WHAT IS COCAINE?

In its pure form, cocaine is a powder extracted from the leaves of the coca bush, mainly found in Bolivia and Peru. Part of a group of drugs called ‘stimulants’, cocaine speeds up the activity of the brain and nervous system. In Australia, it is mostly available as a white powder. It can be inhaled, injected or snorted. Another form of cocaine is ‘crack’ cocaine which is sold as small crystals or ‘rocks’, although rarely found in Australia. It gets the name crack because the baking powder residue in it crackles when it is smoked.

As with other illegal drugs, cocaine sold on the streets is often mixed or cut with other substances to make it go further. This can increase harmful effects and the risk of overdose due to variations in strength.

IMMEDIATE EFFECTS

The effects are usually felt immediately and briefly, lasting around 15 to 30 minutes. The nature and intensity of effects may vary according to the size, weight and health of a person and according to the amount and methods of use.

Generally, the immediate effects of the cocaine ‘high’ include:

- Exhilaration, euphoria
- Increased energy, confidence
- Heightened body temperature & blood pressure, rapid heart rate
- Feelings of wellbeing
- Reduced appetite
- Sense of increased strength & mental capacity
- Dilated pupils
- Sexual arousal.

In return for the high is a sudden, intense ‘low’, including symptoms such as:

- Depression, even paranoia
- Difficulty getting to sleep
- Feelings of tiredness & irritability upon waking
- Anxiety, panic.

In rare cases, sudden death can happen on or following the first use of cocaine. There is no way to know who is prone to sudden death.
When taken in high doses over a number of hours, users may also experience:
- Extreme agitation/aggressive behaviour
- Paranoia/paranoid psychosis
- Hallucinations
- Headaches
- Dizziness
- Feeling sick/vomiting
- Tremors
- Loss of interest in sex
- Apathy
- Heart pain/heart attack
- Fast, irregular, shallow breathing
- Fits
- Overdose.

During the ‘crash’ following a binge, users may also experience intense depression, lethargy, hunger and even suicidal tendencies.

LONG-TERM EFFECTS
With more frequent, long-term use the negative effects increase, with symptoms such as:
- Restlessness/being overly excitable
- Sleeplessness
- Weight loss
- Depression
- Inability to experience pleasure
- Dependency/addiction
- Sexual problems, including impotence
- Nasal problems from snorting
- Seizures/fits
- Heart attack, stroke, respiratory failure
- Psychiatric problems, such as psychosis, paranoia, depression, anxiety disorders & delusions.

DEPRESSION
Research strongly suggests that cocaine harms the brain’s dopamine “pleasure centre” – the brain cells that help produce feelings of pleasure. Ironically, these are the same brain cells that trigger the “high” experienced by cocaine users.

While the immediate effect of cocaine is to increase levels of dopamine, creating feelings of intense pleasure, ongoing use seems to reduce dopamine levels, making it difficult for users to feel positive emotions. This helps explain why depression is common among cocaine users.
DANGERS OF COCAINE

Data gathered by a telephone hotline for cocaine users in the US discovered the majority of users had experienced extreme, even life-threatening, psychiatric and psychological effects. Eighty-five percent of callers had experienced severe depression, 78% irritability and 65% paranoia.\textsuperscript{11}

Severe damage to dopamine is also a characteristic of Parkinson’s disease, leading to loss of movement control.

HEART PROBLEMS/STROKE

Frequent cocaine use may gradually cause blood vessels to become inflamed and clotting to occur, creating an increased risk of heart attack and stroke, even for users who are not otherwise at high risk of these problems.\textsuperscript{12}

Frequent heart-related medical complications of cocaine use include:
• Heart attack due to raised heart rate and constricted arteries.
• Disruption to the brain’s electrical message to the heart. The heart beats inconsistently and cannot be regulated, resulting in a possible cardiac arrest.
• Found to trigger chaotic heart rhythms.\textsuperscript{13}

ADDICTION & WITHDRAWAL

Cocaine is an extremely addictive drug, particularly in terms of psychological dependence.\textsuperscript{14} Anyone can become dependent on cocaine and develop tolerance\textsuperscript{a} to it.

