

# Substance Use Disorders

[samhsa.gov/disorders/substance-use](https://www.samhsa.gov/disorders/substance-use)

The *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (DSM-5), no longer uses the terms substance abuse and substance dependence, rather it refers to substance use disorders, which are defined as mild, moderate, or severe to indicate the level of severity, which is determined by the number of diagnostic criteria met by an individual. Substance use disorders occur when the recurrent use of alcohol and/or drugs causes clinically and functionally significant impairment, such as health problems, disability, and failure to meet major responsibilities at work, school, or home. According to the DSM-5, a diagnosis of substance use disorder is based on evidence of impaired control, social impairment, risky use, and pharmacological criteria.

The following is a list with descriptions of the most common substance use disorders in the United States.

## Alcohol Use Disorder (AUD)

Excessive alcohol use can increase a person's risk of developing serious health problems in addition to those issues associated with intoxication behaviors and alcohol withdrawal symptoms. According to the Centers for Disease Control and Prevention (CDC), excessive alcohol use causes 88,000 deaths a year.

Data from the [National Survey on Drug Use and Health \(NSDUH\) — 2014 \(PDF | 3.4 MB\)](#) show that in 2014, slightly more than half (52.7%) of Americans ages 12 and up reported being current drinkers of alcohol. Most people drink alcohol in moderation. However, of those 176.6 million alcohol users, an estimated 17 million have an AUD.

Many Americans begin drinking at an early age. In 2012, about 24% of eighth graders and 64% of twelfth graders used alcohol in the past year.

The definitions for the different levels of drinking include the following:

- **Moderate Drinking**—According to the Dietary Guidelines for Americans, moderate drinking is up to 1 drink per day for women and up to 2 drinks per day for men.
- **Binge Drinking**—SAMHSA defines binge drinking as drinking 5 or more alcoholic drinks on the same occasion on at least 1 day in the past 30 days. The National Institute on Alcohol Abuse and Alcoholism (NIAAA) defines binge drinking as a pattern of drinking that produces blood alcohol concentrations (BAC) of greater than 0.08 g/dL. This usually occurs after 4 drinks for women and 5 drinks for men over a 2 hour period.
- **Heavy Drinking**—SAMHSA defines heavy drinking as drinking 5 or more drinks on the same occasion on each of 5 or more days in the past 30 days.

Excessive drinking can put you at risk of developing an alcohol use disorder in addition to other health

and safety problems. Genetics have also been shown to be a risk factor for the development of an AUD.

To be diagnosed with an AUD, individuals must meet certain diagnostic criteria. Some of these criteria include problems controlling intake of alcohol, continued use of alcohol despite problems resulting from drinking, development of a tolerance, drinking that leads to risky situations, or the development of withdrawal symptoms. The severity of an AUD—mild, moderate, or severe—is based on the number of criteria met.

Learn more about alcohol from the [Alcohol, Tobacco, and Other Drugs](#) topic. Learn more about the [treatments for AUD](#). Find more information at the [NIAAA website](#).

## Tobacco Use Disorder

According to the CDC, more than 480,000 deaths each year are caused by cigarette smoking. Tobacco use and smoking do damage to nearly every organ in the human body, often leading to lung cancer, respiratory disorders, heart disease, stroke, and other illnesses.

In 2014, an estimated 66.9 million Americans aged 12 or older were current users of a tobacco product (25.2%). Young adults aged 18 to 25 had the highest rate of current use of a tobacco product (35%), followed by adults aged 26 or older (25.8%), and by youths aged 12 to 17 (7%).

In 2014, the prevalence of current use of a tobacco product was 37.8% for American Indians or Alaska Natives, 27.6% for whites, 26.6% for blacks, 30.6% for Native Hawaiians or other Pacific Islanders, 18.8% for Hispanics, and 10.2% for Asians.

For information and strategies to help you or a loved one stop smoking or using tobacco, visit SAMHSA's [Treatments for Substance Use Disorders](#) page. To find out more about smoking and tobacco, visit the [CDC website](#).

## Cannabis Use Disorder

Marijuana is the most-used drug after alcohol and tobacco in the United States. According to SAMHSA data:

- In 2014, about 22.2 million people ages 12 and up reported using marijuana during the past month.
- Also in 2014, there were 2.6 million people in that age range who had used marijuana for the first time within the past 12 months. People between the ages of 12 and 49 report first using the drug at an average age of 18.5.

In the past year, 4.2 million people ages 12 and up met criteria for a substance use disorder based on marijuana use.

