted following a contingent offer of employment,
- Fail to cooperate with any part of the testing process (e.g., refuse to empty pockets when so directed by the collector, behave in a confrontational way that disrupts the collection process); or
- Is reported by the MRO as having a verified adulterated or substituted test result.

## **What happens if I test positive, refuse a test, or violate an agency specific drug & alcohol rule?**

If you test positive, refuse a test, or violate DOT drug & alcohol rules:

- A supervisor or company official will immediately remove you from DOT regulated safety-sensitive functions.
- You will not be permitted to return to performing DOT regulated safety sensitive duties until you have:
  - Undergone an evaluation by a Substance Abuse Professional (SAP);
  - Successfully completed any education, counseling or treatment prescribed by the SAP prior to returning to service;
  - Provided a negative test result for drugs and a breath test less than 0.02 of alcohol.(Return to duty testing).
- Upon return to a safety-sensitive job, you will be subject to unannounced testing for drugs and/or alcohol no less than 6 times during the first 12 months of active service with the possibility of unannounced testing for up to 60 months (as prescribed by the SAP).

## **What are SAPs?**

Under DOT regulations, SAPs are Substance Abuse Professionals. They play a critical role in the work place testing program by professionally evaluating employees who have violated DOT drug & alcohol rules. SAPs recommend appropriate education, treatment, follow-up tests, and aftercare. They are the gatekeepers to the re-entry program by determining when a safety-sensitive employee can be returned to duty.

SAPs are required to have a certain background and credentials, which include clinical experience in diagnosis and treatment of substance abuse-related disorders. They must also complete qualification training and fulfill obligations for continuing education courses. While SAPs do make recommendations to the employer about an employee's readiness to perform safety-sensitive duties,

SAPs neither advocate for the employee or the employer, and they make return-to-duty recommendations according to their professional and ethical standards as well as DOT's regulations.

### **Will I lose my job if I violate drug & alcohol regulations?**

DOT regulations do not address employment actions such as hiring, firing or granting leaves of absence. All employment decisions are the responsibility of the employers. Under Federal regulations, the main requirement for employers is to immediately remove employees from performing DOT safety-sensitive jobs. Be aware that a positive or refused DOT drug or alcohol test may trigger additional consequences based on company policy or employment agreement. While you may not lose your job, you may lose your certification or license to perform that job. Be sure to check industry specific regulations. For example, someone operating a commercial motor vehicle may not lose their state-issued CDL, but they will lose their ability to perform any DOT regulated safety sensitive tasks.

### **Are my results be confidential?**

Your test results are confidential. An employer or service agent (e.g. testing laboratory, MRO or SAP) are not permitted to disclose your test results to outside parties without your written consent. But, your test information may be released (without your consent) in certain situations, such as: legal proceedings, grievances, or administrative proceedings brought by you or on your behalf, which resulted from a positive or refusal. When the information is released, the employer must notify you in writing of any information they released.

### **DO the results follow me to different employers?**

Yes, your drug & alcohol testing history will follow you to your new employer, if that employer is regulated by a DOT agency. Employers are required by law to provide records of your drug & alcohol testing history to your new employer.

This is to ensure that you have completed the return-to-duty process and are being tested according to your follow-up testing plan.

# DRUG TEST

## CUTOFF LEVELS

ng = Nanograms

	INITIAL	GCMS CONFIRMATION
	TEST LEVEL	TEST LEVEL
<b>CANNABINNOIDS (THC)</b>	50 ng/ml	15 ng/ml
<b>COCAINE</b>	300 ng/ml	150 ng/ml
<b>AMPHETAMINES</b>		
"Amphetamines"	1,000 ng/ml	500 ng/ml
"Methamphetamine"	1,000 ng/ml	500 "MET." PLUS 200 "Amp."
<b>OPIATES</b>		
"Morphine"	300 ng/ml	300 ng/ml
"Codeine"	300 ng/ml	300 ng/ml
"Heroin" (6-MAMI)	300 ng/ml	10 ng/ml
<i>"POPPY SEEDS"</i>		Formula = M/C <sup>2</sup> =/codeine use
<b>PCP</b>	25 ng/ml	25 ng/ml

## FAQ's

What does dilute mean?

