

Q & A

Q: What is a substance abuser?

A: Someone who needs alcohol or other drugs to get through the day. An abuser can be a person who binges – consumes an excessive amount of alcohol or other drugs – on the weekends and looks forward to his or her next “hit.” An abuser can also be anyone who misuses a prescription or over-the-counter drug or inhales something not intended for human consumption, such as paint fumes.

Q: What exactly is a drug? What makes some legal and others illegal?

A: A drug is a chemical substance that changes the way the body’s cells and tissues function. Drugs produce physical, mental and/or emotional changes in the user.

Legal drugs are those that you can buy in a store or with a doctor’s prescription. If used properly, legal drugs can be very beneficial. They can help ease pain, cure infections and help heal the body.

Tobacco, while often socially acceptable, is a drug that is legal only for those 18 and older in Indiana and illegal for younger people. Alcohol, while consumed mostly for pleasure, is a drug that is legal for those 21 years and older and illegal for younger people.

U.S. laws prohibit the manufacture, sale, purchase or possession of drugs like marijuana, LSD, cocaine, crack and methamphetamine. These drugs are

illegal because they may cause physical and mental harm to users.

Q: What drug is used most by teens?

A: Alcohol is the drug used most frequently by teens.

Warning Signs of Substance Abuse

- Abrupt changes in work or school attendance, quality of work, work output, grades, discipline
- General attitude changes and/or irritability
- Withdrawal from responsibility
- Deterioration of physical appearance and grooming
- Impaired performance on the job or in the classroom
- Wearing of sunglasses at inappropriate times (to hide dilated or constricted pupils)
- Association with known substance abusers

- Unusual borrowing of money from friends, co-workers or parents
- Stealing small items from employer, home or school

Toll on the Family

Alcoholism and drug addiction is taking a toll on the American family. As a result, 8.3 million children in the U.S. -- approximately 11 percent -- live with at least one parent who is in need of treatment for alcohol or drug dependency. One in four children under the age of 18 is living in a home where alcoholism or alcohol abuse is a fact of daily life. Countless others are exposed to illegal drug use in their families.

Children of addicts are at significantly greater risk for:

- Mental illness or emotional problems, such as depression or anxiety
- Physical health problems
- Learning problems, including difficulty with cognitive and verbal skills; conceptual reasoning and abstract thinking

In addition, children whose parents abuse alcohol or drugs are almost three times more likely to be verbally, physically or sexually abused; and four times more likely than other children to be neglected.

ALCOHOL

Alcohol is the most widely used drug in the United States, and alcohol is the number one drug problem among young people.

Alcohol is one of the oldest drugs of abuse and is a colorless liquid produced by fermenting cereals such as corn, rice and barley. Consumption of alcohol produces a sedative effect.

Short-term effects of alcohol include anxiety, slowed heart and respiratory rates, blurred vision and poor motor coordination. Long-term effects include cirrhosis of the liver, cancers, cardiac diseases and a number of psychological health conditions.

Infants born to women who drink during pregnancy may have birth defects, such as Fetal Alcohol Syndrome and are more likely than other children to develop learning and behavioral disorders later in life.

Alcoholism, also known as “alcohol dependence,” is a disease that includes four symptoms:

- Craving: A strong need or compulsion to drink.
- Loss of control: The inability to limit one’s drinking on any given occasion.

- Physical dependence: Withdrawal symptoms, such as nausea, sweating, shakiness and anxiety, occur when alcohol use is stopped after a period of heavy drinking.

- Tolerance: The need to drink greater amounts of alcohol in order to “get high.”

People who are not alcoholic sometimes do not understand why an alcoholic can't just “use a little willpower” to stop drinking. However, alcoholism has little to do with willpower. Alcoholics are in the grip of a powerful craving or uncontrollable need for alcohol that overrides their ability to stop drinking. This need can be as strong as the need for food or water.

Although some people are able to recover from alcoholism without help, the majority of alcoholics need assistance. With treatment and support, many individuals are able to stop drinking and rebuild their lives.

The minimum drinking age is 21 years, and it is illegal to sell, exchange, provide or furnish alcohol to anyone less than 21 years of age.

According to Indiana law, a person with a Blood Alcohol Content (BAC) of 0.08% or above is considered to be intoxicated, and it is illegal for a person with a BAC level of 0.08% or higher to drive. As of July 2004, it is also illegal to operate a motor vehicle in Indiana if an open container of alcohol is present in the vehicle.