Marijuana's immediate effects include distorted perception, difficulty with thinking and problem solving, and loss of motor coordination. Long-term use of the drug can contribute to respiratory infection, impaired memory, and exposure to cancer-causing compounds. Heavy marijuana use in youth has also been linked to increased risk for developing mental illness and poorer cognitive functioning.

Some symptoms of cannabis use disorder include disruptions in functioning due to cannabis use, the development of tolerance, cravings for cannabis, and the development of withdrawal symptoms, such as the inability to sleep, restlessness, nervousness, anger, or depression within a week of ceasing heavy use.

Learn more about cannabis from the [Alcohol, Tobacco, and Other Drugs](#) topic. For information about the treatment of cannabis use disorder, visit SAMHSA's [Treatments for Substance Use Disorders](#) page.

## Stimulant Use Disorder

Stimulants increase alertness, attention, and energy, as well as elevate blood pressure, heart rate, and respiration. They include a wide range of drugs that have historically been used to treat conditions, such as obesity, attention deficit hyperactivity disorder and, occasionally, depression. Like other prescription medications, stimulants can be diverted for illegal use. The most commonly abused stimulants are amphetamines, methamphetamine, and cocaine. Stimulants can be synthetic (such as amphetamines) or can be plant-derived (such as cocaine). They are usually taken orally, snorted, or intravenously.

In 2014, an estimated 913,000 people ages 12 and older had a stimulant use disorder because of cocaine use, and an estimated 476,000 people had a stimulant use disorder as a result of using other stimulants besides methamphetamines. In 2014, almost 569,000 people in the United States ages 12 and up reported using methamphetamines in the past month.

Symptoms of stimulant use disorders include craving for stimulants, failure to control use when attempted, continued use despite interference with major obligations or social functioning, use of larger amounts over time, development of tolerance, spending a great deal of time to obtain and use stimulants, and withdrawal symptoms that occur after stopping or reducing use, including fatigue, vivid and unpleasant dreams, sleep problems, increased appetite, or irregular problems in controlling movement.

Learn more about stimulants from the [Alcohol, Tobacco, and Other Drugs](#) topic. For information about the treatment of stimulant use disorder, visit SAMHSA's [Treatments for Substance Use Disorders](#) page.

## Hallucinogen Use Disorder

Hallucinogens can be chemically synthesized (as with lysergic acid diethylamide or LSD) or may occur naturally (as with psilocybin mushrooms, peyote). These drugs can produce visual and auditory hallucinations, feelings of detachment from one's environment and oneself, and distortions in time and perception.

In 2014, approximately 246,000 Americans had a hallucinogen use disorder. Symptoms of hallucinogen use disorder include craving for hallucinogens, failure to control use when attempted, continued use despite interference with major obligations or social functioning, use of larger amounts over time, use in risky situations like driving, development of tolerance, and spending a great deal of time to obtain and use hallucinogens.

Learn more about hallucinogens from the [Alcohol, Tobacco, and Other Drugs](#) topic.

## Opioid Use Disorder

Opioids reduce the perception of pain but can also produce drowsiness, mental confusion, euphoria, nausea, constipation, and, depending upon the amount of drug taken, can depress respiration. Illegal opioid drugs, such as heroin and legally available pain relievers such as oxycodone and hydrocodone can cause serious health effects in those who misuse them. Some people experience a euphoric response to opioid medications, and it is common that people misusing opioids try to intensify their experience by snorting or injecting them. These methods increase their risk for serious medical complications, including overdose. Other users have switched from prescription opiates to heroin as a result of availability and lower price. Because of variable purity and other chemicals and drugs mixed with heroin on the black market, this also increases risk of overdose. Overdoses with opioid pharmaceuticals led to almost 17,000 deaths in 2011. Since 1999, opiate overdose deaths have increased 265% among men and 400% among women.

In 2014, an estimated 1.9 million people had an opioid use disorder related to prescription pain relievers and an estimated 586,000 had an opioid use disorder related to heroin use.

Symptoms of opioid use disorders include strong desire for opioids, inability to control or reduce use, continued use despite interference with major obligations or social functioning, use of larger amounts over time, development of tolerance, spending a great deal of time to obtain and use opioids, and withdrawal symptoms that occur after stopping or reducing use, such as negative mood, nausea or vomiting, muscle aches, diarrhea, fever, and insomnia.

Learn more about opioids from the [Alcohol, Tobacco, and Other Drugs](#) topic. For information about the treatment of opioid use disorder, visit SAMHSA's [Treatments for Substance Use Disorders](#) page.

