



The Difference is Research

Cocaine

What is Cocaine?

Cocaine is a short-acting stimulant and takes effect by increasing the amount of neurotransmitters (brain chemicals) such as dopamine, serotonin and norepinephrine. Cocaine is produced from the leaves of the coca plant, which is native to South America.

Cocaine comes in three main forms: a paste, cocaine hydrochloride (powder) and crack cocaine (a white or off-white crystal rock which is normally smoked). In Australia, cocaine is most common in its powder form (which is usually white or off-white) and is normally sold in 'points' (0.1g) or grams. It's most often taken by snorting, although it's also frequently taken in other ways, including injecting.

Cocaine is also known as coke, blow, charlie, C, candy, dust, flake, nose candy, snow, white, white lady, crack, rock or freebase.



How many people use cocaine?

According to the 2013 <u>National Drug Strategy Household Survey</u>, just over two in every one hundred (2.1%) Australians (aged 14 or over) reported using it in the previous 12 months, and 8.1% had used it at some point in their lives.

Use among young people is low and has seen a significant decrease in recent years. According to <u>Australian secondary school students' use of tobacco, alcohol, and over-the-counter and illicit substances in 2011</u>, 1.7% of students aged 12 to 17 years had ever tried cocaine, compared to 2.9% in 2005.

What are the effects?

When snorted or injected, cocaine quickly produces an intense 'rush', with the purity and the amount of the drug taken determining its intensity.

Cocaine can have the following effects:

- Dilated (enlarged) pupils
- Increased heart rate and blood pressure
- Increased breathing rate
- Increased body temperature
- Increased energy, talkativeness and confidence
- A feeling of **euphoria** (a 'high')
- Reduced appetite
- Anxiety

- Irritability, agitation, aggression
- Paranoia (feeling extremely suspicious and frightened)
- Headaches
- Dizziness
- Nausea, vomiting
- Insomnia
- Low mood, depression, cravings (during the 'comedown'/crash)
- Psychosis

The rush doesn't last very long — usually only 30-45 minutes, if snorted. Users may experience a 'comedown' or a 'crash' the next day, when the drug starts to wear off. This can last a few days and symptoms can include:

- Feeling uncomfortable
- Lethargy (having little or no energy or motivation)

COCAINE

- Irritability
- Paranoia

What are the risks?

Some of the effects of cocaine can be unpleasant or even dangerous, especially among people with pre-existing problems or susceptibilities (e.g. heart conditions that users may or may not be aware of).

Risks associated with cocaine use are common to all stimulant drugs, as they have similar effects on the body. The risks and effects of using cocaine can include:

Physical health risks:

- Increased heart rate and blood pressure this is extremely dangerous for people with pre-existing problems (e.g. high blood pressure or heart disease).
- Other **heart problems** such as chest pains, palpitations, irregular heartbeat, heart attacks and permanent heart damage
- Vasospasm, where the vascular system can start to spasm (this can happen at very low doses and can be fatal)
- Rapid and/or irregular breathing
- · Tremors, muscle twitches
- Abdominal pain
- Reduced appetite (regularly users may become malnourished)
- If injected, cocaine use is associated with vein problems including abscesses, infections such as
 endocarditis (a life-threatening infection of the heart valves), and an increased risk of blood-borne viral
 infections such as hepatitis C and HIV
- Hyperthermia (overheating)
- Respiratory collapse

Cocaine is a very unpredictable drug. Toxic (and sometimes fatal) reactions can occur regardless of the amount used, whether the person is a first-time, occasional or regular user.

Mixing drugs causes additional problems. For example, people sometimes use alcohol and cocaine together. However, it's dangerous to do so. Use of both substances at the same time creates a metabolite called cocaethylene, which is more toxic than either substance alone. The use of cocaine in conjunction with other stimulant drugs, such as methamphetamine or ecstasy, also increases the risk of heart attack and stroke.

Risks from using heavier doses on a long-term basis include:

- Long term damage to the heart by clogging its major arteries (see below)
- Increased risk of strokes and seizures
- Kidney failure
- Dependence (addiction)
- Sinus problems including a blocked/runny nose, nosebleeds and damage to the nasal septum (if the drug is snorted). Some people can also lose their sense of smell

Psychological health and social risks include:

- Anxiety, irritability, aggression and paranoia
- Low mood, lethargy and irritability during the 'comedown' phase

COCAINE

Increased chances of taking risks with sex, such as not using a condom, and ending up with a sexually transmitted infection (STI) or unintended pregnancy. (People who use cocaine over a period of time may also experience impaired sexual performance.)

Cocaine and the heart

The most serious physical consequence of cocaine use concerns the heart and the risk of stroke.

Cocaine may cause heart attacks by a combination of increasing oxygen demand, constriction of the coronary arteries and enlargement of the heart. The drug also causes clogging of the arteries. Cocaine users are also at a far higher risk of stroke. Importantly, it does not matter how the cocaine is used: the dangers are the same.

Cocaine and psychosis

One major harm associated with regular cocaine use is the development of a cocaine-induced paranoid psychosis.

A psychosis involves a loss of contact with reality. The person may have paranoid beliefs that they are being persecuted, or that people are trying to kill them, and may also experience hallucinations. A state of extreme agitation ('agitated delirium syndrome'), may also be seen also seen in cocaine users, and may result in heart attack and death.

Treatment

There is no proven drug treatment for cocaine dependence. The main treatment option for cocaine dependence is residential rehabilitation.

Residential rehabilitation is a drug free treatment modality requiring residence in the treatment agency subsequent to having undertaken detoxification. Programs may be of short (approximately 1 month) or longer (at least 3-6 months) duration, and are frequently based upon group therapy, with possible adjunct Narcotics Anonymous meetings. The aim is sustained abstinence from all drugs.