

# Cocaine

## Cocaine

Cocaine is a powerfully addictive stimulant. It is an illegal drug but it can be given by health care providers as a local anesthetic for some eye, ear and throat surgeries.

As a street drug, cocaine is known as “coke,” “C,” “snow,” “flake” and “blow,” among others. Street dealers generally sell cocaine as a fine, white crystalline powder (hydrochloride salt) that may be injected (as a liquid), snorted (as a powder) or inhaled (as vapor or smoke).

Dealers usually mix other substances with the cocaine to make it weaker (diluted). They may add cornstarch, talcum powder, sugar, a local anesthetic or other stimulants such as amphetamines.

## Crack

Crack is the freebase, or crystal, form of cocaine that is smoked. Users mix it with ammonia or baking soda and water, and heat it to remove the hydrochloride salt. The result is a form of cocaine that can be smoked. (The name “crack” comes from the crackling sound heard when the mixture is heated.)

Cocaine powder or crack combined with heroin is known as a speedball.

## Addiction

Addiction to cocaine or crack can occur after only one use. Cocaine disrupts the way the brain releases dopamine, a chemical that provides pleasure. A buildup of dopamine gives the user feelings of pleasure (euphoria).

When taking cocaine in small amounts, the user feels energetic, talkative and mentally alert. These feelings appear almost right away and disappear within a few minutes or hours.

The euphoric high from crack occurs in fewer than 10 seconds. The faster the cocaine is absorbed by the body, the more intense the high.

When taking cocaine in large amounts, the user may have strange and violent behavior, tremors, dizziness (vertigo), muscle twitches, paranoia or feelings of restlessness and anxiety. The user may be a danger to self and others.

After coming down from the high, the user crashes with intense feelings of depression and the need for more cocaine. Some users need more cocaine to get the same level of pleasure as the first use. This process is known as tolerance.

People addicted to cocaine lose interest in things they previously enjoyed. They eat and sleep less than normal, which can lead to weight loss and malnourishment.

## Effects of Cocaine Use

Cocaine can cause the following effects.

### ■ Short-term:

- increased energy
- decreased appetite
- mental alertness
- increased heart rate and blood pressure
- smaller (constricted) blood vessels
- increased temperature
- dilated pupils.

### ■ Long-term:

- addiction
- irritability and mood disturbances
- restlessness
- paranoia
- hallucinations (heard, not seen).

## Medical Complications

A single dose of cocaine can cause a heart attack, stroke, seizure, respiratory failure or abdominal pain. Snorting can cause nosebleeds, trouble swallowing, runny nose, hoarseness and loss of sense of smell.

Injecting can cause an allergic reaction and put the user at risk for other diseases such as HIV and hepatitis B and C.

Taking cocaine while pregnant puts the baby at risk for a low birth weight, smaller head circumference and shorter length.

Death can occur after the first use or after many years of use.

## Treatment

There is no medicine to treat cocaine addiction. The best available treatment is behavioral therapy. The user may have therapy as an outpatient or while staying at a health care facility. As part of therapy, the user may have:

### ■ contingency management:

The user gets rewards for staying in treatment and remaining cocaine-free. Earning points for drug-free urine tests, the user can exchange the points for items that encourage healthy living.

### ■ cognitive-behavioral therapy:

The user learns coping skills to help break the cycle. This type of therapy teaches the user to recognize the situations in which he or she is most likely to use cocaine, how to avoid those situations and how to cope with the problems that go with drug abuse.

Residential programs help the user get back into society, work-related rehabilitation and other supportive services.

**Information adapted from the White House Office of National Drug Control Policy and the National Institute on Drug Abuse.**