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Drug abuse

Definition:

Drug abuse is the use of illegal drugs, or the misuse of prescription or over-the-counter drugs.

Alternative Names:

Substance abuse; Illicit drug abuse; Narcotic abuse; Hallucinogen abuse

Information:

MARIJUANA (also called "grass," "pot," "reefer," "joint," "hashish," "cannabis," "weed," and "Mary Jane")

About 2 in 5 Americans have used marijuana at least once. About 10% of the population uses it on a regular basis.

The source of marijuana is the hemp plant (*cannabis sativa*). The active ingredients are THC (delta-9-tetrahydrocannabinol) and other cannabinoids, which are found in the leaves and flowering shoots of the plant.

Hashish is a substance taken from the tops of female plants. It contains the highest amount of THC.

The drug dose in marijuana varies greatly depending on how it is prepared.

You may feel the effects of marijuana within seconds to several minutes after breathing in the smoke (from a joint or a pipe), or within 30 - 60 minutes after eating foods containing marijuana, such as "hash brownies."

Because you can feel the effects almost right away, you can stop breathing in at any time to reduce the effect. In contrast, eating marijuana produces effects more slowly. These effects add up and last longer, making unpleasant reactions more likely.

The main effects of marijuana are on behavior, because the drug affects the [central nervous system](#) (CNS). Marijuana became popular because it gives people a feeling of joy (euphoria), relaxation, and increased sight, hearing, and taste with low to moderate doses. Most users also report an increase in their appetite ("the munchies").

Unpleasant effects that may occur include:

- [Acute](#) panic reactions or severe [paranoia](#)

- Changed body image
- Lack of orientation
- Trouble telling oneself from others

Some cases of severe [delirium](#), seeing or hearing things that aren't there (hallucinations), and violence have also been reported. In such cases, marijuana may have been laced with another drug, such as PCP.

Marijuana has specific effects that may decrease your ability to perform tasks that require a lot of coordination (such as driving a car). It affects visual tracking and prolongs the sense of time. It also decreases motivation for goal-directed activities.

The drug can affect learning because it can reduce your ability to concentrate and pay attention. Studies have shown that learning may become "state-dependent," meaning that information learned while under the influence of marijuana is best remembered in the same state of drug influence.

Other marijuana effects may include:

- Airway (bronchial) irritation leading to narrowing of the airways (bronchoconstriction) or airway spasms (bronchospasm)
- Bloodshot eyes
- Increased [heart rate](#) and [blood pressure](#)
- [Pharyngitis](#), [sinusitis](#), [bronchitis](#), and [asthma](#) in heavy users
- Possible serious effects on the immune system
- Widening of the airways (bronchodilatation)

Regular users, when they stop marijuana use, may have withdrawal effects. These may include:

- [Agitation](#)
- [Anxiety](#)
- [Insomnia](#)
- Irritability

Because the substance formed when the body breaks down marijuana may be stored in the body's fat tissue, heavy users may show evidence of marijuana in urine tests for up to 1 month after stopping the drug.

The active substance in cannabis is believed to have medical properties. Many people believe that it can help treat nausea caused by [chemotherapy](#) in cancer patients.

Others claim that cannabis stimulates appetite in patients with AIDS, or is useful for treating [glaucoma](#). While the active ingredient in marijuana has been approved as a medication (dronabinol) by the Food and Drug Administration for these purposes, the use of whole marijuana remains very controversial. Currently, cannabis is illegal even for medical use.

PHENCYCLIDINE (PCP, "angel dust")

It is difficult to estimate the current use of phencyclidine in the United States, because many people do not know that they have taken it. Other illegal substances (such as marijuana) can be

laced with PCP without the user being aware of it.

A 1986 National Institute of Drug Abuse survey of high school seniors revealed that more than 12% of the students had used substances that cause hallucinations (hallucinogens), and that many of these drugs probably contained PCP.

PCP use in the United States dates back to 1967 when it was sold as the "Peace Pill" in the Haight-Ashbury district of San Francisco. It never became very popular because it had a reputation for causing "bad trips."

PCP use grew during the mid-1970s, mainly because of different packaging (sprinkling on leaves that are smoked) and marketing strategies. During the 1980s, it became the most commonly used hallucinogen, especially among users aged 15 - 25.