The laboratory measures the specimen's specific gravity and creatinine. These indicate the amount of waste products in someone's system. The more water you ingest, the more dilute your sample is. People may have a health problem, may drink a lot of water for health reasons or may be trying to dilute their sample enough to lower the level of an illegal substance in their system. Do not assume that each person who produces a dilute sample is trying to hide something. A negative dilute sample is negative. However, some employers choose to recollect these types of samples. As a Medical Review Office, we suggest that you address dilute samples in your substance abuse policy.

What does adulterated mean?

Adulteration occurs when a donor tries to add a substance to their specimen in order to pass a test.

What does substituted mean?

Substitution occurs when a donor's specimen is not consistent with human urine.

What's an unsuitable specimen?

When the laboratory reports an unsuitable specimen, this means they were unable to obtain a valid test result. An unknown substance, medical condition, or medication may be interfering with the testing.

What's the typical turnaround time of a drug test?

Specimens should be shipped overnight to the testing laboratory. Most labs report negative samples within 24 hours and positives up to 72 hours upon receipt at the laboratory. There are always exceptions. Upon receipt of the result from the labs, we forward the adjudicated result to you via your method of reporting as soon as possible.

How long do drugs stay in someone's system?

Marijuana is fat-soluble and can stay in someone's system for weeks depending on his or her body composition and metabolism. It is impossible to tell when someone last used Marijuana or whether he or she used a large amount. All other drugs normally tested for are water-soluble and only stay in a person's system for a few days.

### **Did you know?**

Did you know that 6 out of 10 people suffering from substance abuse problems also suffer from mental conditions like depression? Research has long documented that people suffering from depression try to self-medicate themselves through alcohol and other drugs. Typically, many of these individuals fail to remain clean and sober after rehabilitation because their underlying medical problem is not addressed and the cycle of self-medication begins again.

***Remember: If you have substance abuse issues, there is a 60% chance that you are also suffering from an underlying mental condition like depression. Increase your chances of rehabilitation. Be sure to ask your doctor or other mental health professionals about depression as it relates to substance abuse issues.***

## Ways that People Use Alcohol and Other Drugs

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**Use:** Alcohol and other drugs may be used in a socially accepted or medically authorized manner to modify or control mood or state of mind. Examples include having a drink with friends or taking an anti-anxiety agency as prescribed by a physician. Described below are different ways that people use alcohol and other drugs without necessarily becoming addicted.

**Experimentation** – Out of curiosity and/or at the urging of peers, individuals may try drinking or using drugs illegally. If the illegal drug use is not repeated, or discontinues after a short time, such experimentation may not be problematic. Likewise, deciding to drink alcoholic beverages after early experimentation is not problematic for most adults.

**Social/Recreational** – Drinking alcoholic beverages is permitted in American society, and some excessive use may even be condoned. If use doesn't cause problems for the user, or those around him/her, most people would consider such use to be social or recreational. Some use marijuana in a similar manner – only in certain social or recreational situations and without immediate adverse consequences. However, marijuana use is illegal, except in a few states.

**As a Stress Reliever** – Many people use alcohol or other drugs to help them cope with pressure or stress. If this type of use is infrequent and doesn't create more stress or difficulties for the user, or those around him/her, it may not lead to addiction, but alcoholism and drug addiction often begin with relief drinking.

**Abuse:** The use of a substance to modify or control mood or state of mind in a manner that is illegal, or harmful to oneself or others, is considered problematic use, or abuse. Examples of potential consequences of harmful use are:

- Accidents or injuries
- Blackouts
- Legal problems
- Poor job performance
- Family problems
- Sexual behavior that increases the risk of HIV infection

**Addiction:** A number of individuals occasionally use or abuse alcohol or drugs without becoming addicted, but for many abuse continues despite repeated attempts to return to more social or controlled use and leads to addiction. Addiction is the irresistible compulsion to use alcohol and drugs despite adverse consequences. It is characterized by repeated failures to control use, increased tolerance and increased disruption in the family.

