

Cocaine is a drug derived from the leaves of the coca plant. Slang or street names include blow, charlie, coke, crack and snow.

Background Information

Cocaine is a naturally occurring ingredient found in the leaves of the coca bush. The leaves have been chewed and used for religious, social, nutritional and medicinal purposes by South American natives for hundreds of years. Eventually it found its way to Europe, and until 1916 was sold over-the-counter. Cocaine was widely used in medicinal tonics. In 1886, it was part of the original formula for Coca Cola, and promoted both as a brain- tonic and a healthy alternative to alcohol. It was also a popular remedy for anxiety and other such "nervous afflictions", and until 1903 an average drink contained around 60mg of cocaine. In modern Western countries, cocaine was used by popular intellectuals, artists, politicians, and musicians such as Sir Arthur Conan Doyle (author of the famous Sherlock Holmes detective stories) and Sigmund Freud, notable neurologist and psychiatrist.

Forms of the drug

Cocaine comes in various forms.

Cocaine hydrochloride is the most common form in Australia. It is a white powder which can be snorted (sniffed through the nose) or injected. It cannot be smoked as the heating process breaks it down.

Free-base cocaine is a converted form of the drug which can be smoked and the effects are experienced quickly when smoked.

Crack cocaine is a less common form in Australia, a type of free-base cocaine which usually comes in the form of small crystals or 'rocks'. Most street cocaine is heavily cut with various additives. Pure cocaine is rarely found on the streets.

Drug Effects

Cocaine is a central nervous system stimulant. Cocaine acts on the brain's pleasure and reward system, and floods the brain with the naturally occurring neurotransmitter, dopamine. Dopamine is normally associated with the same pleasurable feelings experienced during sex or satisfying hunger or thirst. The brain quickly associates the memory of taking cocaine with the stimulation of its pleasure centres.

The short-term effects of using cocaine may include:

- Immediate feelings of well-being and euphoria
- Increased alertness and energy
- Increase in heart rate and body temperature
- Pupils of the eyes dilate (enlarge)
- Reduced appetite
- Increase in sexual drive.

The desired effects are usually short-acting and occur rapidly, with most users reporting effects lasting between 30 minutes and



COCAINE

one hour for a single dose. As the effects of cocaine tend to wear off quickly, people often take a number of small doses in quick succession which increases the risk of overdose.

Problems associated with cocaine use may include:

PHYSICAL PROBLEMS

- Snorting may lead to nose bleeds, sinus problems and damage to blood vessels which may cause holes in the supporting tissue of the nose
- Rapid and irregular heartbeat, heart pain, high blood pressure and heart attacks
- Smoking freebase can cause breathing difficulties, cough and lung damage
- Skin sores, especially in heavy users
- Delusions of 'crawling insects under the skin' creates the urge to scratch; pimples, sores and spots can easily become infected
- Development of repetitive behaviour e.g. facial tics
- Increased risk of dizziness, headaches, strokes and seizures
- Gastrointestinal complications such as abdominal pain and nausea
- Reduced resistance to infections and viruses, malnutrition
- Brain cell damage, resulting in reduced memory function and concentration
- Chronic sleep problems
- Increased breathing rate and risk of respiratory failure (the higher the dose, the higher the risk of complications)
- Injecting users also face the risk of contracting infectious diseases such as

hepatitis C and HIV (AIDS).

EMOTIONAL AND SOCIAL PROBLEMS

- Heavy use may contribute to feelings of anger and a risk of violent and aggressive behaviour
- Cocaine can make people feel uninhibited, and may contribute to risk-taking behaviour such as unwanted or unsafe sex, unsafe driving, use of other drugs, and reckless behaviour leading to accidents
- Irritability, restlessness and inability to handle pressure or stress
- Impact on family and personal relationships
- Loss of motivation
- Poor work performance, financial difficulties and legal problems.

MENTAL HEALTH PROBLEMS

- Increased feelings of suspicion and paranoia, and severity of mood swings
- Increased risk of drug-induced psychosis (see *Psychosis* opposite) with symptoms such as hyperactivity, delusions, increased aggression and visual hallucinations such as bright lights or floating spots (snow blindness)
- May aggravate symptoms of mental illness, and increase the risk of manic episodes if a person has bipolar disorder
- Aggravate depression, anxiety, mood swings and panic attacks
- Restlessness and irritability.

If there has been a previous psychotic episode, cocaine use may create more confusion, risk of auditory and visual hallucinations, and chances of another psychotic episode. It is thought that a

permanent loss of dopamine can occur as a result of long-term cocaine use. This may contribute to long-term depression, mood swings and other disorders similar to those found in people with Parkinson disease, even after use has stopped.

