



American College of Medical Toxicology

Physicians Specializing in the Care of Poisoned Patients

COCAINE

What is cocaine?

Cocaine is a stimulant prepared from the leaves of the erythroxyton coca plant, grown most commonly in Peru or Columbia.

Are there other names for cocaine?

Other names for cocaine include coke, crack, blow, snow and nose candy.

How is cocaine used?

Cocaine can be used by insertion into the nose (also called snorting), smoking, injection into a vein (also called banging or mainlining), swallowing, and by insertion into the rectum (also called a butt rocket or plugging) or vagina.

Are there any medical uses for cocaine?

Cocaine is still used by some physicians to stop nosebleeds, and for pain control before minor nose surgery. Dentists or oral surgeons can also use cocaine for anesthesia before procedures.

What are the signs of cocaine intoxication?

Cocaine produces decreased appetite, difficulty sleeping, euphoria (feeling happy) and enhanced energy and alertness. Persons with cocaine intoxication may have large pupils, high blood pressure, and an elevated heart rate.

What are the signs of cocaine poisoning?

Cocaine toxicity can cause agitation, aggressive behavior, hostility, hallucinations, seizures, fevers, and death.

What are the medical complications of cocaine?

Cocaine causes many adverse effects to many organ systems. Some complications are dependent on the route of exposure.

Bones – cocaine, when inserted in the nose (snorted) can cause breakdown of the cartilage and bones in and around the nose creating holes in the septum (the septum separates the nostrils).

Brain and nerves – cocaine use can cause difficulty walking, headache, seizures, spontaneous bleeding, stroke, temporary or permanent memory and attention problems, and tremors. Intranasal (in the nose) users can lose their sense of smell and suffer from frequent nosebleeds. Intravenous (in the veins) users are at risk for infections that can be located in the brain in addition to other areas of the body.

Gastrointestinal – cocaine can cause severe abdominal pain, bloody diarrhea, nausea and vomiting. Intravenous users are at increased risk for viral hepatitis if they use contaminated needles.

Heart – cocaine can cause chest pain, high blood pressure, fast or abnormal heart rate, heart attack, problems with heart muscle contraction and rupture of the aorta (main blood vessel from the heart). Intravenous users are at increased risk for infections of the heart and its valves.

Lung – people who smoke cocaine can have shortness of breath and fluid or bleeding in the lung. They can rupture the lung, which results in air leaking into the chest.

Kidney – cocaine can cause kidney damage

Muscles – cocaine can cause severe muscle damage and pain.

Cocaine use during pregnancy – cocaine use is associated with premature delivery, vaginal bleeding, sudden death, and birth defects.

Are there any permanent effects of cocaine?

Long-term use of cocaine can damage nerves and deplete important chemicals in the brain such as dopamine. There can be a loss of memory and concentration, depression, delusions, hallucinations, paranoia, and aggressive or agitated behavior.

Is cocaine addictive?

Yes. There are several properties of cocaine that contribute to its addiction potential: first, cocaine has many effective methods of delivery. Second, the more rapid the onset of cocaine's effect, the higher the addictive potential (most rapid onset is smoking and injecting into a vein). Third, cocaine has a short half-life; it is broken-down by the body quickly. Considering all of these properties, drugs with a fast rapid onset and fast metabolism will have a high addictive and abuse potential.

What is the difference between crack and cocaine?

Crack is made from cocaine mixed with common household items such as ammonia or baking soda. Crack has different melting and vaporizing properties than cocaine, and is more stable for smoking.

How long can cocaine be detected in the urine?

Chemicals from the break-down of cocaine can be detected in the urine for 24 to 48 hours. In habitual users, these chemicals can be detected longer.

Created by Philip W. Moore, D.O. on behalf of the American College of Medical Toxicology

References

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