## *Understanding Addiction*

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Unfortunately, it is not possible to tell early on whose use may lead to abuse and/or addiction. For one in ten people, abuse leads to addiction.

### **Addiction to alcohol and other drugs is:**

**Chronic** – Once you have developed an addiction, you will always have to deal with it. You may manage to stop using alcohol or other drugs for significant periods of time, but for most the disease doesn't disappear but rather goes into remission. Should you attempt to resume 'normal' use, you will rapidly return to addictive, out of control use and abuse.

**Progressive** – Addiction gets worse over time. With some drugs, the decline is rapid; with others, like alcohol, it can be more gradual, but it does get worse. Alcohol and other drugs cause a biochemical change in the nervous system that can persist even after the substance leaves the blood. Repeated use causes progressive damage.

**Primary** – Addiction is not just a symptom of some underlying psychological problem, a developmental stage or a reaction to stress. Once your use of alcohol or drugs has become an addiction, the addiction itself needs to be medically treated as a primary illness.

**Terminal** – Addiction to alcohol and/or other drugs often leads to disease and possibly death.

**Characterized by Denial** – One of the most disturbing and confusing aspects of addiction is that it is characterized by denial. The user denies that his/her use is out of control or that it is causing any problems at home or work. The user often seems to be the last to know that his/her life is out of control. There are effective strategies employed by professionals for helping to break through this denial, which must be overcome before treatment can take place.

## *Risk of Addiction*

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### **Addiction is a family disease:**

Some people with a history of substance abuse in their family are more susceptible to developing problems with addiction. Children of alcoholics or addicts are three times as likely to develop problems. If both parents are addicts or alcoholics, the risk increases to five times as great. This is due to heredity as well as learned behavior. It is important for parents to realize that children learn much more from watching their behavior than listening to their advice.

### **Prior abuse of alcohol and other drugs has a great impact on developing future problems:**

A pattern of abuse develops and can lead to addiction and psychological reliance on drugs and/or alcohol. This can be a slow progression for some and a rapid decline for others. Research demonstrates that the later in life an individual first drinks alcohol or uses other drugs, the less likely he or she will be to progress to problem use.

### **Other contributing factors:**

Some people abuse alcohol and drugs as part of a self-destructive lifestyle. Other people start to use substances to seek relief from depression or crisis in their lives. Although some fortunate individuals never develop serious problems and use diminishes or ceases once the precipitating events change, others develop a serious problem before they even realize it.

# Specific Drugs of Abuse

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## Alcohol

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In American society alcohol is a legal drug. Nonetheless, it is a depressant and is the leading drug of abuse. Use of alcohol affects judgment and decision-making abilities, slows down the central nervous system and brain function, and reduces coordination and reflex actions.

### **Signs and symptoms of abuse:**

- Dulled mental processes
- Lack of coordination
- Slowed reaction time
- Poor judgment
- Reduced inhibitions

### **Health effects:**

- Decreased sexual functioning
- Liver disease
- Increased cancers of the mouth, tongue, pharynx, esophagus, rectum, breast and skin
- Kidney disease
- Ulcers
- Spontaneous abortion
- Birth defects – leading cause of preventable retardation

### **Workplace issues:**

- Many employers now test for the presence of alcohol along with other drug testing.
- Consuming alcohol increases the likelihood that a driver or equipment operator will be involved in an accident.
- Low doses of alcohol reduce inhibitions and affect decision making.
- People who would not ordinarily behave in inappropriate ways can be persuaded to change their behavior when they are drinking.
- Often employees are under the influence of alcohol when they make the decision to use drugs.



