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About drugs

Drugs are substances that change a person's physical or mental state.

The vast majority of drugs are used to treat medical conditions, both physical and mental. Some, however, are used outside the medical setting for their effects on the mind. These are referred to as **recreational** drugs, and many of them are illegal in Australia.

Psychoactive drugs

Drugs that affect a person's mental state, whether prescribed for a medical condition (for example, antidepressants) or taken for recreational purposes (such as alcohol and heroin), are called **psychoactive** drugs. Psychoactive drugs affect the way a person thinks and feels—which may also affect the way they behave.

The most commonly used legal psychoactive drugs, apart from drugs taken on prescription, are alcohol and tobacco. The most commonly used illegal psychoactive drug is cannabis (marijuana).

Categories of psychoactive drugs

Psychoactive drugs are divided into three categories (some drugs fall into more than one category):

- » **Depressants** slow down the activity of the central nervous system (the brain and spinal cord), which reduces a person's alertness, and also slows down functions such as breathing and heart rate. Examples of depressants are alcohol, heroin, cannabis, the prescription drug group of benzodiazepines and other prescription tranquilisers.
- » **Stimulants** increase the activity of the central nervous system, making the person more alert and aroused. Examples of stimulants are nicotine, caffeine, cocaine, ecstasy and the methamphetamines, speed and ice.
- » **Hallucinogens** make a person see, hear, smell or feel things that aren't there. Examples of hallucinogens are LSD, magic mushrooms, ecstasy and cannabis.

Why do people use psychoactive drugs?

People use drugs for many reasons—for fun or excitement; to feel good, better or different; to counteract negative feelings; because they are bored or curious; because their friends or family do it; or because they have a dependence on the drug. Often people who use drugs associate with other people who use drugs. It is not always clear which comes first—the friends or the drugs.

Drug dependence

Drug dependence may occur when a person continues to use drugs—legal or illegal—even though their drug use causes them significant problems. It is regarded by many as a medical condition or a disorder not directly under the control of the individual. The term 'addict', with its negative implications, is not used any longer.

Drugs & young people

Young people take drugs for much the same reasons as older people, often with the added element of rebellion. However, the consequences can be much worse. Childhood and adolescence are critical times for brain development, and the brain is more sensitive to the influences of drugs and alcohol during these periods. For example, there is evidence that alcohol use in young people can lead to impaired learning and memory which can affect them for the rest of their lives.

In general, drug dependence may be diagnosed if a person:

- » spends a significant amount of time obtaining the drug, using it, and/or recovering from its effects
- » develops a tolerance to the drug (see below)
- » continues using the drug even though they know it is causing them psychological and/or physical harm
- » wants to cut down or control their drug use (and perhaps makes repeated unsuccessful attempts to do so)
- » takes more of the substance, or uses it for longer, than they intend
- » reduces, or gives up entirely, important social, recreational and/or work activities because of their drug use
- » suffers symptoms of withdrawal when they stop using the drug (see below).

Three or more of these symptoms is generally considered sufficient for a diagnosis.

Tolerance

After using a drug for a while, a person may find that:

- » they need to take more of the drug to get an effect that they previously got with less, or
- » the drug simply becomes less effective in producing the desired effect.

This is called **tolerance**.

Withdrawal

When a person who has been using a drug stops taking it, or reduces the dose, they may experience a physical and/or psychological reaction. This is called **withdrawal**. Because the dependent person has become tolerant to the drug's effects, they have been taking the drug just to feel normal. When they stop taking the drug, they may experience the opposite to the highs the drug originally gave them.

Withdrawal can be very unpleasant, producing symptoms such as tremors, sweating and vomiting, as well as extreme craving. For some drugs and some individuals, medical supervision during withdrawal is necessary.

The strength of the withdrawal varies, depending on:

- » the individual person
- » the drug they have been using
- » how much they have been taking
- » how long they have been taking it.

Bad withdrawal symptoms can make it very difficult for a user to stop or reduce their drug intake.

Detoxification

Detoxification is the term that used to be applied to withdrawal management. The process by which the body is purged of the drug and its immediate physical and psychological effects is called detoxification.

