

COCAINE ABUSE

Cocaine is a drug extracted from the leaves of the cocoa plant. It is one of the most powerfully addictive drugs of abuse. An individual who has tried cocaine just once cannot predict or control the extent to which he or she will continue to use the drug.

Extent of Use

Although studies suggest that cocaine use peaked in the United States in 1985, it continues to be used by a large number of Americans, and it may be on the rise: The National Household Survey on Drug Abuse found that in 1994 an estimated 1.4 million Americans were current cocaine users; that number increased to 1.7 million in 1996.

Methods of Use

People may use cocaine occasionally, daily, or in a compulsive, repeated-use pattern known as “binging.” Cocaine may be administered several ways:

SNORTING

Cocaine powder is inhaled through the nostrils and absorbed from there into the bloodstream.

INJECTING

Cocaine powder is dissolved in water and injected directly into the bloodstream.

SMOKING

Crack cocaine, cocaine that has been processed with ammonia or sodium bicarbonate (baking soda) and water and heated to remove the hydrochloride, is smoked in a pipe. Some evidence suggests that smoking cocaine leads most quickly to addiction. The cocaine reaches the brain very quickly, in extremely high doses, and brings an immediate, intense high.

Effects of Use

Cocaine provides an immediate euphoria to the user by interfering with the reabsorption process of dopamine, a chemical messenger associated with pleasure and movement.

Physical effects include

- Constricted peripheral blood vessels
- Dilated pupils
- Increased temperature, heart rate, and blood pressure

Some users also report feelings of restlessness, irritability, and anxiety. Prolonged use can also lead to paranoid behavior. When addicted persons stop using cocaine, they often suffer from depression and the inability to enjoy normally enjoyable activities

(anhedonia). This may lead to renewed cocaine use, although tolerance to the drug's high frequently develops. Death may occur from cardiac arrest or seizures followed by respiratory arrest.

ADDED DANGER: COCAETHYLENE

Cocaethylene is a chemical formed in the liver when cocaine and alcohol are used together; it intensifies cocaine's euphoric effects but also possibly increases the risk of sudden death.

GREATER RISK FOR WOMEN

Drug use by pregnant women poses significant health risks. Almost all drugs cross the placenta to the unborn child's bloodstream. This can result in

- Premature delivery
- Low birth weight
- Ectopic pregnancy
- Stillbirth
- Sudden infant death syndrome
- Small gestational size

Risks for the woman include

- Hemorrhage
- Spontaneous abortion
- Toxicity
- Sexually transmitted diseases
- Nutritional deficiencies

Treatment

Several drugs are being tested for their safety and effectiveness in treating cocaine addiction. Behavioral interventions have also been investigated. Outpatient cocaine treatment can be successful with the proper combination of psychological and therapeutic approaches.