### Alcohol Metabolism Chart

Body Weight	Number of Drinks (drink = 1 Beer, 1 glass of wine, or 1 shot mixed drink)								
	1	2	3	4	5	6	7	8	9
100	0.032	0.065	0.097	0.129	0.162	0.194	0.226	0.258	0.291
120	0.027	0.054	0.081	0.108	0.135	0.161	0.188	0.215	0.242
140	0.023	0.046	0.069	0.092	0.115	0.138	0.161	0.184	0.207
160	0.02	0.04	0.06	0.08	0.101	0.121	0.141	0.161	0.181
180	0.018	0.036	0.054	0.072	0.090	0.108	0.126	0.144	0.162
200	0.016	0.032	0.048	0.064	0.080	0.097	0.113	0.129	0.145
220	0.015	0.029	0.044	0.058	0.073	0.088	0.102	0.117	0.131

#### How to use the chart

Hours since drinking started	1	2	3	4	5	6
Subtract this number from the number shown on the first chart	0.015	0.03	0.045	0.06	0.075	0.09

1. Count your drinks.
2. Line up the number of drinks with the box that comes closest to your weight.
3. Use the second chart to determine the approximate metabolism of the alcohol over time.

Example: A 161 lb man drinks four beers in one hour and has an approximate BAC of .08. Two hours after he started drinking, his BAC is .05 (.08-.03=.05)

## Marijuana

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Marijuana is a derivative of the hemp plant and is illegally used for its intoxicating effects and dreamy state of relaxation and euphoria. All forms of marijuana have negative physical and mental effects. The active ingredient in marijuana is Delta-9-Tetrahydrocannabinol, or THC, and is present in all forms of the drug.

### Signs and symptoms of use:

#### **Physical**

- Substantial increase in heart rate
- Bloodshot eyes
- Dry mouth and throat
- Increased appetite
- Chronic sore throat

#### **Mental**

- Impaired or reduced short-term memory and comprehension
- Altered sense of time
- Changed sensory perception--sight, smell, hearing, touch
- Reduced ability to perform tasks requiring concentration and coordination, such as driving a car

### Health effects:

- Emphysema-like symptoms
- Respiratory track and sinus infections
- Lowered immune system response

### Workplace issues:

- Employees who fall under Federal guidelines such as the Department of Transportation's testing regulations are prohibited from using marijuana in any form.
- THC is stored in the body fat and is slowly released over time. Since it is retained in the fat, an employee can test positive many days after use.
- Many employers also have work rules requiring the employee to disclose if he or she is taking any sedating medications that could impact his or her ability to work safely. This rule would apply even in states that have approved the medicinal use of marijuana.
- The use of marijuana definitely would cause fitness-for-duty concerns.

## Inhalants

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Inhalants are mood-altering substances that are voluntarily inhaled. Most substances used are commercial and household products, such as solvents and aerosols, which are easily obtained and not harmful, if used for the purpose intended and as directed. Because they are common products, inhalants often are a young person's first attempt at "getting high."

### **Signs and symptoms of abuse:**

Inhaling solvents allows the substance to reach the bloodstream very quickly. Immediate negative effects of include:

- Nausea
- Sneezing
- Coughing
- Nosebleeds
- Fatigue
- Poor coordination
- Loss of appetite

### **Health effects:**

- Hepatitis
- Brain damage
- Debilitating effects on the central nervous system
- Weight loss
- Fatigue
- Electrolyte imbalance
- Muscle fatigue
- Permanent damage to the nervous system

### **Workplace issues:**

- Inhalants can severely impair judgment and driving ability.
- They also cause severe disorientation, visual distortion and confusion.
- Some such products may be available in the workplace.

## Cocaine

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Cocaine is the most potent stimulant of organic origin and the most widely used of the stimulants. Although cocaine has been used in the past as a topical anesthetic, its therapeutic uses have almost been eliminated due to the development of safer anesthetics. Cocaine is a powerfully addictive drug leading to physical and psychological dependence.

