

Information on Cannabis

Slang/ Common Street Names

Grass, Pot, Weed, Mull, Chronic, Dak, Hash, Smoke, Buds, Skunk, Cabbage

How it is taken

Smoked in joints, pipes or bongs

Eaten in cakes.

What it is

Cannabis is a drug that comes from the cannabis sativa plant. There are three main forms of cannabis:

- Marijuana: the most common and least powerful form of cannabis, this is the dried leaf and flower (buds) of the plant. It is mostly green in appearance although some strains have orange, silver and purple fibres
- Hashish: Dried blocks of cannabis resin, which can range in colour from gold to nearly black. This produces a more intense high than marijuana
- Hash oil: This is a thick oily liquid extracted from hashish and is the most powerful form of cannabis.

Marijuana gives off a thick, pungent odour similar to grass clippings when it is dried. The smoke also gives off a distinctive smell.

The most common way of using cannabis is by smoking it. Marijuana can be rolled into cigarettes ('joints'), smoked through a pipe or water bong, or 'spotted' which involves rapidly heating small portions of cannabis with very hot surfaces, such as knives. Utensils used in this manner will soon be tarnished with distinctive heat marks.

Cannabis can also be eaten. Normally it is mixed into cake mixtures. Another way to take cannabis is by using a vaporiser. This instrument instantly heats a small portion of cannabis to an extremely high temperature, releasing the THC vapour which is then inhaled.

How does Cannabis Work?

Cannabis is a depressant, meaning that it slows down the messages between the brain and the body. The 'high' from smoking cannabis normally takes effect within minutes and can affect a person for about two or three hours.

The chemical in cannabis that causes a person to get 'high' or 'stoned' is called THC (Delta-9 tetrahydrocannabinol). The higher a plant is in THC, the stronger its effects will be. How cannabis is grown can also affect its potency. For example, indoor-grown marijuana ('skunk') can be much stronger than outdoor-grown marijuana.

When cannabis is smoked THC enters the bloodstream and reaches the brain within minutes. Effects are perceptible within seconds and fully apparent in a few minutes. If orally ingested THC takes longer to reach the brain because there is continued slow absorption from the gut and is first metabolised in the liver.

Once absorbed THC is rapidly distributed to all other tissues in the body, at rates, dependent on blood flow.

When in the brain THC binds to nerve receptors and if enough THC binds these your behaviour will be affected and you become 'stoned.' High concentrations are reached in the neocortical, limbic and sensory and motor areas.

Because they are lipid soluble, cannabinoids, of which THC is the most potent, are accumulated in fatty tissues, reaching peak concentration in 4-5 days. They are then slowly released back into other compartments of the body, including the brain. Complete elimination of THC in a single dose can take up to 30 days. With repeated dosage, high levels of cannabinoids can accumulate in the body and continue to reach the brain.

Common effects

- Relaxation
- loss of inhibition
- Increased appetite
- altered perceptions; heightened sense of sound, colour and vision, time and space
- less coordination
- laughter
- increased appetite
- Impaired thinking and memory
- Increased heart rate, low blood pressure, faintness and red eyes

Using Greater Amounts

Very large quantities of marijuana can produce confusion, restlessness, feelings of excitement, hallucinations, anxiety or panic, detachment from reality, decreased reaction time and paranoia.

People who have been regular heavy users of marijuana report that after stopping their thoughts are clearer and reaction times better. This might point to evidence that long-term use can slowly effect cognitive functioning over a period of time. At the time however, the person may not realise that this is happening due to the gradual change.

Short-term effects

- Increased heart rate and changes in blood pressure
- Feelings of happiness and relaxation
- Talkativeness & laughter
- Changes in mood, perceptions, thoughts or feelings

- Possible paranoia, anxiety or panic
- Feeling of hunger; 'the munchies.'
- Time seeming to speed up or slow down
- Some experiences seeming to be intensified
- Impaired reaction to time and co-ordination that may lead to higher risks of accidents
- Impaired concentration, short-term memory and information processing that affects learning at school or work performance
- Potential worsening symptoms of mental health problems in those with a history or predisposition with such problems

The extent of these effects will be dependent on the following things:

- Your previous experience with cannabis
- The amount you use: How much cannabis is used and its strength will affect its impact. Generally marijuana is weaker than hash and hash is weaker than hash oil.
- Your mental and physical state at the time: If you are feeling anxious anyway, you may find this will increase when taking cannabis. If you have a severe mental illness or already existing respiratory problems there will be a worsening of symptoms.
- The environment you use the drug in: If you are with people you know and in a familiar place you may experience fewer feelings of anxiety or paranoia than you would if you were in a strange environment or something unexpected happened.
- Using other drugs: Using other drugs, like alcohol creates different effects. However using other drugs does not cancel out the effect of either cannabis or alcohol or any other drug.

