

## Drugs and their effects

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### Introduction

Australia is a drug-using society. The most common drugs used are alcohol, coffee, nicotine and various medications. Less commonly used are illegal drugs such as cannabis (marijuana), ecstasy, heroin and amphetamines (speed).

At some time most of us will be confronted with drugs or drug-related issues. This fact sheet answers some common questions about drugs and their effects.

### What is a drug?

A drug is any substance, solid, liquid or gas, that brings about physical and/or psychological changes. The drugs of most concern in the community are those that affect the central nervous system. They act on the brain and can change the way a person thinks, feels or behaves. These drugs are known as 'psychoactive drugs'.

### How are drugs classified?

Drugs are commonly classified according to their legal status or their effects on the central nervous system.

### Legal drugs

Laws and regulations control the availability, quality and price of the 'legal' drugs; for example, tobacco may not be sold to persons under the age of 18.

### Illegal drugs

Because they are illegal, there are no price or quality controls on the illicit drugs such as heroin and ecstasy. This means that a user can never be sure that the drug they are taking is in fact what they think it is; for example, PMA (paramethoxyamphetamine), a toxic form of amphetamine, has been sold as ecstasy. The user also cannot be sure of a drug's strength or purity. Various batches of an illegally manufactured drug may have different mixtures of the drug and additives such as poisons, caffeine or even talcum powder.

### Central nervous system

There are three main types of drug affecting the central nervous system.

**Depressants** are drugs that slow down the functions of the central nervous system.

Depressant drugs do not necessarily make a person feel depressed. They include:

- alcohol ('booze', 'grog')
- cannabis ('pot', 'dope', 'mull')
- barbiturates, including Seconal, Tuinal and Amytal
- benzodiazepines (tranquilisers), 'benzos', 'tranx' such as Rohypnol, Valium, Serepax, Mogadon, Normison and Eupynos
- GHB (Gamma-hydroxybutyrate), or 'fantasy'
- opiates and opioids, including heroin ('H', 'smack'), morphine, codeine, methadone and pethidine
- some solvents and inhalants ('glue', 'chroming'); many are household products.

In small quantities, depressants can cause the user to feel more relaxed and less inhibited. In larger quantities they can cause unconsciousness, vomiting and even death. Depressants affect concentration and coordination. They slow down a person's ability to respond to unexpected situations.

**Stimulants** act on the central nervous system to speed up the messages to and from the brain. They can make the user feel more awake, alert or confident. Stimulants increase heart rate, body temperature and blood pressure. Other effects include reduced appetite, dilated pupils, talkativeness, agitation and sleep disturbance. Mild stimulants include:

- ephedrine used in medicines for bronchitis, hay fever and asthma
- caffeine in coffee, tea and cola drinks
- nicotine in tobacco.

Stronger stimulants include:

- amphetamines, including illegal amphetamines ('speed', 'crystal meth', 'ice', 'shabu')
- cocaine ('coke', 'crack')
- ecstasy ('E', 'XTC', 'eccy')
- slimming tablets such as Duromine, Tenuate Dospan and Ponderax.

Large quantities of stimulants can 'over-stimulate' the user, causing anxiety, panic, seizures, headaches, stomach cramps, aggression and paranoia. Prolonged use of strong stimulants can mask some of the effects of depressant drugs, such as alcohol, making it difficult for a person to judge their effects.

**Hallucinogens** affect perception. People who have taken them may believe they see or hear things that aren't really there, or what they see may be distorted in some way. The effects of hallucinogens vary a great deal, so it is impossible to predict how they will affect a particular person at a particular time.

Hallucinogens include:

- datura
- ketamine ('K', 'Special K')
- LSD (lysergic acid diethylamide; 'trips', 'acid', 'microdots')
- magic mushrooms (psilocybin; 'gold tops', 'mushies')
- mescaline (peyote cactus)
- PCP ('angel dust')

Cannabis is an hallucinogen as well as a depressant. Ecstasy can also have hallucinogenic qualities.

Some effects of hallucinogens include dilation of pupils, loss of appetite, increased activity, talking or laughing, emotional and psychological euphoria and well-being, jaw clenching, sweating, panic, paranoia, loss of contact with reality, irrational or bizarre behaviour, stomach cramps and nausea.

How do drugs affect a person?

The effects of a drug depend on the type of drug, how much is used, how it is taken, the characteristics of the person taking it (body type and mood), the situation or place at which the drug is taken and other drugs used at the same time. Some factors to consider include:

- *How much of the drug is taken and how often.* Generally, the greater the quantity taken, the greater the effect. Overdose occurs when the amount taken exceeds the body's ability to cope with the drug.
- *How the drug is taken.* Generally, drugs that are injected or inhaled act very quickly and the effects are more intense. Snorting through the nose is the next fastest-acting method, while the effects of drugs eaten or swallowed take longer to occur.
- *A person's physical characteristics,* such as height, weight and gender also influence how a drug affects them.

The proportion of body fat, rate of metabolism and, for women, stage of the menstrual cycle can all influence the intensity and duration of drug effects.

- *The person's mood and environment also plays a role.* How a person is feeling and the social setting can have a significant impact on drug effects. A person is more likely to enjoy the experience in a comfortable social atmosphere than in a threatening environment.
- *Tolerance to the drug.* The first time a person uses a drug, they have a very low tolerance and are likely to feel the effects very strongly. The more often the drug is taken, generally the less intense the effects will be. This means that larger amounts are needed to obtain the desired effect.
- *Other drugs used (poly drug use).* Combining drugs can increase or alter the effects, often in unpredictable ways.

### What problems can drug use cause?

Regardless of the drug used, there are many problems related to drug use, such as:

- family or relationship problems
- problems at work or school
- accidents
- legal problems
- financial problems
- health problems
- sexual problems.

### Drugs and pregnancy

Most psychoactive drugs can cross the placenta and affect the unborn child. Heavy and sustained use of some drugs during pregnancy may cause miscarriage, foetal distress or a range of other complications.

### Drugs and driving

Driving safety requires mental alertness, clear vision, physical coordination and the ability to react appropriately. Drug use can affect these driving abilities and increase the risk of having a crash. The risk of having an accident is nine times greater when alcohol and drugs are used together than when a driver is drug-free.

One of the most concerning measures of drug-related harm in the community is the death toll. Drug use is a factor in about one in five of all deaths in Australia. In 1998, 23,310 deaths were attributed to drug use:

- 19,020 associated with tobacco use
- 3270 related to alcohol use
- 1020 as a result of illicit drug use.

### Drug dependence

A common concern is that people who use drugs will become dependent on drugs and become a 'drug addict'. Some alarmist stories give the impression that illegal drugs are instantly addictive and cause the most harm. In fact, no drug is instantly addictive. The greatest drug harms caused in our society come from the legal drugs, alcohol and tobacco.

Drug dependence can be physical or psychological, or both. There are degrees of dependency, from mild dependency to compulsive drug use (addiction). It is impossible to say how long a person must take a drug before they will become dependent.

Experimenting does not necessarily lead to regular or dependent drug use, and regular use does not necessarily lead to problems. However, there is no 'safe' level of drug use. All drugs have the potential to cause harm, not just the illegal ones.

*For further information about drugs and drug prevention, see our website at [www.druginfo.adf.org.au](http://www.druginfo.adf.org.au).*