# Treatments for Substance Use Disorders

[samhsa.gov/treatment/substance-use-disorders](https://www.samhsa.gov/treatment/substance-use-disorders)

The treatment system for substance use disorders is comprised of multiple service components, including the following:

- Individual and group counseling
- Inpatient and residential treatment
- Intensive outpatient treatment
- Partial hospital programs
- Case or care management
- Medication
- Recovery support services
- 12-Step fellowship
- Peer supports

A person accessing treatment may not need to access every one of these components, but each plays an important role. These systems are embedded in a broader community and the support provided by various parts of that community also play an important role in supporting the recovery of people with substance use disorders.

## Individual and Group Counseling

Counseling can be provided at the individual or group level. Individual counseling often focuses on reducing or stopping substance use, skill-building, adherence to a recovery plan, and social, family, and professional/educational outcomes. Group counseling is often used in addition to individual counseling to provide social reinforcement for pursuit of recovery.

Counselors provide a variety of services to people in treatment for substance use disorders including assessment, treatment planning, and counseling. These professionals provide a variety of therapies. Some common therapies include:

- Cognitive-behavioral therapy teaches individuals in treatment to recognize and stop negative patterns of thinking and behavior. For instance, cognitive-behavioral therapy might help a person be aware of the stressors, situations, and feelings that lead to substance use so that the person can avoid them or act differently when they occur.
- Contingency management is designed to provide incentives to reinforce positive behaviors, such as remaining abstinent from substance use.
- Motivational enhancement therapy helps people with substance use disorders to build motivation and commit to specific plans to engage in treatment and seek recovery. It is often used early in the process to engage people in treatment.

- 12-step facilitation therapy seeks to guide and support engagement in 12-step programs such as Alcoholics Anonymous or Narcotics Anonymous.

Some forms of counseling are tailored to specific populations. For instance, young people need a different set of treatment services to guide them towards recovery. Treatments for youth often involve a family component. Two models for youth that are often used in combination and have been supported by SAMHSA grants are the Adolescent Community Reinforcement Approach (ACRA) and Assertive Continuing Care (ACC). ACRA uses defined procedures to build skills and support engagement in positive activities. ACC provides intensive follow up and home based services to prevent relapse and is delivered by a team of professionals.

## Inpatient and Residential Settings

Treatment can be provided in inpatient or residential sessions. This happens within specialty substance use disorder treatment facilities, facilities with a broader behavioral health focus, or by specialized units within hospitals. Longer-term residential treatment has lengths of stay that can be as long as six to twelve months and is relatively uncommon. These programs focus on helping individuals change their behaviors in a highly structured setting. Shorter term residential treatment is much more common, and typically has a focus on detoxification (also known as medically managed withdrawal) as well as providing initial intensive treatment, and preparation for a return to community-based settings.

An alternative to inpatient or residential treatment is partial hospitalization or intensive outpatient treatment. These programs have people attend very intensive and regular treatment sessions multiple times a week early in their treatment for an initial period. After completing partial hospitalization or intensive outpatient treatment, individuals often step down into regular outpatient treatment which meets less frequently and for fewer hours per week to help sustain their recovery.

## Medication

Using medication to treat substance use disorders is often referred to as Medication-Assisted Treatment (MAT). In this model, medication is used in combination with counseling and behavioral therapies. Medications can reduce the cravings and other symptoms associated with withdrawal from a substance by occupying receptors in the brain associated with using that drug (agonists or partial agonists), block the rewarding sensation that comes with using a substance (antagonists), or induce negative feelings when a substance is taken. MAT is has been primarily used for the treatment of opioid use disorder but is also used for alcohol use disorder and the treatment of some other substance use disorders. For more information, see the [joint bulletin on Medication-Assisted Treatment – 2014 \(PDF | 155 KB\)](#).

### Medications for Alcohol Use Disorders

Medications also exist that can assist in the treatment of alcohol use disorder. Acamprosate is a medication that reduces symptoms of protracted withdrawal and has been shown to help individuals with alcohol use disorders who have achieved abstinence go on to maintain abstinence for several weeks to months. Naltrexone, a medication used to block the effects of opioids, has also been used to reduce craving in those with alcohol use disorders. Disulfiram is another medication which changes the way the body metabolizes alcohol, resulting in an unpleasant reaction that includes flushing, nausea, and other unpleasant symptoms if a person takes the medication and then consumes alcohol.

