

Drugs and Addiction

Drug Definitions

1. Any natural or artificially made chemical that is used as a medicine
2. Any natural or artificially made chemical that is taken for pleasure, to improve someone's performance of an activity, or because a person cannot stop using it

Historical Context

- Egyptians – Recipe for beer-making found on papyrus
- Romans – Bacchanalian feasts celebrating the Greco-Roman god of wine, freedom, intoxication and ecstasy
- Incas – Messengers who ran between the city-states chewed on cocoa leaves (form of cocaine) for energy
- Southwest Native Americans
- *Exception:* Aleutian tribe – Only society known to not have a socially sanctioned drug

Socially Sanctioned Drugs in Our Society

- Caffeine, nicotine, alcohol, (marijuana?)
- All activate the brain's reward system – produce a desired effect (e.g., mood altering, neurotransmitter release, energy)
- The activation of the brain's reward system is central to problems arising from drug use; the rewarding feeling people experience as a result of taking drugs may be so profound that they neglect other normal activities in favor of taking the drug
- While the pharmacological mechanisms for each class of drug are different, the activation of the reward system is similar across substances in producing feelings of pleasure or euphoria, which is often referred to as a “high”



Stages of Addiction

- **Use** – Not tied to a specific incident/outcome
 - Includes experimentation, peer pressure, wanting to be “cool,” curiosity, etc.
- **Abuse** – Tied to a specific outcome (e.g., mood altering); agency/choice reduced
 - Goal to change how you feel (e.g., numbing, not feel uncomfortable emotion)
 - Pleasure centers activated
- **Addiction** – Choice is severely limited
 - Absence results in craving for the substance/activity
 - “Normal” now felt only under the influence (withdrawal)
 - Takes more of the substance/activity to produce the desired effect (tolerance)

Understanding Addiction

- An addiction (the need to use a substance or perform a behavior repeatedly) usually develops over time
 - Can be easy not notice at first
 - As the problem grows, the chances of losing everything important multiply
 - Individuals can become addicted to many things—not just substances
- A person may become addicted to:
 - Illegal drugs such as cocaine, heroin, and methamphetamine
 - Legal drugs such as cigarettes, alcohol, and prescription medications
 - Activities of daily life such as working, eating, and having sex
 - Leisure activities such as gambling, watching television, and playing video games

What Causes Addiction?

- Addiction is a complex disease influenced by:
 - Genetics (50% increased risk when parent or grandparent was addicted)
 - Changes to “brain chemistry” and dopamine production effecting mood and cravings/urges
 - Ineffective or unhealthy coping skills
 - Social routines or pressure

DSM–5 Criteria for Substance Use Disorder

The Diagnostic and Statistical Manual of Mental Disorders (DSM–5) lists the following as symptoms of substance use disorder:

1. Taking the substance in larger amounts or for longer than you're meant to.
2. Wanting to cut down or stop using the substance but not managing to.
3. Spending a lot of time getting, using, or recovering from use of the substance.
4. Cravings and urges to use the substance.
5. Not managing to do what you should at work, home, or school because of substance use.
6. Continuing to use, even when it causes problems in relationships.
7. Giving up important social, occupational, or recreational activities because of substance use.
8. Using substances again and again, even when it puts you in danger.
9. Continuing to use, even when you know you have a physical or psychological problem that could have been caused or made worse by the substance.
10. Needing more of the substance to get the effect you want (tolerance).
11. Development of withdrawal symptoms, which can be relieved by taking more of the substance.

Two or three symptoms indicate a mild substance use disorder; four or five symptoms indicate a moderate substance use disorder, and six or more symptoms indicate a severe substance use disorder.

What is Substance Use Disorder?

- Excessive and compulsive use of alcohol or drugs
- Causes health problems or disability
- Limits ability to meet responsibilities
- A disease
 - Not a failure of will or weakness of character
- Life-threatening
- **TREATABLE**

Types of Addictions

- Substance use disorders
 - The DSM–5 recognizes disorders resulting from the use of 10 separate classes of drugs: alcohol; caffeine; cannabis; hallucinogens, inhalants; opioids; sedatives, hypnotics, stimulants, and tobacco
- Non-substance use disorders (process addictions)
 - E.g., gambling, pornography, sexual excitation, shopping, work, gaming, social media

U.S. Statistics

- Current drug use in the U.S. per Centers for Disease Control and Prevention (CDC):
 - 5 million users of cocaine
 - 1.4 millions user of methamphetamine
 - 37.6 million users of cannabis
- Marijuana legalization
 - 10 states have legalized recreational use
 - 23 states have legalized medicinal use

Alcohol Use in the U.S.

- **YES – ALCOHOL IS A DRUG**
- According to the 2015 National Survey on Drug Use and Health, 86.4 percent of people ages 18+ reported drinking alcohol at some point in their lifetime; 70.1 percent reported drinking in the past year; 56.0 percent reported drinking in the past month
- An estimated 88,000 die from alcohol-related causes annually, making alcohol the third leading preventable cause of death in the United States
- In 2010, alcohol misuse cost the United States \$249.0 billion

Binge Drinking in the U.S.

- Binge drinking is defined as a pattern of drinking that brings a person's blood alcohol concentration (BAC) to 0.08 grams percent or above. This typically occurs after consuming five or more drinks for men, or four or more drinks for women, in about two hours.
- One in six U.S. adults binge drinks about four times a month, consuming about seven drinks per binge.
- U.S. adults consume an estimated 17 billion binge drinks annually (about 470 binge drinks per binge drinker).
- Binge drinking is most common among younger adults aged 18–34 years, but more than half of the total binge drinks are consumed by those aged 35 and older

Underage Drinking in the U.S.

- Alcohol is the most commonly used and abused drug among youth in the U.S.
- Excessive drinking is responsible for more than 4,300 deaths among underage youth each year.
- Although drinking by persons under the age of 21 is illegal, people aged 12 to 20 years drink 11% of all alcohol consumed in the United States. More than 90% of this alcohol is consumed in the form of binge drinks.
- In 2013, there were approximately 119,000 emergency rooms visits by persons aged 12 to 21 for injuries and other conditions linked to alcohol.

Alcoholism Treatment

- Detox
- 12 Step or other support group
- Medication-assisted treatment (MAT)
- Residential
- Outpatient
- Partial hospitalization

For help, contact the Caterpillar EAP:

- [CaterpillarEAP.com](https://www.CaterpillarEAP.com)
- 1-866-CAT(228)-0565

