**What is heroin?**

Heroin is an opiate/depressant drug processed from morphine, a naturally occurring substance in the Asian poppy plant. Morphine has been used as a narcotic for thousands of years.

According to the Drug Enforcement Agency (DEA), heroin is a narcotic that can be injected, smoked or snorted. It comes from the opium poppy grown in Southeast Asia (Thailand, Laos and Myanmar—Burma); Southwest Asia (Afghanistan and Pakistan), Mexico and Colombia. Heroin comes in several forms, the main ones being "black tar" from Mexico and white heroin from Colombia. In the past, heroin was mainly injected. Because of the high purity of the Colombian heroin, many users now snort or smoke heroin. All of these methods can lead to addiction, and the use of intravenous needles can result in the transmission of HIV or hepatitis C.

Common names for heroin include horse, chiva, smack, junk, H, mud and China white.

**Legal Status:**

Heroin is illegal and classified by the federal government as a Schedule I narcotic under the Controlled Substances Act, meaning that it has a high potential for abuse and no legitimate medical use in the United States.

**Prevalence:**

According to the 2012 National Survey on Drug Use and Health, more than 4.5 million Americans aged 12 or older reported trying heroin at least once during their lifetime. The number of past year heroin users increased between 2007 (373,000) and 2012 (669,000).

**How is heroin used?**

Heroin can be injected, inhaled by snorting or sniffing or smoked. All three methods deliver the drug to the brain very rapidly and can lead to addiction. The use of intravenous needles to inject heroin can result in the transmission of HIV or hepatitis C.

**What does it feel like?**

Immediately after it is taken, heroin causes the user to feel a pleasurable sensation, or a "rush." It produces a deep, dreamlike state of relaxation and reduces anxiety.

**What are its short-term effects?**

Heroin’s short-term effects appear within seconds after dosing and disappear in a few hours. A heroin user may experience these effects:

- Heroin "rush"—a sudden surge of warmth flooding the body
- Slowing of heartbeat and breathing
- Euphoria
- Slurred speech
- Sensation of heavy arms and legs
- Alternating sleepiness with awareness known as being "on the nod"
- Pinpoint pupils
- Droopy eyelids
- Vomiting
- Constipation

**What are its long-term effects?**

- Collapsed veins, infections of the heart lining, cellulitis, liver disease
- Various types of pneumonia (from depleted respiratory system)
- Infections of the lungs, liver, kidneys and brain due to impurities in the heroin
- In addition to the effects of the drug itself, street heroin often contains toxic contaminants or additives that can clog blood vessels leading to the lungs, liver, kidneys, or brain, causing permanent damage to vital organs.

**Is it addictive?**

All forms of heroin are extremely addictive, even after just a few uses. The body adapts to the presence of the drug, causing a physical dependence. Heroin users soon find they need larger doses to achieve the same high they originally felt. Soon, they are using the drug as a way to avoid feeling withdrawal, rather than as a way to get high.

**What is withdrawal?**

If a dependent user reduces or stops use of the drug abruptly, he or she may experience severe symptoms of withdrawal. These symptoms—which can begin as early as a few hours after the last drug administration—can include restlessness, muscle and bone pain, insomnia, diarrhea and vomiting, cold flashes with goose bumps ("cold turkey"), and kicking movements ("kicking the habit"). Users also experience severe craving for the drug during withdrawal, which can lead to continued abuse and/or relapse.

**Special Risks of Injection Drug Use**

Injection drug use refers to when a drug is injected into a tissue or vein with a needle. When injection drug users share "equipment"—such as needles, syringes, and other drug injection tools—diseases can be transmitted through contact with blood or other bodily fluids.

People who inject heroin are at high risk of contracting HIV (human immunodeficiency virus), the virus that causes AIDS (acquired immune deficiency syndrome). AIDS is a progressive disease of the immune system. Treatment options exist but AIDS is still incurable.

Other infections—such as hepatitis C—can also be spread this way. Hepatitis C, the most common blood-borne infection in the United States, can cause liver disease and permanent liver damage.
Stimulants Notes

The process of addiction begins when a person tries heroin for the first time. Heroin targets specific opiate receptors in the brain, blocking pain and producing a calming effect. After repeated use, these receptors get overstimulated and it becomes harder for the drug user to get high. As a result, the user takes more of the drug to get the original effect. This is called tolerance.

As heroin use continues, the brain is tricked into believing the drug’s presence is normal—it cannot physically function without the drug. At this point, receptors in the brain have become so stimulated, it becomes hard for the user to feel pleasure in ordinary ways. The user no longer uses heroin to feel good, he or she takes the drug merely to feel normal. This is called dependence.

Some people move from dependence to addiction, defined as a compulsive need for the drug. The user will neglect everything else in life—family, friends, hygiene, even eating—to get the drug. The addict’s brain has been so changed by heroin that the person has no real control over his or her drug use.

If an addict tries to reduce or stop use, he or she will experience unpleasant symptoms—including nausea, sweating, diarrhea, muscle and bone pain—as the body struggles to adjust to the absence of the drug. These symptoms are called withdrawal.

An overdose occurs when someone (accidentally or on purpose) takes too much of the drug for the body to handle. Mixing heroin with other drugs or using it with alcohol greatly increases the risk of overdose. A heroin overdose can kill by slowing down breathing or causing heart failure.

If you suspect that a friend is using heroin, look for these warning signs:
- Covering up injection marks by wearing long-sleeved shirts or long pants, even in summer
- Track marks or bruises at injection sites (arms, legs, between toes)
- Change in eating or sleeping
- Easily irritated or depressed
- Poor concentration and focus
- Losing interest in school
- Intense craving for sweets
- Money or valuables disappearing

WHAT ARE STIMULANTS?

Stimulants are drugs that speed up the activity of the central nervous system. These drugs temporarily increase alertness and may cause a feeling of euphoria. Caffeine and tobacco are legal stimulants that produce a mild effect, compared to other stimulant drugs. Stimulants like cocaine, amphetamines and methamphetamine are illegal and highly addictive.

THE NATURAL HIGH

When you feel good, it’s because a series of chemical reactions has occurred in the area of your brain that controls pleasure. This is known as a natural high. The brain’s pleasure center normally works like this:

When something good happens, nerve cells called neurons release a chemical neurotransmitter called dopamine.

Dopamine attaches itself to other neurons, spreading the “good news.”

The more neurons release dopamine, the greater the high.

Once the high is over, the brain sends a signal instructing the neurons to turn off the dopamine flow.

THE STIMULANT HIGH

When the brain’s pleasure center is flooded with a stimulant (such as cocaine or amphetamine), the chemical reaction is much different:

Step 1: Stimulants cause the brain’s neurons to produce extra dopamine. The dopamine flows freely and the user feels a tremendous high until the stimulant wears off.

Step 2: The overactivated neurons begin to produce less dopamine. To get high again, the user must use more of the drug to produce the same high as before.

Step 3: The brain’s pleasure center is so depleted of dopamine that no pleasure is felt without the stimulant. This process is called tolerance and leads to addiction.
**Stimulants Notes**

**SIGNS OF STIMULANT ABUSE**
These are typical signs of stimulant drug abuse:
- sudden mood changes
- overreaction to criticism
- sudden weight loss
- change in appearance
- loss of interest in sports or hobbies
- slurred speech
- drop in grades
- lack of coordination
- paranoid behavior
- withdrawal from friends and family

**SHORT-TERM EFFECTS**
Stimulants are designed to speed up the body’s responses.
Short-term effects include:
- rapid heartbeat
- dizziness
- anxiety
- dilated pupils
- redness
- increased appetite
- loss of coordination
- blurred vision
- rapid breathing
- decreased appetite
- elevated blood pressure

**LONG-TERM EFFECTS**
People who abuse stimulants are at risk of these long-term effects:
- addiction
- hyperactive behavior
- aggressiveness
- malnutrition
- paranoid psychosis
- inability to combat infection
- bronchitis and other respiratory illnesses
- hepatitis or HIV infection (from shared needles)
- damage to the nasal cartilage (from snorting)

**COCAINE**
*Coca* is one of the most addictive drugs on the planet.
The leaves of the South American coca bush are processed into a paste and heated with hydrochloric acid to create a white powder.
A cocaine high usually lasts 5-30 minutes.
It is also known as *coca*, *snow*, or *blow*.