## Medications for Tobacco Use Disorders

There are three medications approved by the Food and Drug Administration (FDA) to treat tobacco use disorders (cigarette smoking). Nicotine replacement medications assist with reducing nicotine withdrawal symptoms including anger and irritability, depression, anxiety, and decreased concentration. Because nicotine delivered through chewing of gum containing nicotine, via transdermal patch, or in lozenges has a slower onset of action than does the systemic delivery of nicotine through smoked tobacco; these medications have little effect on craving for cigarettes. These medications are available over-the-counter. However, the nicotine inhaler and nasal spray deliver nicotine more rapidly to the brain and so are available only by prescription. Bupropion is a medication originally developed and approved as an antidepressant that was also found to help people to quit smoking. This medication can be used at the same dose for either cigarette smoking or depression treatment (or both). Varenicline is a nicotine partial agonist that reduces craving for cigarettes and has been helpful in smoking cessation for many. Bupropion and varenicline are prescription medications.

## Medication for Opioid Use Disorders

Medication-assisted treatment with methadone, buprenorphine, or extended-release injectable naltrexone plays a critical role in the treatment of opioid use disorders. According to the latest survey of opioid treatment providers more than 300,000 people received some form of medication-assisted treatment for an opioid use disorder in 2011.

Opioid agonist therapies with methadone or buprenorphine reduce the effects of opioid withdrawal and reduce cravings. They have been shown to increase retention in treatment and reduce risk behaviors that lead to transmission of HIV and viral hepatitis such as using opioids by injection.

Medication-assisted treatment with extended-release injectable naltrexone reduces the risk of relapse to opioid use and helps control cravings. Extended-release injectable naltrexone is particularly useful for people exiting a controlled setting where abstinence has been enforced such as jail or residential rehabilitation or in situations where maintenance with an opioid agonist is not available or appropriate. People who misuse prescription opioids benefit from medication assisted treatment as much as people abusing heroin.

There are no other FDA-approved medications for the treatment of other substance use disorders.

More information about medication-assisted treatment is available through SAMHSA's [Addiction Technology Transfer Center Network \(link is external\)](#).

## Recovery Support Services

Recovery support services are non-clinical services that are used with treatment to support individuals in their recovery goals. These services are often provided by peers, or others who are already in recovery. Recovery support can include:

- Transportation to and from treatment and recovery-oriented activities
- Employment or educational supports
- Specialized living situations
- Peer-to-peer services, mentoring, coaching
- Spiritual and faith-based support
- Parenting education
- Self-help and support groups
- Outreach and engagement
- Staffing drop in centers, clubhouses, respite/crisis services, or warmlines (peer-run listening lines staffed-by people in recovery themselves)
- Education about strategies to promote wellness and recovery

## Peer Supports

Peers are individuals in recovery who can use their own experiences to help others working towards recovery. Peer supports are a critical component of the substance use disorder treatment system. Many people who work in the treatment system as counselors or case managers are in recovery, and peers are central to many recovery support efforts.

Peers also play a powerful role as a part of mutual-support groups. These groups, including Alcoholics Anonymous or Narcotics Anonymous and other 12-step programs, provide peer support for ending or reducing substance use. They provide an international support network which is relied upon by many people in recovery from substance use disorders. Mutual-support groups are often intentionally incorporated into treatment plans and can provide a ready community for individuals who are trying to change their lifestyles to get away from alcohol and other drugs. While mutual-support groups do not work for everyone and are not a necessary part of recovery, they are a fundamental component of the substance use disorder treatment system, even if they are not considered formal treatment.

## Resources for Specific Substance Use Disorders

### Alcohol Use Disorder

Learn more about medications that can be used to treat alcoholism from the SAMHSA publication



[Incorporating Alcohol Pharmacotherapies into Medical Practice – 2009.](#)

## Cannabis Use Disorder

The [Cannabis Youth Treatment Series](#) is a five-volume resource for substance abuse treatment professionals that provides a unique perspective on treating adolescents for marijuana use.

SAMHSA also developed the [Brief Counseling for Marijuana Dependence: A Manual for Treating Adults – 2005](#), which guides practitioners on how to help adult patients reduce or stop marijuana use through skill building.

## Stimulant Use Disorder

One of the best-known treatment interventions is the Matrix Model, an outpatient treatment approach that was developed during the mid-1980s. SAMHSA has developed a set of materials about the [Matrix Model](#).

SAMHSA's [Treatment Improvement Protocol \(TIP\) #33: Treatment for Stimulant Use Disorders – 2009](#) contains comprehensive information on all aspects of stimulant abuse, including treatment.

## Opioid Use Disorder

Two volumes in the SAMHSA Treatment Improvement Protocol (TIP) series focus on opioid treatment:

- [TIP 40: Clinical Guidelines for the Use of Buprenorphine in the Treatment of Opioid Addiction – 2004](#)
- [TIP 43: Medication Assisted Treatment for Opioid Addiction in Opioid Treatment Programs – 2008](#)

Other SAMHSA materials also provide information about treatment for opioid use disorder: