

## Substance Use Disorder defined by NIDA and SAMHSA:

### NIDA (National Institute on Drug Abuse) defines SUD/Addiction as:

What is drug addiction?

Addiction is defined as a chronic, relapsing disorder characterized by compulsive drug seeking, continued use despite harmful consequences, and long-lasting changes in the brain. It is considered both a complex brain disorder and a mental illness. Addiction is the most severe form of a full spectrum of substance use disorders, and is a medical illness caused by repeated misuse of a substance or substances.

Why study drug use and addiction?

Use of and addiction to alcohol, nicotine, and illicit drugs cost the Nation more than \$740 billion a year related to healthcare, crime, and lost productivity.<sup>1,2</sup> In 2016, drug overdoses killed over 63,000 people in America, while 88,000 died from excessive alcohol use.<sup>3,4</sup> Tobacco is linked to an estimated 480,000 deaths per year.<sup>5</sup> (Hereafter, unless otherwise specified, *drugs* refers to all of these substances.)

How are substance use disorders categorized?

NIDA uses the term *addiction* to describe compulsive drug seeking despite negative consequences. However, *addiction* is not a specific diagnosis in the fifth edition of *The Diagnostic and Statistical Manual of Mental Disorders (DSM-5)*—a diagnostic manual for clinicians that contains descriptions and symptoms of all mental disorders classified by the American Psychiatric Association (APA).

In 2013, APA updated the DSM, replacing the categories of *substance abuse* and *substance dependence* with a single category: *substance use disorder*, with three subclassifications—mild, moderate, and severe. The symptoms associated with a substance use disorder fall into four major groupings: impaired control, social impairment, risky use, and pharmacological criteria (i.e., tolerance and withdrawal).

The new DSM describes a problematic pattern of use of an intoxicating substance leading to clinically significant impairment or distress with 10 or 11 diagnostic criteria (depending on the substance) occurring within a 12-month period. Those who have two or three criteria are considered to have a “mild” disorder, four or five is considered “moderate,” and six or more symptoms, “severe.” The diagnostic criteria are as follows:

1. The substance is often taken in larger amounts or over a longer period than was intended.
2. There is a persistent desire or unsuccessful effort to cut down or control use of the substance.
3. A great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects.
4. Craving, or a strong desire or urge to use the substance, occurs.
5. Recurrent use of the substance results in a failure to fulfill major role obligations at work, school, or home.
6. Use of the substance continues despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of its use.
7. Important social, occupational, or recreational activities are given up or reduced because of use of the substance.
8. Use of the substance is recurrent in situations in which it is physically hazardous.
9. Use of the substance is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.
10. Tolerance, as defined by either of the following:

1. A need for markedly increased amounts of the substance to achieve intoxication or desired effect
  2. A markedly diminished effect with continued use of the same amount of the substance.
11. Withdrawal, as manifested by either of the following:
1. The characteristic withdrawal syndrome for that substance (as specified in the DSM-5 for each substance).
  2. The use of a substance (or a closely related substance) to relieve or avoid withdrawal symptoms.

**Please note:** Some national surveys of drug use may not have been modified to reflect the new DSM-5 criteria of substance use disorders and therefore still report substance abuse and dependence separately

How does NIDA use the terms *drug use*, *misuse*, and *addiction*?

*Drug use* refers to any scope of use of illegal drugs: heroin use, cocaine use, tobacco use. *Drug misuse* is used to distinguish improper or unhealthy use from use of a medication as prescribed or alcohol in moderation. These include the repeated use of drugs to produce pleasure, alleviate stress, and/or alter or avoid reality. *It also includes using prescription drugs in ways other than prescribed or using someone else's prescription.* *Addiction* refers to substance use disorders at the severe end of the spectrum and is characterized by a person's inability to control the impulse to use drugs even when there are negative consequences. These behavioral changes are also accompanied by changes in brain function, especially in the brain's natural inhibition and reward centers. NIDA's use of the term *addiction* corresponds roughly to the DSM definition of substance use disorder. The DSM does not use the term *addiction*.

Why does NIDA use the term "*misuse*" instead of "*abuse*"?

NIDA uses the term *misuse*, as it is roughly equivalent to the term *abuse*. Substance abuse is a diagnostic term that is increasingly avoided by professionals because it can be shaming, and adds to the stigma that often keeps people from asking for help. Substance misuse suggests use that can cause harm to the user or their friends or family.

What is the difference between physical dependence, tolerance, and addiction?

Physical dependence can occur with the regular (daily or almost daily) use of any substance, legal or illegal, even when taken as prescribed. It occurs because the body naturally adapts to regular exposure to a substance (e.g., caffeine or a prescription drug). When that substance is taken away, (even if originally prescribed by a doctor) symptoms can emerge while the body re-adjusts to the loss of the substance. Physical dependence can lead to craving the drug to relieve the withdrawal symptoms. Tolerance is the need to take higher doses of a drug to get the same effect. It often accompanies dependence, and it can be difficult to distinguish the two. Addiction is a chronic disorder characterized by drug seeking and use that is compulsive, despite negative consequences.

How do drugs work in the brain to produce pleasure?

Nearly all addictive drugs directly or indirectly target the brain's reward system by flooding the circuit with dopamine. Dopamine is a neurotransmitter present in regions of the brain that regulate movement, emotion, cognition, motivation, and reinforcement of rewarding behaviors. When activated at normal levels, this system rewards our natural behaviors. Overstimulating the system with drugs, however, produces effects which strongly reinforce the behavior of drug use, teaching the person to repeat it.

Is drug use or misuse a voluntary behavior?

The initial decision to take drugs is generally voluntary. However, with continued use, a person's ability to exert self-control can become seriously impaired. Brain imaging studies from people addicted to drugs

show physical changes in areas of the brain that are critical for judgment, decision-making, learning, memory, and behavior control. Scientists believe that these changes alter the way the brain works and may help explain the compulsive and destructive behaviors of a person who becomes addicted.

Can addiction be treated successfully?

Yes. Addiction is a treatable, chronic disorder that can be managed successfully. Research shows that combining behavioral therapy with medications, if available, is the best way to ensure success for most patients. The combination of medications and behavioral interventions to treat a substance use disorder is known as medication-assisted treatment. Treatment approaches must be tailored to address each patient's drug use patterns and drug-related medical, psychiatric, environmental, and social problems.

**SAMHSA (Substance Abuse and Mental Health Services Administration) defines SUD/addiction as:**

Mental health and substance use disorders affect people from all walks of life and all age groups. These illnesses are common, recurrent, and often serious, but they are treatable and many people do recover. Mental disorders involve changes in thinking, mood, and/or behavior. These disorders can affect how we relate to others and make choices. Reaching a level that can be formally diagnosed often depends on a reduction in a person's ability to function as a result of the disorder. For example:

- Serious mental illness is defined by someone over 18 having (within the past year) a diagnosable mental, behavioral, or emotional disorder that causes serious functional impairment that substantially interferes with or limits one or more major life activities.
- For people under the age of 18, the term "Serious Emotional Disturbance" refers to a diagnosable mental, behavioral, or emotional disorder in the past year, which resulted in functional impairment that substantially interferes with or limits the child's role or functioning in family, school, or community activities.
- Substance use disorders occur when the recurrent use of alcohol and/or drugs causes clinically significant impairment, including health problems, disability, and failure to meet major responsibilities at work, school, or home.

The coexistence of both a mental health and a substance use disorder is referred to as co-occurring disorders. [The National Institute for Mental Health's Mental Health Information page](#) has information about specific conditions and disorders as well as their symptoms.

SAMHSA's mission is to reduce the impact of mental and substance use disorders on America's communities. SAMHSA works to [prevent](#) and [treat](#) mental and substance use disorders and provide [supports for people seeking or already in recovery](#).