Binge drinking is defined as drinking 5 or more drinks on the same occasion, usually within a few hours on at least one day in the past 30 days. Studies show that more than 35% of adults with an alcohol problem developed symptoms, such as binge drinking, by age 19.

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As soon as nicotine, the main drug in tobacco, reaches the bloodstream, the heart speeds up and beats an extra 10 to 25 times a minute. Because nicotine narrows the blood vessels, increasing the smoker's blood pressure, smokers have a much greater chance of heart attacks and strokes than non-smokers.

Smokers also inhale sticky tars that coat the lungs' tiny air sacs, making breathing difficult. A hacking cough is also quite common in smokers

Tobacco also accounts for about one-third of all cancer deaths in the United States and is the single most preventable cause of premature deaths.

Smokers also put other people's health at risk.

Environmental tobacco smoke, commonly referred to as second-hand smoke, is the nation's number one airborne carcinogen (cancer-causing agent), killing more people than all other forms of air pollution combined. Children of smokers have more

respiratory problems and miss more school than do children of non-smokers.

In Indiana, it is illegal for anyone under the age of 18 to purchase or accept tobacco for personal use. It is also illegal to knowingly sell tobacco to a person under the age of 18.

Tobacco

The phrase “tobacco products” refers to numerous different tobacco-based items, including cigarettes, cigars, smokeless tobacco, and loose-leaf tobacco. Nicotine is the primary addictive toxin found in tobacco. It is a colorless liquid that turns brown when burned and is found in all kinds of tobacco products. It is known to be highly addictive in smaller doses and can kill the average person in larger quantities.

Approximately 80 percent of adult smokers (of whom there were 46.5 million in the U.S. in 2004) started smoking before the age of 18. Every day nearly 4000 youths under age 18 try their first cigarette.

Cigarettes are considered the primary “gateway drug,” meaning cigarette use can lead to use of other drugs. A recent study found that among high school seniors, smokers were 10 times more likely to use cocaine regularly than were the seniors who had never smoked.

Health effects:

Cigarette smoke contains more than 300 known poisons, including such deadly substances as nicotine, arsenic, cyanide, carbon monoxide, phenol and formaldehyde.

Inhalants

Inhalants are breathable, chemical vapors that produce mind-altering effects. A variety of cleaning and other products common in the home and workplace contain substances that can be inhaled. Many young people do not even think of these products as drugs because they were never meant to be used to achieve an intoxicating effect. Yet young children and adolescents can easily obtain these extremely toxic substances and are among those most likely to abuse them.

Although they differ in makeup, nearly all abused inhalants produce short-term effects that slow down the body's functions. When inhaled via the nose or mouth into the lungs, inhalants can cause intoxicating effects that can last a few minutes.

However, sometimes users extend this effect for several hours by breathing in inhalants repeatedly. Initially, users may feel slightly stimulated.

Repeated inhalations make them feel less inhibited

and less in control. If use continues, users can lose consciousness.

High concentration of inhalants can cause death from suffocation by displacing oxygen in the lungs and then in the central nervous system so that breathing stops. Deliberately inhaling from a paper or plastic bag or in a closed area greatly increases the chances of suffocation. Even when

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Club Drugs

The term “club drugs” refers to a wide variety of drugs being used by young people at dance clubs, bars and all-night dance parties. These parties are usually held in a clandestine location with high volume music, high-tech entertainment and easy access to drugs.

Club drugs are attractive to today’s youth because they are inexpensive and produce increased stamina and intoxicating highs. Because many of these drugs are colorless, tasteless and odorless, they can be secretly added to beverages by individuals who want to intoxicate or sedate others.

The most widely used club drugs are:

- **Ecstasy.** Also known as MDMA. It is a stimulant that combines the effects of amphetamines and hallucinogens. Chronic use of Ecstasy can lead to changes in brain function, negatively affecting thinking and memory, and can also lead to symptoms of depression several days after its use.
- **Rohypnol.** Known as the “date rape drug,” Rohypnol is a central nervous system depressant that produces sedative-hypnotic effects, muscle relaxation and amnesia.
- **Ketamine.** Also called K, Vitamin K, Special K and Jet. It is a rapidly-acting general anesthetic. It produces a wide range of feelings from weightlessness to out-of-body or near-death experiences. In high doses, it can cause high blood pressure, depression and potentially fatal breathing problems. It is produced commercially for use as an

anesthetic by veterinarians and is often acquired for use by theft from veterinary clinics.

