

Powder Cocaine Crack Cocaine Crack Cocaine

Cocaine is a powerfully addictive drug of abuse. Once having tried cocaine, an individual cannot predict or control the extent to which he or she will continue to use the drug.

The major routes of administration of cocaine are sniffing or snorting, injecting, and smoking (including free-base and crack cocaine). Snorting is the process of inhaling cocaine powder through the nose where it is absorbed into the bloodstream through the nasal tissues. Injecting is the act of using a needle to release the drug directly into the bloodstream. Smoking involves inhaling cocaine vapor or smoke into the lungs where absorption into the bloodstream is as rapid as by injection.

"Crack" is the street name given to cocaine that has been processed from cocaine hydrochloride to a free base for smoking. The term "crack" refers to the crackling sound heard when the mixture is smoked (heated), presumably from the sodium bicarbonate.

There is great risk whether cocaine is ingested by inhalation (snorting), injection, or smoking. It appears that compulsive cocaine use may develop even more rapidly if the substance is smoked rather than snorted. Smoking allows extremely high doses of cocaine to reach the brain very quickly and brings an intense and immediate high. The injecting drug user is at risk for transmitting or acquiring HIV infection/AIDS if needles or other injection equipment are shared.

Health Hazards

Cocaine is a strong central nervous system stimulant that interferes with the re-absorption process of dopamine, a chemical messenger associated with pleasure and movement. Dopamine is released as part of the brain's reward system and is involved in the high that characterizes cocaine consumption.

Physical effects of cocaine use include constricted peripheral blood vessels, dilated pupils, and increased temperature, heart rate, and blood pressure. The duration of cocaine's immediate euphoric effects, which include hyperstimulation, reduced fatigue, and mental clarity, depends on the route of administration. The faster the absorption the more intense the high. On the other hand, the faster the absorption, the shorter the duration of action. The high from snorting may last 15 to 30 minutes, while that from smoking may last 5 to 10 minutes. Increased use can reduce the period of stimulation.

Some users of cocaine report feelings of restlessness, irritability, and anxiety. An appreciable tolerance to the high may be developed, and many addicts report that they seek but fail to achieve as much pleasure as they did from their first exposure. Scientific evidence suggests that the powerful neuropsychological reinforcing property of cocaine is responsible for an individual's continued use, despite harmful physical and social consequences. In rare instances, sudden death can occur on the first use of cocaine or unexpectedly thereafter. However, there is no way to determine who is prone to sudden death.

High doses of cocaine and/or prolonged use can trigger paranoia. Smoking crack cocaine can produce a particularly aggressive paranoid behavior in users. When addicted individuals stop using cocaine, they often become depressed. This also may lead to further cocaine use to alleviate depression. Prolonged cocaine snorting can result in ulceration of the mucous membrane of the nose and can damage the nasal septum enough to cause it to collapse. Cocaine-related deaths are often a result of cardiac arrest or seizures followed by respiratory arrest.

Added Danger: Cocaethylene

When people mix cocaine and alcohol consumption, they are compounding the danger each drug poses and unknowingly forming a complex chemical experiment within their bodies. NIDA-funded researchers have found that the human liver combines cocaine and alcohol and manufactures a third substance, cocaethylene, that intensifies cocaine's euphoric effects, while possibly increasing the risk of sudden death.