

## Controlling Substance Abuse

**T**he brain changes when a person abuses illicit (illegal) and prescription drugs or alcohol, often causing addiction and making it harder for the person to practice self-control. The addicted person may want to quit using the substance or may experience negative health and social consequences as a result of using the substance, yet still may be unable or unwilling to quit.

Not everyone who abuses a substance will become addicted. However, substance abuse can often lead to family disintegration, loss of employment, failure in school, domestic violence, and child abuse. Military personnel returning from combat are also at an increased risk for abuse of alcohol, tobacco, and prescription drugs.

### What are the symptoms?

Symptoms of substance abuse and addiction vary based on the substance. In general, if a person turns to the substance to cope, craves the substance, or feels ill without it (withdrawal) despite not wanting to use it, he or she is likely experiencing a disorder or addiction.

- **Alcohol**, specifically ethanol, is found in beer, wine, and liquor. Abuse of alcohol is termed *alcoholism* and can be recognized by behaviors such as an inability to limit the amount of alcohol being consumed, experiencing nausea/sweating/shaking when not drinking, or hiding it from others.
- **Anabolic steroids** can be prescribed by a doctor to treat conditions such as delayed puberty or cancer but can also be abused to build muscle and enhance physical performance. Abuse of anabolic steroids may lead to aggression, mood swings, paranoid jealousy, extreme irritability, delusions, and impaired judgment.
- **Cigarettes and other tobacco products**, including cigars, snuff, and chewing tobacco, contain the addictive drug nicotine (nick-uh-teen). Whether chewed, inhaled, or smoked, nicotine affects the brain chemical dopamine

(doh-puh-meem), which is responsible for feelings of reward and pleasure. With long-term exposure, a person can become addicted to nicotine and may continue to use tobacco products despite negative health consequences.

- **Club drugs**, which include ecstasy and the “date rape” drug known as “roofies,” can cause reduced inhibitions, poor judgment, memory loss, and loss of consciousness. At high doses, these drugs can cause seizures, coma, and death.
- **Hallucinogens**, including LSD, cause a person to experience hallucinations (images, sounds, and sensations that seem real but are not) and rapid, intense emotional swings. Rapid heart rate, high blood pressure, tremors, and panic are among the many varying symptoms of hallucinogens.
- **Marijuana** is legal in 2 states for recreational use and legal in many more states for medical use with a prescription. Despite its growth in popularity, it remains illegal at the federal level and is now the most commonly abused illicit substance in the U.S. The chemical found in marijuana, known as THC, is absorbed into the bloodstream by inhaling or eating the marijuana. Abuse overactivates receptors in the brain, leading to a “high” feeling, altered perceptions of mood, decreased coordination and memory, and difficulty thinking, problem solving, and learning.
- **Narcotic painkillers**, such as oxycodone, may be prescribed by a doctor or obtained illegally (eg, heroin). Symptoms of dependence include a reduced sense of pain, sedation, depression, constipation, and slowed breathing.
- **Stimulants**, including methamphetamine (meth-am-fet-uh-meem) and cocaine, are highly addictive and cause both short- and long-term health consequences. Weight loss, insomnia, restlessness, rapid speech, paranoia, and irritability are all symptoms of an addiction to stimulants. When the drug wears off, depression may set in, causing the addicted person to seek another dose.

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## How do I know if I am at risk?

There are many ways to determine if someone is at risk for developing a substance use disorder. These include:

- Family history of substance abuse
- Being male
- Personal history of a psychological disorder
- Exposure to peer pressure
- Lack of close family or friends
- Anxiety, depression, and loneliness

## Are there complications?

Substance abuse can cause serious, long-term effects, including problems with physical and mental health, relationships, employment, and the law. Mental illness can occur as a direct result of substance abuse because of the close link addictive substances have with the brain. Suicide, overdose, and accidental death are also serious complications of a substance use disorder.

Other complications may include driving accidents while under the influence, financial problems, and getting an infectious disease, such as HIV (human immunodeficiency virus).

## Can substance abuse be prevented?

The best way to prevent substance abuse is to never use the substance. However, abuse can happen with legal, “socially acceptable” substances (eg, tobacco, alcohol) or drugs prescribed by a doctor. Early intervention is key to preventing substance abuse, and recognizing the symptoms associated with substance abuse can help.

## When do I need medical attention?

If you feel you cannot go without the substance, that using the substance is negatively impacting your life in any way, or use of the substance has led to unsafe behavior, such as using needles or having unprotected sex, make an appointment with your primary care doctor or a mental health professional.

Seek emergency help by calling 911 if you or someone you know has overdosed, lost consciousness, is

struggling to breathe, experiencing a seizure, feels pressure or pain in the chest, or has any other troublesome physical or mental reaction after taking a substance.

## How is substance abuse treated?

Research shows that combining addiction treatment medications with behavioral therapy is the best way to ensure success for most patients.

- **Medication.** Without medical intervention, it can often be too difficult for a person to quit abusing a substance due to the withdrawal effects of addiction. Withdrawal medications can suppress these effects and serve as a first step toward detoxification (dee-tok-suh-fih-kay-shun). Treatment medications can be used to reestablish normal brain functioning and prevent relapse by lessening cravings.
- **Behavioral treatment.** Treatment for substance abuse and addiction can help the patient engage in the treatment process, modify attitudes and behaviors toward the substance abuse, and increase healthy life skills. Behavioral treatment can be done on an outpatient basis, meaning the patient undergoing treatment regularly visits a clinic. Most of these programs involve individual, group, and family talk therapy. Treatment can also be done in a residential setting where the focus is on helping the patient develop a substance-free, crime-free lifestyle.

With treatment and support, the addicted person can return to a substance abuse-free life. For information on seeking treatment, visit <http://findtreatment.samhsa.gov> or call (800) 662-HELP (4357).