**COCAINE**
How it is used: Cocaine is typically snorted through the nose or injected into a vein with a needle.
When snorted, cocaine powder is chopped with a razor, arranged in lines on a smooth surface and then snorted through a rolled-up tube of paper such as a dollar bill.
When injected, cocaine is first dissolved in water and then injected into a vein.
The risk of overdose or seizure is high because the cocaine floods the system and reaches the brain immediately.

**FREEBASE COCAINE**
*Freebase cocaine* is a form of cocaine that has been dissolved in highly explosive solvents in order to draw out its impurities.

How it is used: The vaporized cocaine is heated and then inhaled through a glass tube or pipe.
**CRACK COCAINE**

*CRACK COCAINE* is a type of freebase cocaine made by heating cocaine with ammonia or baking soda until it forms small pellets known as *rocks*.

- Because crack is so potent and cheap, crack abuse has become widespread.
- Even a first-time user can suffer a brain seizure, heart attack or stroke.

**How it is used:** The cocaine pellets are heated in a pipe or glass tube until they evaporate into smoke. This smoke is inhaled. Crack reaches the brain in less than 8 seconds. The high lasts only 15 minutes.

---

**AMPHETAMINES**

*AMPHETAMINES* speed up the central nervous system.

- Popular street names include speed, crack, crack, crack, crystal, and uppers.
- Certain amphetamines can be legally prescribed by physicians.
- Most abused amphetamines are synthesized in illicit labs and are sold on the street in the form of crystals, chunks, powders or capsules.

**How they are used:** Amphetamines can be inhaled or mixed with water and injected. Capsules and tablets are taken orally. One dose usually lasts 6-8 hours.

---

**METHAMPHETAMINE**

*METHAMPHETAMINE* (or *meth*) is the most potent and dangerous form of amphetamines.

- Meth affects several areas of the brain at the same time, making it even more dangerous than cocaine or other amphetamines.
- The high usually lasts 8-24 hours.

**How it is used:** Meth may be swallowed, snorted or injected.

---

**ICE**

*ICE* is a concentrated form of meth that looks like tiny chunks of translucent glass. Its smoke is colorless and colorless.

- The high may last 2-20 hours.
- **How it is used:** Just as crack is a smokable form of cocaine, ice is a smokable form of meth.
- Ice is more powerful and addictive than crack.

---

**THE BINGE ABUSE CYCLE**

People who abuse stimulants quickly find themselves locked in a terrifying cycle of highs and lows that begins as soon as the drug enters the bloodstream.

- **Rush** (5-30 minutes): Heartbeat races, blood pressure soars. The user feels intense pleasure.
- **High** (4-15 hours): Rush is replaced with exaggerated feelings of power and aggressiveness.
- **Binge** (3-15 days): User becomes physically and mentally hyperactive and must continue using the drug to maintain the high.
- **Tweaking** (3-15 days): The user stops sleeping and becomes paranoid as well as hypertensive. Cravings intensify, but no amount of the drug satisfies.
- **Crash** (1-3 days): User is exhausted physically and emotionally. Long periods of restless sleep are interrupted only by severe hunger.
- **Almost Normal** (2-14 days): If no more stimulants are used, there is a brief return to an almost normal state—but it doesn’t last.

**Withdrawal** (30-90 days): Deep depression and intense drug cravings often lead to suicidal tendencies. It’s easy for the user to fall back into the cycle, since taking the drug will provide relief from withdrawal.
**STIMULANTS AND THE LAW**

Possession of illegal stimulants like cocaine, amphetamines or methamphetamine is a federal crime that carries a mandatory prison sentence.

Supplying these drugs to others carries even higher penalties.

In certain states, a person guilty of dealing stimulant drugs may be sentenced to life in prison.

---

**SAYING NO**

Don’t give in to peer pressure. Be a role model and show others that life is better drug-free.

Don’t let anyone talk you into trying “just once.” Remember, most stimulants are very addictive.

Don’t listen to anyone who says drugs are cool. Heart attacks, seizures and jail time are not cool.

Don’t glorify media stars who use drugs.

Don’t believe that you can solve your problems with drugs. They will only make your problems much worse.

---

**HOW TO HELP A FRIEND**

If you have a friend with a drug problem, do something about it.

- Share what you know. Your friend may not be aware of the dangers.
- Listen to your friend’s problems. Be encouraging.
- Explain how you have dealt with similar situations.
- Urge your friend to seek help.

**National Drug and Alcohol Referral Hotline**

800-662-HELP