### Signs and symptoms of abuse:

- Dilated pupils
- Increased pulse rate
- Elevated blood pressure
- Insomnia
- Loss of appetite
- Tactile hallucinations
- Paranoia
- Seizures
- Anxiety, agitation
- Periods of increased activity followed by fatigue and depression
- Wide mood swings
- Difficulty in concentration

### Health effects:

- Cocaine stimulates the central nervous system. Its immediate effects include dilated pupils and elevated blood pressure, heart rate, respiratory rate and body temperature. Cocaine use can lead to death by cardiac arrest or respiratory failure.
- Cocaine powder is sniffed or snorted. The euphoric high lasts for approximately 30 minutes. Occasional use can cause a stuffy or runny nose, while chronic use can ulcerate the mucous membrane of the nose. Cocaine powder can also be injected into the bloodstream when it is mixed with water. Using contaminated equipment to inject cocaine, or any other substance, can transmit HIV and cause HIV/AIDS, hepatitis and other infection diseases.
- Preparation of freebase, which involves the use of volatile solvents, can result in death or injury from fire or explosion. Inhalation of cocaine fumes from freebasing produces effects that are very fast in onset, very intense and momentary in duration.
- Crack is cocaine that is processed into tiny chips having the appearance of slivers of soap. Crack has become a very popular form of cocaine, since it is inexpensive and relatively easy to use. It is smoked in a pipe or rolled with tobacco in a cigarette. Cocaine can produce psychological and physical dependency, a feeling that the user cannot function without the drug. Many users become extremely depressed when not using the drug, and the craving for the drug is intense. In addition, tolerance develops rapidly.

### Workplace issues:

- Employees who fall under Federal guidelines such as the Department of Transportation's testing regulations are prohibited from using cocaine in any form.
- The addictive nature and cost can lead to workplace theft and/or dealing.
- Work performance is erratic with periods of high performance and periods characterized by forgetfulness, absenteeism and missed assignments.

## Stimulants

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Stimulants are drugs that stimulate the central nervous system and excite bodily activity. Methamphetamine or crank is one of the fastest growing drugs of abuse. These drugs create less intense and less expensive cocaine-like effects in the body.

### Signs and symptoms of abuse:

- Mood changes
- Impaired concentration
- Impaired mental functioning
- Swings between apathy and alertness

### Health effects:

- Increased heart and respiratory rates
- Elevated blood pressure
- Sweating
- Headaches
- Blurred vision
- Dizziness
- Sleeplessness and anxiety
- Rapid or irregular heartbeat
- Tremors
- Poor coordination
- Physical collapse

### Workplace issues:

- Employees who fall under Federal guidelines such as the Department of Transportation's testing regulations are prohibited from using amphetamines without a current prescription.
- The addictive nature and cost can lead to workplace theft and/or dealing.
- Work performance is erratic with periods of high performance and periods characterized by forgetfulness, absenteeism and missed assignments.

## Depressants

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A depressant is a drug that depresses the central nervous system, resulting in sedation and a decrease in bodily activity. Depressants, taken as prescribed by physicians, can be beneficial for the relief of anxiety, irritability, stress and tension.

### Signs and symptoms of use:

- Slurred speech
- Staggered walk
- Altered perception
- Respiratory depression
- Coma and death

### Health effects:

- The use of depressants can cause both physical and psychological dependence. Regular use over time may result in a tolerance to the drug, leading the user to increase the quantity consumed.
- The main classes of medical depressants are barbiturates and benzodiazepines. When regular users suddenly stop taking large doses, they can develop withdrawal symptoms ranging from restlessness, insomnia and anxiety to convulsions and death.
- Babies born to mothers who abuse depressants during pregnancy may be physically dependent on the drugs and show withdrawal symptoms shortly after they are born. Birth defects and behavioral problems also may result.

### Workplace issues:

- Mental clouding and drowsiness pose a fitness-for-duty concern.
- Many employers also have work rules requiring the employee to disclose if they are taking any sedating medications that could impact their ability to work safely.

