

Drug Abuse and Addiction:

UNDERSTANDING THE SIGNS, SYMPTOMS, AND EFFECTS



Drugs are chemicals that have a profound impact on the neurochemical balance in the brain which directly affects how you feel and act. People who are suffering emotionally use drugs, not so much for the rush, but to escape from their problems. They are trying to self-medicate themselves out of loneliness, low self-esteem, unhappy relationships, or stress. This is a pattern that too often leads to drug abuse and addiction.

Find out how to recognize the signs and symptoms of drug abuse or addiction in yourself or someone you care about. When these problems are faced and thoughtfully addressed, there is hope for overcoming drug abuse and addiction.

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Drug abuse: prescription drugs and street drugs

What happens when you take drugs?

Drug abuse or substance abuse, involves the repeated and excessive use of prescription or street drugs. In one way or another, almost all drugs over stimulate the pleasure center of the brain, flooding it with the neurotransmitter dopamine which produces euphoria. That heightened sense of pleasure can be so compelling that the brain wants that feeling back, again and again.

These drugs cause increased energy, rapid heart rate and elevated blood pressure, but they also produce racing thoughts and make you feel overly-stimulated. Continued use causes rapid breathing, irritability, impulsiveness, aggression, nervousness, insomnia, weight loss, tolerance, addiction, and possible heart failure. These drugs also cause an impairment cognitive functioning which negatively affects memory and impacts the ability to learn.

PBS.org provides easy to understand [animation videos](#) demonstrating how cocaine affects the brain's electrical impulses and increases the neurotransmitter dopamine which causes changes in behavior.

Signs and symptoms: drug abuse vs. drug dependence

Drug ABUSE: How can I tell if I have a drug problem?

Signs and symptoms of drug ABUSE	
Health and behavior	<ul style="list-style-type: none"> ■ Continuing to use drugs even though you have health problems that are affected or caused by your drug use ■ Irritability, anger, hostility, fatigue, agitation, anxiety, depression, psychosis (seeing or hearing things that are not there), lack of coordination, difficulty concentrating
Financial and legal issues	<ul style="list-style-type: none"> ■ Paying bills late, collection agencies calling, inability to keep track of your money ■ Being arrested, doing things that you would normally not do, such as stealing to obtain drugs
Employment or school	<ul style="list-style-type: none"> ■ Continuing to use drugs even though you realize your job or education is in jeopardy ■ Missing work or school, or going in late due to drug use
Family and friends	<ul style="list-style-type: none"> ■ Feeling annoyed when other people comment on, or criticize your use of drugs ■ Feeling remorse or guilt after using drugs ■ Associating with questionable acquaintances or frequenting out of the ordinary locations to purchase or use drugs
Social life	<ul style="list-style-type: none"> ■ Scheduling your day around using drugs ■ Focusing recreational activities around obtaining drugs, using drugs, or recovering from drug use ■ Using drugs when alone
Signs and symptoms of Cannabis use (Marijuana and Hashish)	<ul style="list-style-type: none"> ■ Heightened visual and auditory perceptions and increased sensitivity in taste ■ Increased appetite ■ Problems with memory, difficulty concentrating, paranoid thinking ■ Decreased coordination, slowed reaction time ■ Bloodshot eyes, elevated blood pressure, increased heart rate

Drug DEPENDENCE: How serious is my drug use?

How drug use can lead to addiction

People with conditions such as Attention-Deficit/Hyperactivity Disorder (ADHD) or mood disorders such as depression and anxiety may find that a street drug makes them feel less jumpy, depressed or anxious.

The line between substance abuse and drug dependence is defined by the role drugs play in your life. Addiction and drug dependence occurs when drugs become so important that you are willing to sacrifice your work, home and even family. On your brain and body get used to the substances you are taking, you begin to require increasingly larger and more frequent doses, in order to achieve the same effect.

Drugs such as Heroin, a painkiller, over-stimulate the pleasure centers of the brain producing euphoric effects which cause compulsive drug-seeking behaviors and affect self-control and judgment. These drugs are highly addictive and require a medical detoxification (detox) to cleanse the chemicals from your system. The severity of withdrawal symptoms such as chi

shakes, muscle pain, nausea, vomiting, headaches, and cravings can be reduced in detox with prescribed medications that can be slowly decreased over time. Withdrawal affects you physically and emotionally resulting in sadness, depression and exhaustion.

Signs and symptoms of drug DEPENDENCE	
Cravings and relapse	<ul style="list-style-type: none"> ■ Strong and overwhelming desire to use your drug of choice at a specific time of day or several times a day ■ Drug seeking behaviors ■ Trying to stop using the drug but failing more than once ■ Feeling that you must have the drug to deal with your problems
Tolerance	<ul style="list-style-type: none"> ■ In order to feel the same effect, using more of the drug than intended and using the drug more frequently
Withdrawal symptoms	<ul style="list-style-type: none"> ■ Cocaine: Agitation, insomnia, anxiety, depression, anger, cravings, fatigue, nausea, vomiting, shakes, irritability, muscle pain ■ Anti-anxiety medications: Sleeplessness, irritability, anxiety, feeling shaky, headache, dizziness, loss of appetite, and in extreme cases, seizures ■ Heroin: Dilated pupils, goose bumps, watery eyes, runny nose, yawning, chills, nausea, muscle cramps, stomach cramps, diarrhea, vomiting, shakes, sweats, feeling jittery, irritable, panic, tremors ■ Methamphetamine: Fatigue, disturbed sleeping patterns, irritability, intense hunger, moderate to severe depression, anxiety, psychotic reactions
Effects on memory and motivation	<ul style="list-style-type: none"> ■ Impairments in learning, memory and cognitive functioning ■ Losing interest in activities and hobbies that were once pleasurable
Risky behavior	<ul style="list-style-type: none"> ■ Sharing needles ■ Having unsafe sex

Effects of drug abuse and addiction

The effects of drug abuse and addiction differ depending on the drug used. For example, with heroin the effects include:

Short and Long Term Effects of Heroin Abuse	
<p>Short-Term Effects:</p> <ul style="list-style-type: none"> ■ "Rush" ■ Depressed respiration ■ Clouded mental functioning ■ Nausea and vomiting ■ Suppression of pain ■ Spontaneous abortion 	<p>Long-Term Effects:</p> <ul style="list-style-type: none"> ■ Infectious diseases (HIV/AIDS and Hepatitis) ■ Collapsed veins ■ Bacterial infections ■ Abscesses ■ Infection of heart lining and valves ■ Arthritis and other rheumatologic problems
<p>Source: National Institute on Drug Abuse</p>	

Effects on society

Drug abuse and addiction have a devastating impact on society costing billions of dollars each year. Heroin use alone is responsible for the epidemic number of new cases of HIV/AIDS, Hepatitis, and drug addicted infants born each year. Drug abuse is responsible for decreased job productivity and attendance, increased healthcare costs, and an escalation of domestic violence and violent crimes.

Commonly abused drugs

The drugs listed below are commonly abused, and affect the brain and physiology in different ways. Check out information provided by The National Institute on Drug Abuse (NIDA) which offers a chart of [commonly abused drugs](#) and identifies how they affect you and what the long-term health risks are.

Commonly Abused Drugs	
Stimulants	<ul style="list-style-type: none"> ■ Cocaine ■ Ritalin (one of several medications for ADHD)
Methamphetamine	<ul style="list-style-type: none"> ■ Ecstasy
Opioids	<ul style="list-style-type: none"> ■ Heroin ■ Vicodin and Oxycontin (painkillers)
Depressants (Benzodiazepine)	<ul style="list-style-type: none"> ■ Valium and Xanax (tranquilizers)
Cannabinoids	<ul style="list-style-type: none"> ■ Marijuana and Hashish
Hallucinogens and Psilocybin	<ul style="list-style-type: none"> ■ LSD and PCP ■ Magic Mushrooms
Inhalants	<ul style="list-style-type: none"> ■ Aerosols, Nitrous oxide, Nitrites (poppers)
Drugs for increasing muscle mass	<ul style="list-style-type: none"> ■ Anabolic steroids

Teenage drug abuse and addiction

For most of us, it's a no-brainer to avoid misuse of drugs: we see that the dangers and destructive long-term effects outweigh any momentary pleasure drugs afford and act accordingly. But it's also easy to understand why people use and abuse drug that pose risks to health and well-being. It's a matter of brain chemistry.

