



# Cocaine

*Street names: Blow, Coke, Crack*

EXPAND ALL

**Revised March 2017**

## What is cocaine?

**Also known as:** Blow, Bump, C, Candy, Charlie, Coca, Coke, Flake, Rock, Snow, and Toot



Cocaine is an addictive stimulant drug made from the leaves of the coca plant native to South America. Cocaine comes in two forms:

- **Powder cocaine** is a white powder (which scientists call a hydrochloride salt). Street dealers often mix cocaine with other substances like cornstarch, talcum powder, or sugar. They also mix cocaine with active drugs like procaine, a local anesthetic (a chemical that causes you not to feel pain in a specific area of the body), and with other stimulants like amphetamines.
- **Crack** is a form of cocaine that has been processed to make a rock crystal that people smoke. The term “crack” refers to the cracking sound the rocks make when they are heated.

## How Cocaine is Used

There are a few different ways that cocaine can enter the body: through the nose by snorting, and directly into the blood stream by injecting it or through the gums. The crystal of crack is heated in a glass pipe to produce vapors that are absorbed into the blood through the lungs.

## What happens to your brain when you use cocaine?

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All drugs change the way the brain works by changing the way nerve cells communicate. Nerve cells, called neurons, send messages to each other by releasing chemicals called neurotransmitters. These neurotransmitters attach to molecules on neurons called receptors. (Learn more about how [neurotransmitters](#) work.) Drugs affect this signaling process.

There are many neurotransmitters, but [dopamine](#) is the main one that makes people feel good when they do something they enjoy, like eating a piece of chocolate cake or playing a video game. Normally, dopamine gets recycled back into the cell that released it, thus shutting off the signal. Stimulants like cocaine prevent the dopamine from being recycled, causing a buildup of the neurotransmitter in the brain. It is this flood of dopamine that causes cocaine’s high. The drug can cause a feeling of intense pleasure and increased energy.

With repeated use, stimulants like cocaine can disrupt how the brain’s dopamine system works, reducing a person’s ability to feel pleasure from normal, everyday activities. People will often develop *tolerance*, which means they must take more of the drug to get the desired effect. If a person becomes addicted, they may take the drug just to feel “normal.”

After the "high" of the cocaine wears off, many users experience a "crash" and feel tired or sad for days. They also experience a strong craving to take cocaine again to try to feel better.

Learn more about [how the brain works and what happens when a person uses drugs](#). And, check out how the brain responds to natural rewards and to drugs.

The Reward Circuit: How the Brain Responds to Co...

## What happens to your body when you use cocaine?

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The surge of dopamine in the brain affects the body in a variety of ways:

- constricted blood vessels and dilated pupils
- higher body temperature
- higher blood pressure and faster heartbeat
- feeling sick to the stomach
- restlessness
- decreased appetite and, over time, a loss of weight
- inability to sleep

## Can you overdose or die if you use cocaine?

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Yes. In 2015, nearly 7,000 people died from a cocaine overdose. Males are much more likely to die in this way than are females.<sup>1</sup>

Cocaine can be deadly when taken in large doses or when mixed with other drugs or alcohol. Cocaine-related deaths often happen because the heart stops (cardiac arrest), then breathing

stops. Using cocaine and drinking alcohol or using other drugs increases these dangers, including the risk of overdose. For example, combining cocaine and heroin (known as a “speedball”) puts a person at higher risk of death from an overdose. In rare instances, sudden death can occur on the first use of cocaine or soon after.

Learn more about [drug overdoses in youth](#).

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<sup>1</sup> Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2015 on CDC WONDER Online Database, released 2016. Available at <http://wonder.cdc.gov>.

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## What are the other risks of using cocaine?

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How cocaine is used leads to different physical problems, including:

- snorting: hoarse voice, loss of the sense of smell, nosebleeds, and a constant runny nose
- taken by mouth: reduced blood flow in your intestines, leading to bowel problems
- needle injection: higher risk of getting HIV, hepatitis C (a liver disease), and other diseases transmitted by blood contact

In addition, people who use cocaine are at increased risk for:

- heart attack or stroke due to high blood pressure
- HIV because of impaired judgment leading to risky sexual behavior
- strange, unpredictable behavior, panic attacks, or paranoid psychosis (losing touch with reality)

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## Can you get addicted to cocaine?

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Yes, repeated cocaine use can lead to addiction. Addiction is a devastating brain disease in which people can't stop using drugs even when they really want to and even after it causes terrible consequences to their health and other parts of their lives.

Because a cocaine high usually doesn't last very long, people take it again and again to try to keep feeling good. Once addicted, people who are trying to quit taking cocaine might experience *withdrawal* symptoms, including:

- depression
- feeling very tired
- increased appetite
- bad dreams and trouble sleeping
- slowed thinking

The right treatment, however, can help an addicted person control their cravings and stop using cocaine.

## How many teens use cocaine?

Below is a chart showing the percentage of teens who use cocaine.

### Monitoring the Future Study: Trends in Prevalence of Various Drugs for 8th Graders, 10th Graders, and 12th Graders; 2016 (in percent)\*

Drug	Time Period	8th Graders	10th Graders	12th Graders
Cocaine	Lifetime	1.40	2.10	3.70
	Past Year	0.80	1.30	2.30
	Past Month	0.30	0.40	0.90
Crack Cocaine	Lifetime	0.90	0.80	1.40
	Past Year	0.50	[0.40]	0.80
	Past Month	0.20	0.20	0.50

\* Data in brackets indicate statistically significant change from the previous year.

For more statistics on teen drug use, see [NIDA's Monitoring the Future study](#).

## What should I do if someone I know needs help?

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If you see or hear about someone misusing opioids, talk to a coach, teacher, or other trusted adult.

If you, or a friend, are in crisis and need to speak with someone now, please call:

- **National Suicide Prevention Lifeline at 1-800-273-TALK** (they don't just talk about suicide—they cover a lot of issues and will help put you in touch with someone close by).

If you need information on treatment and where you can find it, you can call:

- **Substance Abuse Treatment Facility Locator at 1-800-662-HELP** or visit [www.findtreatment.samhsa.gov](http://www.findtreatment.samhsa.gov).

For more information on how to help a friend or loved one, visit our [Have a Drug Problem, Need Help? page](#).

## Where can I get more information?

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### Drug Facts

#### NIDA:

- [Commonly Abused Drugs Chart](#)
- [DrugFacts: Cocaine](#)
- [Mind Over Matter Teaching Guide and Series: Cocaine](#).
- [NIDA Notes Articles: Cocaine](#)
- [NIDA Notes Articles: Stimulants](#)
- [Research Report Series: Cocaine](#)

### Statistics and Trends

#### NIDA:

- [DrugFacts: High School and Youth Trends](#)

## Centers for Disease Control and Prevention

- [Youth Risk Behavior Surveillance System](#)

## Monitoring the Future (University of Michigan):

- [Monitoring the Future](#)

## Substance Abuse and Mental Health Services Administration:

- [National Survey on Drug Use and Health](#)

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