Although phencyclidine was first created by a drug company searching for a new pain reliever (anesthetic), it was not good for human use because of its mind-altering (psychotropic) side effects.

PCP is no longer produced for legitimate, legal purposes. Unfortunately it can be made rather easily and cheaply by anyone who knows organic chemistry. This makes it a prime drug for the illegal drug industry. It is available illegally as a white powder that can be dissolved in either alcohol or water.

PCP may be taken in different ways. How fast it affects the user depends on how it is taken. If dissolved, PCP may be taken through a vein ("shot up") and its effects begin within seconds.

Sprinkled over dried parsley, oregano, or marijuana leaves, it can be smoked. The effects begin within 2 - 5 minutes, peaking at 15 - 30 minutes. Taken by mouth, in pill form, or mixed with food or drinks, PCP's effects usually start within 30 minutes. The effects tend to peak in about 2 - 5 hours.

Lower doses of PCP typically produce feelings of joy (euphoria) and less inhibition, similar to being drunk. Higher doses cause numbness throughout the body, and perception changes that may lead to extreme anxiety and violence.

Large doses may produce paranoia, "hearing voices" (auditory hallucinations), and [psychosis](#) similar to [schizophrenia](#). Massive doses, usually from taking the drug by mouth, may cause:

- [Acute kidney failure](#)
- Death
- Heart [arrhythmias](#)
- [Muscle rigidity](#)
- [Seizures](#)

Because of the pain-killing ([analgesic](#)) properties of PCP, users who get seriously injured may not feel any pain.

Ketamine, a substance related to PCP, has become more popular in recent years. It is commonly called "Special K."

HALLUCINOGENS

In addition to PCP, other commonly abused hallucinogens include LSD (lysergic acid diethylamide), psilocybin (mushrooms, "shrooms"), and peyote (a cactus plant containing the active ingredient mescaline).

Some people have used naturally occurring hallucinogens, especially for religious rites, for centuries. The native people of Mexico used mushrooms containing psilocybin, and peyote use was common among southwestern Native Americans.

In contrast, LSD is an artificial substance, first developed by a drug company in 1938. Today, most hallucinogens are used experimentally rather than on a regular basis. Most users report only one or a few uses per year.

LSD is a very strong hallucinogen. Only tiny doses are needed to produce effects. Compared to LSD, psilocybin is 100 - 200 times weaker, and mescaline (peyote) is about 4,000 times weaker.

Hallucinogens can lead to extreme anxiety and lack of reality at the height of the drug experience ("bad trips"). These experiences can come back as a "flashback," even without using the drug again. Such experiences typically occur during times of increased stress, and tend to occur less often and intensely after stopping the drugs.

STIMULANTS ("speed," "crack," "coke," "snow," "crank," "go," "speedball," "crystal," "cross-tops," "yellow jackets")

Cocaine

The abuse of cocaine increased dramatically in the late 1980s and early 1990s, but is now on the decline.

Cocaine may be breathed in through the nose ("snorting"), or dissolved in water and taken through a vein (intravenously). When mixed with heroin for IV use, the combination is called a "speedball."

Through a simple chemical procedure, cocaine may be changed into a smokeable form known as freebase or crack. Smoking produces an instant and intense sense of joy (euphoria), which is attractive to abusers. Other effects include:

- Feelings of increased confidence and energy
- Less inhibition
- Local numbness
- Powerful stimulation of the central nervous system

Increased use of and addiction to cocaine probably occur because it produces a very pleasurable high that is very short lived. This encourages the user to use the drug more often or regularly to get the desired effects.

Both the need to use larger amounts of the drugs to get the same effect (tolerance) and dependence may occur with regular cocaine use. Regular users may have:

- Depression

- Loss of interest in school, work, family, and friends
- Memory loss
- Mood swings
- Sleep problems
- Social withdrawal

Because heavy use may cause paranoia, cocaine users may become violent.

AMPHETAMINES

During the 1950s and 1960s, amphetamines were often prescribed for conditions such as [fatigue](#), [obesity](#), and mild depression. Such use has stopped because the drugs are very addictive, and are now considered controlled substances.

Over-the-counter (OTC) amphetamine look-alike drugs are often abused. These drugs typically contain [caffeine](#) and other stimulants, and are sold as appetite suppressants or stay-awake/stay-alert aids.