## Hallucinogens

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Hallucinogenic drugs distort the senses and often produce hallucinations--experiences that depart from reality. Phencyclidine (PCP) interrupts the function of the neuro-cortex, the section of the brain that controls the intellect and keeps instincts in check, because the drug blocks pain receptors. Violent PCP episodes may result in self-inflicted injuries.

### Signs and symptoms of use:

- Impaired concentration
- Confusion and agitation
- Muscle rigidity
- Profuse sweating

### Health effects:

- Chronic users of PCP report persistent memory problems and speech difficulties.
- Some of these effects may last six months to a year following prolonged daily use.
- Mood disorders, such as depression, anxiety and violent behavior, also occur.
- In later stages of chronic use, users often exhibit paranoid and violent behavior and experience hallucinations.
- Large doses may produce convulsions and coma, as well as heart and lung failure.

### Workplace issues:

- Employees who fall under Federal guidelines such as the Department of Transportation's testing regulations are prohibited from using PCP.
- Use causes severe disorientation.

## Narcotics

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Narcotic analgesics are the most effective compounds used for pain relief. Narcotic analgesics include Opium, Opiates (morphine, codeine, percodan, heroin and dilaudid) and Opioids (synthetic substitutes such as vicodin, darvon, demerol and methadone).

### **Signs and symptoms of use:**

Narcotics initially produce a feeling of euphoria that is often followed by:

- Drowsiness
- Nausea and vomiting
- Constricted pupils
- Watery eyes and itching
- Low and shallow breathing
- Clammy skin
- Impaired respiration
- Convulsions
- Coma
- Possible death

### **Health effects:**

- Tolerance to narcotics develops rapidly and addiction is likely.
- The use of contaminated syringes may result in diseases such as HIV/AIDS, endocarditis and hepatitis.
- Addiction in pregnant women can lead to premature, stillborn or addicted infants who experience severe withdrawal symptoms.

### **Workplace issues:**

- Employees who fall under Federal guidelines such as the Department of Transportation's testing regulations are prohibited from using opiates without a current medical prescription.
- Many employers also have work rules requiring the employee to disclose if they are taking any sedating medications that could impact their ability to work safely.
- The addictive nature and cost can lead to workplace theft and/or dealing.
- Mental clouding and drowsiness pose a fitness-for-duty concern.



## Designer Drugs

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Illegal drugs are defined in terms of their chemical formulas, but underground chemists can modify the molecular structure of certain illegal drugs to produce analogs known as designer drugs, which do not meet these definitions. These drugs can be several hundred times stronger than the drugs they are designed to imitate.

Many of the so-called designer drugs are related to amphetamines and have mild stimulant properties but are mostly euphorants. They can produce severe neurochemical damage to the brain. The narcotic analogs can cause symptoms such as those seen in Parkinson's disease, including uncontrollable tremors, drooling, impaired speech, paralysis and irreversible brain damage. Analogues of amphetamines and methamphetamines cause nausea, blurred vision, chills or sweating and faintness.

Psychological effects include anxiety, depression and paranoia. As little as one dose can cause brain damage, and the designer drugs still cause illusions, hallucinations and impaired perception.

Some designer drugs are: Synthetic Heroin White, MPTP (New Heroin), analogs of MDMA (Ecstasy, XTC, Essence), hallucinogens (STP, PMA, EVE) and analogs of PCP.

### **What should I do if I have a drug or alcohol abuse problem?**

#### **Seek help.**

Jobs performed by safety-sensitive transportation employees keep America's people and economy moving. Your work is a vital part of everyday life. Yet, by abusing drugs or alcohol, you risk your own life, your co-workers lives and the lives of the public.

Most every community in the country has resources available to confidentially assist you through the evaluation and treatment of your problem. If you would like to find a treatment facility close to you, check with your local yellow pages, local health department or visit the U.S. Department of Health and Human Services treatment facility locator at <http://findtreatment.samhsa.gov/>. This site provides contact information for substance abuse treatment programs by state, city and U.S. Territory.

Also, many work-place programs are in place to assist employees and family members with substance abuse, mental health and other problems that affect their job performance.