Cocaine withdrawal usually happens in three phases.

• ‘The Crash’ – Immediately after a person stops using, in the first two to four days, symptoms include agitation, depression, intense craving for the drug and extreme fatigue.
• Withdrawal – for up to 10 weeks following use, a person may experience depression, lack of energy, anxiety, intense craving or angry outbursts.
• Extinction – this phase may be ongoing, involving episodes of craving cocaine, usually in response to a trigger. These cravings may surface months or years after a person has stopped using cocaine.

Other withdrawal symptoms that may be experienced include lack of motivation, inability to feel pleasure, nausea/vomiting, shaking, irritability/agitation, muscle pain, long but disturbed sleep.\textsuperscript{15}

\textsuperscript{a} Tolerance is when a person needs to take more and more of a drug to experience the same effects.
**DAMAGE TO NOSE**

Snorting cocaine can create pimple-like abscesses in the nose that can turn into raw holes. The holes can eat away the cartilage that divides the nose, enough to cause it to collapse. Snorting cocaine can also lead to nosebleeds, sinus problems, and runny, inflamed nasal passages.

**INJECTING**

Injecting over a period of time can result in blocked blood vessels caused by the substances mixed with cocaine, leading to serious damage to the liver, heart and other bodily organs. Pricking of skin may lead to damage requiring skin grafts. Injecting with dirty needles carries all the usual risks of hepatitis C and B, HIV, blood poisoning and skin abscesses (sores with pus).

**SMOKING**

Smoking cocaine, such as crack, can lead to difficulty breathing, a constant cough, chest pain and damage to the lungs. Smoking seems to make a person likely to become a compulsive user more quickly.

**PREGNANCY**

A significant amount of research into the effects of cocaine use during pregnancy suggests cocaine may cause bleeding, miscarriage, premature labour and stillbirth. Because cocaine causes rapid heart rate in both mother and baby and the supply of oxygen and blood to the baby is reduced, the baby is more likely to be below average size and grow slowly. If cocaine is used near birth the baby may be born under the influence of the drug, showing signs of being agitated and hyperactive.

There is some research to suggest babies of cocaine-using mothers are susceptible to malformations of the genito-urinary tract, heart, limbs and/or face. A number of instances of bleeding in the brain have also been reported in babies whose mothers were dependent on cocaine.

It is believed that cocaine is transferred to the baby through breast milk, causing the baby to become restless, irritable and difficult to feed.
OVERDOSE
Anyone who uses cocaine, even in small amounts, could be at risk of overdose. Some people have unexpectedly strong reactions to it. Mixing with other drugs makes a person more prone to overdose.

Overdose may result in:
- Fast, irregular or weak heartbeat
- Difficulty breathing
- Heart failure
- Bleeding blood vessels in the brain
- Death.

There have been some instances of death related to cocaine use as a result of seizures, heart attack, brain haemorrhage, kidney failure, stroke, repeated convulsions.

COCAINE & OTHER DRUGS
Cocaine users often mix with other drugs to increase the pleasurable effects or to help them deal with the negative effects, particularly of the crash. This may include alcohol, cannabis, heroin and benzodiazepines. Combining cocaine with alcohol causes the liver to produce a substance called cocaethylene which can be more harmful to the body even than the cocaine and may increase the chance of sudden death. Injecting heroin and cocaine can affect the area of the brain responsible for breathing, increasing risk of coma and death.

OTHER PROBLEMS
Cocaine users can become obsessed with obtaining the substance, using it and recovering from use, to the detriment of other areas of life. Family, work and relationships can all suffer as a result of drug use.
Endnotes

4. Stoppard, Dr Miriam 2000, Australian Drugs Info File, Dorling Kindersley, Australia, p.74
DANGERS OF COCAINE