Dependency

Cocaine is known to be extremely physically addictive. Laboratory animals trained to press a lever to deliver an injection of cocaine will do so up to 300 times to receive a single dose. If given an unlimited supply, they will continue to dose themselves until they die of exhaustion or a heart seizure. The pleasurable brain effects and feelings of increased confidence are thought to contribute greatly to the addictive nature of cocaine.

Withdrawal

The withdrawal is known as cocaine dysphoria, comedown or crash. Cocaine withdrawal symptoms can be difficult to manage, as reactions can be unpredictable and sudden. You will need to keep a close watch for depression and suicidal thoughts, which could lead to a suicide attempt. If you are worried for any reason, call an ambulance immediately by dialling 000 or 112 from a mobile. Symptoms include:

- Irritability
- Extremes of hunger
- Deep depression and suicidal feelings
- Nausea and vomiting
- Fatigue, weakness and muscle pain.

Overdose

Risk of overdose is severely increased when combined with other drugs or alcohol. Death

from cocaine use is rare; however some people have a severe reaction to even small doses of the drug.

Overdose first aid

What to do if someone passes out or experiences other complications:

- People may experience panic attacks or hyperventilate – in this case they may need reassurance and encouragement to slow down their breathing.
- If the person becomes unconscious, turn them on their side to reduce the risk of them vomiting and choking.
- Make sure their airways are clear, and do not leave them alone.
- Call an ambulance immediately on 000 or 112 from a mobile phone (you don't need credit or to be in range)
- If breathing has stopped, give mouth to mouth resuscitation – if there is no pulse, commence CPR (cardio-pulmonary resuscitation) if you are trained.

If a person is psychotic and may be violent

Do not put yourself or your family at risk. Do not physically try to stop or restrain the person, unless in self-defence.

Create a calm, non-threatening atmosphere. Talk slowly, quietly and simply. Reduce any distractions and noise – turn off the TV or radio.

Don't get too close to the person as it may make them feel trapped and threatened. Avoid direct eye contact. Try to get the person to sit down, so the person feels more at ease and less likely to lash out. If you are talking to the person, sit side-by-side.

Do not threaten, shout or argue with the person. Express empathy for the person's emotional distress, and acknowledge they are frightened.

If they are experiencing delusions, voices or hallucinations do not try to convince the person they are not real, or play along.

If you are really scared, or the violence is escalating, call the police – let the police know the person is showing symptoms of psychosis. Contact a mental health crisis team for further advice – however they will most likely be accompanied by the police if there is violence or risk of weapons.

Detox and treatment

Phone your local community health centre or Alcohol & Drug Information Service for details of services providing cocaine detox and support programs (see the rear cover). Home detox from cocaine is possible with the assistance of medical supervision and a support worker. If the user has a history of mental illness, heart disease, fits, high blood pressure or angina, detox would be better in a clinical setting.

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PSYCHOSIS

One of the risks of cocaine use is drug-induced psychosis. The symptoms are similar to those of schizophrenia. Symptoms of psychosis may appear quickly, and can last a few hours or days. Symptoms of cocaine psychosis have been described as being particularly intense, and may include:

- Visual hallucinations
- Paranoia and suspiciousness
- Blunted, flat or inappropriate emotions
- Social isolation and withdrawal
- Severe anxiety and panic attacks
- Paranoid delusions
- Change in perceptual experiences such as smell, sound or colour
- Disorientation and memory problems
- Uncontrolled violent behaviour.

These symptoms usually disappear a few days after drug use has stopped. In many cases, mental health intervention is required. However the user remains vulnerable to further episodes of psychosis if the drug is used again.

When cocaine and alcohol are taken, the two drugs combine to produce cocaethylene in the bloodstream. This substance creates more damage to the brain than taking alcohol or cocaine individually.

REDUCING THE RISKS

It is safer not to 'snort' than inject cocaine – if it is injected, always use new needles and syringes, sterile water and clean equipment (swab, tourniquet, spoon, glass and filter).

Use with people you trust, and avoid participating in risky activities.

Monitor how much cocaine you use and how often, and don't drink alcohol with cocaine as it can cause complications.

Carry condoms and/or dental dams and have sex safely.

TIPS FOR FAMILIES

Some tips for supporting a loved one with a cocaine problem are to avoid panicking and get informed about the effects of cocaine use. Keep communicating, but avoid pleading or nagging, and don't only talk about the problem. Choose your moment to express your concern.

If they are detoxing at home, they will need to be monitored for any complications and may need lots of calm, gentle reassurance.

Learn the signs of overdose and psychotic episodes, and how to respond. Have contact numbers readily available, and a safety plan for possible violence. Being supportive doesn't mean you have to be at risk.

It's okay to talk about it. Get support for yourself even if they don't want help.