- **GHB (gamma hydroxybutyrate).** Originally available over the counter in health food stores to aid body builders, GHB and other synthetic steroids are also used for their euphoric effects.

- **LSD (lysergic acid diethylamide).** This hallucinogen produces unpredictable effects, depending on the amount taken, the surroundings in which the drug is used and the user’s personality, mood and expectations.

Hallucinogens affect the brain by changing the way the brain interprets time, reality and the environment.

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using aerosols or volatile products for legitimate purposes (painting, cleaning) it is wise to do so in a well-ventilated room or outdoors.

Chronic abuse of solvents can also cause severe long-term damage to the brain, the liver and the kidneys. Specific effects include hearing loss, limb spasms, bone marrow damage, and blood oxygen depletion.

Initial use of inhalants starts early. Some young people may use inhalants as a cheap, accessible substitute for alcohol. Research suggests that chronic or long-term inhalant abusers are among the most difficult drug abuse patients to treat.

In 2005, according to a national survey, nearly 5 percent of girls and 4.2 percent of boys between ages 12 and 17 used inhalants to get high in 2005. Together, the data showed that an estimated 1.1 million adolescents used inhalants in the past year.

Cocaine

Cocaine is a powerfully addictive stimulant drug extracted from the leaves of the coca plant. It appears as a white powder that can be smoked, snorted or injected.

Cocaine is one of the oldest known drugs. The pure chemical, cocaine hydrochloride, has been an abused substance for more than 100 years, and coca leaves, the source of cocaine, have been ingested for thousands of years.

Cocaine stimulates the body’s central nervous system. Physical effects of cocaine include constricted blood vessels, dilated pupils, and increased temperature, heart rate and blood pressure. Increased use can reduce the period of time a user feels high and increases the rate of addiction.

A tolerance to the “high” may develop. Many addicts report that they seek but fail to achieve as much pleasure as they did from their first exposure.

Some users will increase their doses to intensify and prolong the euphoric effects. Use of cocaine in a binge, during which the drug is taken repeatedly and at increasingly higher doses, may lead to a state of increasing irritability, restlessness and paranoia. This can result in a period of full-blown paranoid psychosis, in which the user loses touch with reality and experiences auditory hallucinations. Other complications associated with cocaine can include disturbances in heart rhythm and heart attacks, chest pain and respiratory failure, strokes, seizures and headaches, abdominal pain and nausea. Because cocaine has a tendency to decrease appetite, many chronic users can become malnourished. Different means of taking cocaine can produce different adverse effects. Regularly snorting cocaine, for example, can lead to loss of sense of smell, nosebleeds, problems with swallowing, hoarseness and a chronically runny nose. People who inject cocaine can experience severe allergic reactions and, as with any injecting drug user, are at increased risk for contracting HIV and other blood borne diseases.

Crack Cocaine

Crack is the street name given to the freebase form of cocaine that has been processed from powdered cocaine. This form of cocaine comes in a rock crystal that can be heated and its vapors smoked. The term “crack” refers to the crackling sound heard when it is heated. Because crack is smoked, the user experiences a high in less than 10 seconds. This rather immediate and euphoric effect is one of the reasons that crack became enormously popular in the mid 1980s. Another reason is that crack is inexpensive both to produce and to buy.

Methamphetamine

Methamphetamine is an addictive stimulant drug that strongly activates certain systems in the brain. It is closely related chemically to amphetamine, but the central nervous system effects of methamphetamine are greater. Methamphetamine is a powdered substance that sometimes is distributed in large rock-like chunks. It is usually slightly yellow, depending on the purity. Methamphetamine is made in illegal laboratories and has a high potential for abuse and addiction. Street methamphetamine is referred to by many names such as “speed,” “meth,” and “chalk.”

Methamphetamine hydrochloride, which is clear chunky crystals resembling ice and can be inhaled by smoking, is referred to as “ice,” “crystal,” “glass,” and “tina.”

Methamphetamine is taken orally or by snorting, by intravenous injection and by smoking. Immediately after smoking or injection, the user experiences an intense sensation, called a “rush” or “flash,” that lasts only a few minutes and is described as extremely pleasurable. Oral or intranasal use produces euphoria — a high, but not a rush. Users may become addicted quickly, and use it with increasing frequency and in increasing doses. The central nervous system effects that result from even small amounts of methamphetamine include increased wakefulness, increased physical activity, decreased appetite, hyperthermia, increased respiration, and euphoria. Other effects include irritability, insomnia, confusion, tremors, convulsions, anxiety, paranoia, repetitive behavior and aggressiveness. Hyperthermia and convulsions can result in death.

