

COCAINE

Cocaine is powerfully addictive stimulant that directly affects the brain and central nervous system. It is also considered a narcotic. It is one of the oldest known drugs. Cocaine is a Schedule II drug, meaning that it has high potential for abuse, but can be administered by a doctor for legitimate medical uses, such as a local anesthetic for some eye ear and throat surgeries. Cocaine comes from the leaves of the coca plant



Slang Terms

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| ➤ Coke | ➤ Blow |
| ➤ Crack | ➤ Snow |
| ➤ C | ➤ Flake |
| ➤ Dust | ➤ Nose candy |
| ➤ Toot | ➤ Bernice |
| ➤ Bloke | ➤ Dream |

There are two chemical forms of cocaine: The hydrochloride salt and the "freebase". The hydrochloride salt, or powdered form of cocaine, when abused, is inhaled through the nose or applied directly to the nasal membranes or gums. When dissolved in water, cocaine is injected intravenously. Freebase refers to a compound that has not been neutralized by an acid to the hydrochloride salt and is usually smoked. Cocaine is a fine, white, crystalline powder known as, among other things, "coke". Crack is the street name given to the freebase form of cocaine that has been processed from the powdered cocaine to a smokeable substance. The term "crack" refers to the crackling sound heard when the

mixture is smoked. Crack cocaine is processed with ammonia or baking soda and water, and heated to remove the hydrochloride.

Cocaine belongs to a class of drugs known as stimulants, which tend to give a temporary illusion of limitless power and energy that leave the user feeling depressed, edgy and craving more. Having tried cocaine once, an individual cannot predict or control the extent to which s/he will continue to use the drug. This addiction can erode physical and mental health and can become so strong that these drugs dominate all aspects of an addict's life. Most clinicians estimate that approximately 20 percent of people who begin to use cocaine "recreationally" will go on to serious heavy use. According to the 1997 National Household Survey on Drug Abuse (NHSDA), an estimated 1.5 million Americans were current cocaine users.

Effects of Cocaine Use

Short-term Effects

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| ➤ Increase energy | ➤ Decreased appetite |
| ➤ Mental alertness | ➤ Increased heart rate |
| ➤ Constricted blood vessels | ➤ Increased blood pressure |
| ➤ Increased temperature | ➤ Dilated pupils |

Cocaine's effects appear almost immediately after a single dose, and disappear with a few minutes or hours. Taken in small amounts, cocaine usually makes the user feel euphoric, energetic, talkative, and mentally alert, especially to the sensations of sight, sound and

touch. It can also temporarily decrease the need for food and sleep. Some users find that the drug helps them to perform simple physical and intellectual tasks more quickly, while others can experience the opposite effect. The duration of cocaine's immediate euphoric effects depends upon the route of administration (oral, intranasal, intravenous, or inhalation). The faster the absorption, the more intense the high and the shorter the duration of the action. The high from snorting (intranasal) is relatively slow on onset and may last 15 to 30 minutes, while that from smoking may last 5 to 10 minutes.

The short-term physiological effects of cocaine include constricted blood vessels, dilated pupils, increased temperature, increased heart rate, and increased blood pressure. Large amounts intensify the user's high but also may lead to bizarre, erratic and violent behavior. These users experience tremors, vertigo, muscle twitches, paranoia, or with repeated doses, a toxic reaction resembling amphetamine poisoning. Some users report feelings of restlessness, irritability, and anxiety. In rare instances, sudden death can occur on the first use or unexpectedly thereafter. Cocaine-related deaths are often a result of cardiac arrest or seizures followed by respiratory arrest.

Long-term Effects	
➤ Addiction	➤ Irritability
➤ Mood disturbances	➤ Restlessness
➤ Paranoia	➤ Auditory hallucinations

Cocaine is a powerfully addictive drug. Once having tried cocaine, an individual may have difficulty predicting or controlling the extent to which they will continue to use the drug. Cocaine's stimulant and addictive effects are thought to be primarily a result of its ability to inhibit the reabsorption of dopamine by nerve cells. Dopamine is released as part of the brain's reward system, and is either directly or indirectly involved in the addictive properties of every major drug of abuse. An appreciable tolerance to cocaine's high may develop. Users can also become more sensitive to cocaine's anesthetic and convulsant effects without increasing the dosage. Going on a "binge", during which the drug is taken repeatedly and at increasingly high doses, leads to a state of increasing irritability, restlessness and paranoia. This may result in a full-blown paranoid psychosis, in which the individual loses touch with reality and experiences auditory hallucinations.

Medical Complications

Medical Consequences
➤ Cardiovascular effects <ul style="list-style-type: none"> ○ Disturbance in heart rhythm ○ Heart attack
➤ Respiratory effects <ul style="list-style-type: none"> ○ Chest pain ○ Respiratory failure
➤ Neurological effects <ul style="list-style-type: none"> ○ Strokes ○ Seizures ○ Headaches
➤ Gastrointestinal complications <ul style="list-style-type: none"> ○ Abdominal pain ○ Nausea

There are enormous medical complications associated with cocaine use. Some of the most frequent complications include disturbance in heart rhythm and heart attacks. It affects the respiratory system that causes chest pain and respiratory failure. It also affects the neurological system including strokes, seizures and headaches. Cocaine use can also cause abdominal pain and nausea.

Source: National Institute on Drug Abuse Research Report Series: Cocaine Abuse and Addiction, May 1999

Different routes of cocaine administration can produce different adverse effects. Regularly snorting cocaine can lead to loss of sense of smell, nosebleeds, problems with swallowing, hoarseness, and an overall irritation of the nasal septum. Ingested cocaine can cause severe bowel gangrene, due to reduced blood flow. Intravenous users may experience allergic reactions, either to the drug, or some additive, which can result in death. Because cocaine has a tendency to decrease food intake, many chronic users lose their appetites and can experience significant weight loss and malnourishment.

Treatment

Treatment for cocaine addiction is a combination of medication and behavioral interventions including cognitive behavioral therapy. Because cocaine addiction involves biological changes in the brain as well as a myriad of social, familial and environmental factors, treatment of cocaine addiction addresses the psychobiological, social, and pharmacological aspects of a person's drug abuse.