If taken in high doses, these OTC drugs may cause the same high and other effects that occur with amphetamines. Regular users may have:

- Dilated pupils
- Irritability
- Restlessness
- Skin flushing
- Sleep disturbances
- Tremors
- Weight loss

INHALANTS

Inhalant use became popular with young teens in the 1960s with "glue sniffing." Since then, a greater variety of inhalants have become popular. Inhalant use typically involves younger teens or school-age children. Groups of children will use inhalants usually as an experiment.

Commonly abused inhalants include:

- Aerosols for deodorants or hair sprays
- Cleaning fluids
- Gasoline
- Liquid typewriter correction fluid
- Model glue
- Spray paints

The chemicals are poured into a plastic bag or soaked into rags, then breathed in. The drugs are absorbed through the respiratory tract and cause an altered mental state within 5 - 15 minutes.

Negative effects of inhalant abuse include:

- Brain damage
- [Convulsions](#)

- Liver or [kidney damage](#)
- Nerve damage ([peripheral neuropathy](#))
- Sudden death

Most inhalant use occurs among teens or preteens who do not have access to illegal drugs or alcohol.

OPIATES, OPIOIDS, AND NARCOTICS

Opiates come from opium poppies. These drugs include morphine and codeine. Opioids are artificial substances that have the same effect as morphine or codeine.

Opiates and opioids include:

- Heroin
- Hydromorphone
- Oxycodone
- Meperidine
- Methadone
- Propoxyphene

All of these substances, natural or human-made, are considered narcotics. Used as painkillers, these drugs:

- Change perception of painful [stimuli](#)
- Decrease anxiety
- Pinpoint pupils during intoxication
- Promote a relaxed state (sedation)

Because heroin is commonly injected into a vein (used intravenously), there are health concerns about sharing contaminated needles among IV drug users. Complications of sharing contaminated needles include [hepatitis](#), HIV infection, and [AIDS](#).

STAGES OF JUVENILE DRUG USE

There are several stages of drug use. Young people seem to move more quickly through the stages than do adults.

- Experimental use -- typically involves peers, done for recreational use; the user may enjoy defying parents or other authority figures.
- Regular use -- the user misses more and more school or work; worries about losing drug source; uses drugs to "fix" negative feelings; begins to stay away from friends and family; may change friends to those who are regular users; shows increased tolerance and ability to "handle" the drug.
- Daily preoccupation -- the user loses any motivation; does not care about school and work; behavior changes become obvious; thinking about drug use is more important than all other interests, including relationships; the user becomes secretive; may begin dealing drugs to help support habit; use of other, harder drugs may increase; legal problems may increase.
- Dependence -- cannot face daily life without drugs; denies problem; physical condition gets worse; loss of "control" over use; may become suicidal; financial and legal

problems get worse; may have broken ties with family members or friends by this time.

TREATMENT OVERVIEW

As with any other area of medicine, the least intensive treatment should be the starting point.

Residential treatment programs monitor and address possible withdrawal symptoms and behaviors. These programs use behavior modification techniques, which are designed to get users to recognize their behaviors.

Treatment programs include counseling both for the person (and perhaps family), and in group settings. Drug abuse treatment programs have a long after-care part (when the user is released from the medical facility), and provide peer support.

Drug addiction is a serious and complicated health condition that requires both physical and psychological treatment and support. It is important to be evaluated by a trained professional to determine the best care.

CALL YOUR HEALTH CARE PROVIDER

- If you are concerned about the possibility of getting addicted to any prescribed medications
- If you are concerned about possible drug abuse by yourself or a family member
- If you are interested in getting more information on drug abuse
- If you are seeking treatment of drug abuse for yourself or a family member

Also seek out information and support from local 12-step support groups, such as:

- Al-anon/Alateen
- Alcoholics Anonymous (AA)
- Narcotics Anonymous (NA)

Other support groups include:

- LifeRing Recovery
- Moderation Management
- SMART Recovery

See also:

- [Alcoholism - support group](#)
- [Chemical dependence - support group](#)

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National Institutes of Health. Principles of Drug Addiction Treatment: A Research Based Guide. NIH Publication No. 00-4180, printed October 1999, reprinted July 2000.

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