Methamphetamine causes increased heart rate and blood pressure and can cause irreversible damage to blood vessels in the brain, producing strokes. Other effects of methamphetamine include respiratory problems, irregular heartbeat and extreme anorexia.

Its use can result in cardiovascular collapse and death. Studies have shown methamphetamine abuse and production continue at high levels in the west coast and some southwestern areas of the United

States and that methamphetamine abuse is also continuing to spread eastward to urban, suburban and rural areas at a pace unrivaled by any other drug in recent times.

Prescription Drugs

Prescription medications such as pain relievers, tranquilizers, stimulants and sedatives are very useful treatment tools, but sometimes people do not take them as directed and may become addicted. Pain relievers make surgery possible, and enable many individuals with chronic pain to live productive lives. However, the inappropriate or non-medical use of prescription medications is a serious public health concern. Non-medical use of prescription medications can lead to abuse and addiction, characterized by compulsive drug seeking and use. Patients, healthcare professionals, and pharmacists all have roles in preventing misuse and addiction to prescription medications. For example, when a doctor prescribes a medication, the patient should follow the directions for use carefully, learn what

effects the medication could have and determine any potential interactions with other medications. The patient should read all information provided by the pharmacist.

Physicians and other healthcare providers should screen for any type of substance abuse during routine history-taking. Over time, providers should note any rapid increases in the amount of medication

needed — which may indicate the development of tolerance to the medication — or frequent requests for refills before the quantity prescribed should have been used.

Three types of prescription medications are most commonly abused:

- **Opiates**, often prescribed to treat pain. These can include morphine, codeine, vicodin, demorol and Oxycontin. Chronic use of Opiates can result in tolerance to the medications so that higher doses must be taken to obtain the same initial effects.

Long-term use can also lead to physical dependence - the body adapts to the presence of the substance and withdrawal symptoms occur if use is reduced abruptly.

- **Central Nervous System Depressants**, used to treat anxiety and sleep disorders. These can include barbituates and benzodiazepines such as Valium, Librium and Xanax. CNS depressants should not be combined with any medication or substance that causes sleepiness, including prescription pain medications and alcohol. If combined, they can slow breathing, or slow both the heart and respiration, which can be fatal.

- **Stimulants**, which are often prescribed to treat attention deficit/hyperactivity disorder. These can include Dexedrine, Adderall and Ritalin.

The consequences of stimulant abuse can be extremely dangerous. Taking high doses of a stimulant can result in an irregular heartbeat, dangerously high body temperatures and/or the potential for heart failure or seizures. Taking high doses of some stimulants repeatedly over a short period of time can lead to hostility or feelings of paranoia.

Marijuana

Marijuana is a green, brown or gray mixture of dried, shredded leaves, stems, seeds and flowers of the cannabis or hemp plant. There are more than 200 slang terms for marijuana including pot, herb, grass, boom, Mary Jane, gangster or chronic. Marijuana is usually smoked in the form of loosely rolled cigarettes called joints or hollowed out commercial cigars called blunts.

Marijuana contains more than 400 chemicals. When the drug is smoked, these chemicals are converted into more than 2000 chemicals, with even more cancer-causing ingredients than cigarettes.

The main active chemical in marijuana is THC, which seeps into the fat-containing part of cell membranes and is released very slowly. A marijuana user's body is still affected by the drug long after he or she has stopped using.

Marijuana is the most commonly used illegal drug. It is used by 76 percent of current illegal drug users.

Short-term effects of marijuana can include problems with memory and learning, distorted perception, difficulty in thinking and problem solving, loss of coordination and increased heart rate.

Even infrequent use of marijuana can cause burning and stinging of the mouth and throat, often accompanied by a heavy cough. Someone who smokes marijuana regularly may have many of the same respiratory problems that tobacco smokers do, such as a daily cough.

Depression, anxiety and personality disturbances have been associated with marijuana use.

Research demonstrates that marijuana has potential to cause problems in daily life or make a person's existing problems worse.

Many young men who use marijuana do not have well-developed muscles, do not grow normally and have less facial and body hair than non-users.

Marijuana can also damage the egg cells in a female and the sperm cells in a male, increasing the risk of birth defects in babies born to users.