Drugs are chemicals that enter the brain and mess with the way nerve cells normally send, receive, and process information. Some imitate natural neurotransmitters; for example, narcotic pain relievers mimic the effects of endorphins, the body's natural "feel-good" chemical. Or they are similar enough to the brain's natural chemical messengers that they trick brain receptors into activating nerve cells. Stimulants such as cocaine and methamphetamines cause the neurons to release too much of the neurotransmitters, causing the sensation users describe as the brain "racing."

And, in one way or another, almost all drugs overstimulate the pleasure center of the brain, flooding it with the neurotransmitter dopamine. That produces euphoria, and that heightened pleasure can be so compelling that the brain wants that feeling back again and again. Unfortunately, with repeated use of a drug, the brain becomes accustomed to the dopamine surges by producing less of it, so the user has to take more of the drug to feel the same pleasure — the phenomenon known as tolerance.

But what causes people to want to tinker with their brain chemistry in the first place? Some are thrill-seekers, some just curious; some try drugs because their friends use, or they want to be perceived as cool. Even more susceptible, though, are

the many people who use drugs in order to cope with unpleasant emotions and the difficulties of life. The National Alliance on Mental Illness estimates that about half of all drug abusers also suffer from a mental illness such as depression, anxiety, bipolar disorder, or schizophrenia.

People who are suffering emotionally use drugs not so much for the rush but to escape from their problems. They're trying to self-medicate themselves out of loneliness, low self-esteem, unhappy relationships, stress, and many other types of problems. Drug use doesn't solve any of those problems, and it can easily make them worse or create new ones. But even if the user knows that, the short-term escape drugs provide can be so attractive that the dangerous consequences of abuse can seem unimportant.

Drug abuse and addiction in teenagers

Teenagers are especially vulnerable to drug abuse for several reasons:

- In the adolescent brain, the centers for judgment and self-control are still developing, resulting in many teens being less than careful about the decisions they make and more open to risk-taking
- Kids think they're immortal and nothing can kill them
- Teens are notorious conformists, so many are going to want to do what the other kids are doing, or do things that they think will make them look cool
- Contemporary adolescence is filled with stress and problems, some of which is exaggerated, but unfortunately some of the stress is experienced fully. Even if a teen over-dramatizes or magnifies a problem, the temptation to self-medicate is real

Although it is sometimes difficult to distinguish between normal adolescent behaviors and drug-related activities, it is possible to get a good picture of what's going on in your child's life if you take an active interest in their daily lives. Many parents rely on the **three W's**:

Knowing...

- **WHERE** they are at all times
- **WHAT** they are doing
- **WHO** they are with

Structure is achieved by defining and modeling acceptable behaviors, by limiting unacceptable behaviors, and by making sure your child clearly understands the difference between the two.

Signs and Symptoms of Teenage Drug Use

The following list includes behaviors that may be red flag indicators of teen drug use – particularly if you notice several of these symptoms in your child:

Some Common Warnings of Teen Drug Use

- School performance, declining grades, increased absences, reported truancy
- Withdrawal from hobbies, teams, family life
- Marked change in behavior ranging from hostility to violence
- Changes in energy level, having unusual amounts of energy or increased fatigue
- Increased secrecy about possessions or activities
- Use of incense, room freshener, or perfume to hide smoke or chemical odors

- Wearing new clothes that highlight drug use, or suggest inappropriate conduct, or lack of concern for appearance and grooming
- Evidence of drug paraphernalia, such as pipes and rolling papers
- Evidence of eye drops used to mask bloodshot eyes or dilated pupils
- Missing prescription drugs
- Unusual requests for money without reasonable explanations for why they need it, discovering money has been stolen from your home or wallet, or finding objects missing which may have been sold to support a drug habit

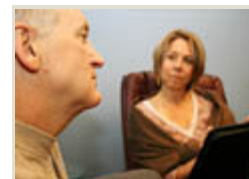
For a more comprehensive list see American Council for Drug Educations [Signs and Symptoms of Drug Use](#)

I have a problem - what do I do now?