Detoxification usually leads to some level of withdrawal, and medical assistance may be required. Anti-anxiety drugs such as benzodiazepines are sometimes prescribed for a short time during medically-supervised withdrawal.

Treatment

Withdrawal is only the first step towards recovering from drug dependence. Most people also need access to effective treatments.

A number of options for treating drug and alcohol dependence are available in Australia. Some seek to help the person achieve a drug-free lifestyle, while others recognise abstinence as one option among others. All treatments have the primary aim of minimising the harm and the risks associated with drug use.

Treatment is most effective if it is tailored to suit a person's circumstances, and it usually involves a combination of methods.

- » For many drugs—including alcohol and tobacco—**psychological interventions** and good **social support** are important elements of recovery.
- » For a few drugs, there are effective medical interventions (**pharmacotherapies**).

- » For some drugs, there has been little or no research on effective treatments, mainly because these drugs are less widely used and have lower impact on society or they have only recently been developed.

Although in most cases a person on treatment lives in their own home during treatment, some residential programs are available. These may be appropriate for people with serious problems who have little social support.

Psychological interventions

Three types of psychological intervention have been found effective for a broad range of drugs.

- » **Motivational enhancement** is an approach used by the therapist to help the client to decide for themselves that they really need to change their behaviour. This can help maintain commitment in people who might otherwise leave treatment before it can be effective.
- » **Cognitive behavioural therapy** seeks to change the thoughts and ideas that led to dependence in the first place, replacing them with more constructive ways of thinking. It can also be used to help a person recognise situations that place them at risk for resuming drug-taking, and to reduce the anxiety often associated with stopping drug use.
- » **Contingency management** typically uses rewards, such as vouchers, to encourage compliance with treatment and reduce drug use (**voucher-based reinforcement**). The vouchers are exchangeable for goods and services in the community, and clients are rewarded if they meet specific treatment goals such as drug-free urine, on-time attendance at treatment or medication compliance.
- » **Social and family support services** provide psychological support as well as helping with medical, financial, housing and legal issues, and are important in maintaining recovery in the community.

Peer support programs

Peer support programs such as Alcoholics Anonymous and Narcotics Anonymous may be helpful for people who can relate to their particular philosophical approach. Other peer support groups use a 'rational recovery' approach.

See pages 127-133 for contact details of drug and alcohol treatment centres and advice lines.

Pharmacotherapy

Pharmacological treatments usually involve replacing the drug with a less harmful alternative; for example, heroin may be replaced by methadone. This allows the person to regain some control over their life, and may ultimately lead to a drug-free lifestyle.

Pharmacological treatments are not available for all drugs, and even when they are available they do not work for everyone. They must be accompanied by good social and psychological support to be effective.

Polydrug use

Polydrug use means:

- » using two or more drugs in combination
- » using one drug to counteract the effects (or the after effects) of another
- » using different drugs at different times over a short period of days or weeks.

Most illegal drug users are polydrug users.

The dangers of polydrug use

Using a single psychoactive drug can be dangerous; using more than one significantly increases the risks. In particular, if two drugs of the same type, such as the depressants heroin and alcohol, are used together, there are greatly increased risks of accidents, overdose and death.

Other common dangerous drug combinations include cannabis with alcohol, ecstasy with alcohol, heroin with sedatives, and amphetamines with sedatives.

Because alcohol is the most widely abused psychoactive drug, it is also the most commonly involved in risky polydrug use.

Drugs and driving

Many psychoactive drugs, including alcohol, have effects on the brain that make operating machinery, and particularly driving a vehicle, more dangerous.

Drugs, driving and the law

It is against the law to drive under the influence of alcohol or any illicit drug (see page 113 for further details).

Random drug testing is used in NSW. Police can administer an oral drug test to any driver. Cannabis, ecstasy and methamphetamines can be detected through roadside testing. A person who tests positive is prohibited from driving for 24 hours. The sample is sent to a laboratory for more precise analysis, and if the presence of an illegal drug is confirmed the driver may be charged. A person can also be arrested and taken to a hospital for a blood and urine test if a police officer has a reasonable suspicion that they are driving under the influence of drugs. The samples will be sent to a laboratory and if they test positive for any drug (including prescribed drugs) NSW Police will decide whether the person's driving would have been impaired by their drug use. The person will then be charged accordingly.