Treatment options for drug abuse and addiction

Learn more about drug treatment programs, including rehab and peer support groups. With new ways of coping with life's problems, without the use of drugs, the tight grip of addiction will begin to loosen its hold. Recovery is possible with the right medical help and social support.

Read [Treatment for Drug Abuse and Addiction](#)



Related links for drug abuse and addiction

Helpguide articles on abuse and addictions:

[Alcohol Abuse and Alcoholism](#) – Guide to the signs, symptoms, adverse effects, and causes of problem drinking.

[Treatment for Alcohol Abuse and Alcoholism](#) – Guide to treatment options, prevention, and self-help for alcoholism.

Drug abuse and addiction: signs, symptoms, and causes

[Commonly Used Drugs](#) – A comprehensive list of about 50 commonly used drugs with their intoxicating effects and health consequences. (National Institute on Drug Abuse)

[The Drug Abuse Screening Test](#) – A standard list of, yes-or-no, questions mostly concerning signs and symptoms of drug use and addiction that doctors and counselors use to determine if someone has a drug problem. (Schick Shadel Hospital)

[Drug Addiction: Signs and Symptoms](#) – General and specific signs and symptoms of drug addiction correlated to seven classes of drugs. (Mayo Clinic)

[NIDA InfoFacts: Understanding Drug Abuse and Addiction](#) – Detailed but understandable description of how people become addicted to drugs and the causes of drug addiction. (NIDA)

[Prescription Drug Use and Abuse](#) – Information-packed and consumer-oriented article about misuse of prescription drugs and the problems they cause. (U.S. Food and Drug Administration)

[Crossing the Line to Addiction: How and When Does it Happen?](#) – Clear description of how drugs cause actual changes in the brain. (PBS Online)

[Substance Abuse Symptoms Checklist](#) – Detailed list of signs and symptoms of drug and alcohol abuse that relates to motivations behind substance abuse as well as physical and behavioral symptoms. The site also has a list for drug use [signs and symptoms in teens](#). (National Council on Alcoholism and Drug Dependence of the San Fernando Valley)

Physical effects of drug use

[Animation video of cocaine's affect on the brain](#) – Easy to understand animation video demonstrating how cocaine affects the brain's electrical impulses and increases the neurotransmitter dopamine which causes changes in behavior. (PBS.org)

[Pathology of Drug Abuse](#) – Using medical terminology, provides details of how drug abuse affects different organs and bodily processes. (University of Utah)

Drug abuse and addiction in teens and young adults

[Signs and Symptoms of Drug Use](#) – Comprehensive list of signs and symptoms, especially, as they apply to teens, including drug-specific symptoms. (American Council for Drug Education)

[How to Tell if Your Teenager Is Using an Illicit Substance](#) – Written in a warm, conversational style, this article goes into great detail concerning the signs of drug use, with some signs many parents wouldn't think to look for and a subtext reminding parents to pay attention to their kids. (The Partnership for a Drug-Free America)

[Why Do Sally And Johnny Use Drugs?](#) - Covers the different reasons young people abuse drugs and how to prevent the problem. (National Institute on Drug Abuse)

Drug Abuse articles written for teens and young adults

[NIDA for Teens: The Science Behind Drug Abuse](#) – U.S. government-sponsored educational site for teens provides facts on drugs, learning activities, real stories, and an “ask the doctor” feature. (National Institute on Drug Abuse)

[Drugs: What You Should Know](#) – Straight-forward information on the symptoms, effects, and dangers of many different substances, written for teens. (TeensHealth)

[Addiction – when you just can't stop](#) – This Australian site uses kid-speak and cartoons to define addiction and lay out its signs and symptoms. (Children, Youth and Women's Health Service, South Australia)

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