A driver under the influence of an illegal drug who causes the death or injury of another road user can face criminal charges, with the possibility of a prison term if convicted.



Image: Age fotostock

Driving under the influence: the research

A 2007 report from the Australian Drug Foundation summarises the Australian research on driving under the influence of drugs and alcohol.¹

The percentage of drug users who reported driving under the influence of a drug (that is, driving within three hours of using the drug) at least once in the previous 12 months were:

- » cannabis users: 50%
- » methamphetamine (ice and speed) users: 50%
- » ecstasy users: 40%
- » benzodiazepine users: 30%
- » alcohol users who drove over the .05% alcohol limit: 14%.

The percentages were lower for other drug types.

Although in percentage terms the alcohol figure is lowest, in absolute numbers it is highest because of the vastly greater number of drinkers. The report found that alcohol is the single most frequently implicated substance in car crashes, and is involved in around 30% of all road accidents. However, 30% of accidents also involve a drug other than alcohol (including prescription drugs)—much higher than might be expected given the estimated rates of drug-driving in the community.

- » The research also found that polydrug use is a significant factor in road accidents. Alcohol with benzodiazepines, and alcohol with cannabis, were found to be the most dangerous combinations. In particular, around 43% of fatally injured drivers with cannabis in their body were also under the influence of alcohol.

Community perceptions

The report also showed that many people underestimate the risks involved in driving while affected by drugs—particularly with illegal drugs, for which less information is available. For instance, if alcohol users and non-users are asked if driving above the blood alcohol level of .05 is dangerous, over 90% in both groups agree. However, only around 30% of cannabis users (compared with 80% of non-users) think driving under the influence of cannabis is very risky or dangerous. Similar differences in estimating risks are found for users and non-users of methamphetamines and ecstasy.



Image: Age fotostock

Drugs and pregnancy

Most drugs taken during pregnancy cross the placenta and reach the unborn child. Some of these drugs, such as alcohol, can be harmful to the developing child. Premature birth and low birth weight have been linked to the use of heroin, cocaine and methamphetamines during pregnancy.

See the relevant chapter on a particular drug for information about the health risks of drug use during pregnancy.

If a mother uses drugs while breastfeeding, it is possible that the drug will be present in her milk and may have adverse effects on the baby.

Check with your doctor if you are taking or planning to take any drug during pregnancy or breastfeeding, including prescribed and over-the-counter medications.

Drugs and mental health

Some drugs, such as cannabis, LSD, ecstasy, ice and speed, can directly produce effects that resemble symptoms of mental illness, such as hallucinations or paranoia. These effects usually disappear once the drug is out of the person's system.

However, many people who seek treatment for drug or alcohol problems also have mental health problems that are not due to their current drug use. These people tend to be more unwell and are more difficult to treat than people with a single disorder.

It has been suggested both that mental illness can cause drug problems (when a person takes drugs in the hope of escaping their symptoms), and that heavy drug use over time causes mental health problems. Most of the evidence, however, seems to indicate that the same factors can lead to both types of problems; that is, biological, social and/or environmental factors predispose a person to have both a mental health and a substance abuse problem.

Both drug and alcohol and mental health services have become much more aware of this situation, and best practice in both areas is now to treat both disorders if this is appropriate. If you are choosing a drug and alcohol treatment program for a friend or relative, it is important to ask whether they will help with any mental health problems.

If the client is a polydrug user, it is also important that the agency can treat each type of drug.

Prevalence of mental health problems associated with drug use

Statistics from the 2007 National Drug Strategy Household Survey found that around 20% of those who used illegal drugs in the month preceding the survey said they were suffering 'high or very high psychological distress'. This compared with around 9% of those who did not use illegal drugs in that month. While the figure of 20% applied to most illegal drugs, heroin users are much more affected, with 65% expressing high or very high psychological distress.²