Long-term effects

Long-term cannabis smoking (i.e. after smoking daily or regularly for a period of years) affects both mental and physical health.

Respiratory Problems: People experience shortness of breath, wheeziness and increased susceptibility to breathing problems or picking up infections more easily. Bronchitis and emphysema. The smoking of cannabis presents similar health risks to tobacco smoking. Smoke releases carcinogens that can affect the respiratory system, and the risk increases because cannabis smokers tend to inhale more deeply and hold the smoke in longer.

Thinking Processes: The ability to learn and remember is impaired by regular cannabis use. There are subtle impairments to your thinking processes such as organising complex information, concentrating and short-term memory is especially affected. Regular users find it harder to concentrate for longer periods of time. These effects can last for several months after ceasing cannabis use. Evidence is unclear if such effects are reversible after long-term use.

Motivation: Regular users find it hard to stay motivated for sport, school and work, and their energy levels suffer. These effects do diminish over time after cannabis use has ceased.

Hormonal Changes: There is also evidence that cannabis affects a person's hormones. Regular users sometimes report a lower sex drive, irregular menstrual cycles for women and lower sperm counts in men.

Increased risk: of cancers of the ling, mouth, throat and the canal (oesophagus) from the mouth to the stomach

Dependence, addiction and overdose risk

Cannabis does have mild addictive properties. Also, people who use it regularly might develop dependency on the drug because they are used to functioning and performing certain behaviours under the influence of cannabis. Risk of addiction appears greater if you start using cannabis at an early age.

A person who suddenly withdraws from cannabis use might suffer from some physical symptoms for about a week, including sleep loss, anxiety, appetite loss and upset stomach. Their sleep might be disturbed for a few weeks.

It is virtually impossible to overdose on cannabis. It has been estimated that a lethal dose of cannabis is 40,000 times that which is needed to intoxicate a person. In comparison, the lethal dose ratio of alcohol is between 4:1 and 10:1.

Cannabis psychosis

There is growing evidence indicating a link between cannabis and psychotic conditions.

Cannabis use, particularly heavy and frequent use, has been linked to a condition called 'cannabis psychosis'. Episodes of cannabis psychosis are characterised by delusions, confusion, memory loss and hallucinations, and could last several days.

Cannabis can also bring forward pre-existing or latent psychosis. A person who is vulnerable or pre-disposed to depression or schizophrenia might have these conditions made worse. It can also trigger a psychotic episode in someone who already has a mental illness.

An Australian study, published 2006 in the British Journal of Psychiatry, showed that the more cannabis that a person with mental illness used, the worse their condition becomes. It also found that when they suffer a relapse in psychotic conditions, they were more likely to turn to cannabis to cope.

Safe use

There is growing evidence that cannabis use, especially long-term and heavy use, can cause significant harm to the brain and affect mental health. The safest use of cannabis is not to use it. Other than that, it is suggested that people limit their intake to occasional use only.

The occasional use of cannabis may not cause the average person significant harm. However, the risks of short-term harm will increase if cannabis is used in situations when it is important to concentrate or be totally physically co-ordinated (such as driving). Risks also increase if your mental state and physical characteristics mean that you react negatively to the drug.

You should not be smoking cannabis when pregnant as this can affect both birth weight and future growth and some susceptibility to respiratory difficulties.

People who have a history of or pre-disposition to mental illness, and who use cannabis, have an increased risk of worsening their condition. People with mental illness risk harm to themselves and others if they continue to use cannabis.

A vaporiser is a machine that instantly combusts the THC content of cannabis, causing much less smoke. Consequently, there are less irritants and potential carcinogens inhaled through this method of using cannabis.

Do not use cannabis and then drive or operate machinery. Cannabis impairs reaction times and hinders concentration. The risk of an accident does increase.

Smoking cannabis after drinking alcohol compounds the effects of alcohol significantly. A lightly intoxicated person after three drinks might find the effect greatly increased after smoking cannabis, making them just as intoxicated (and dangerously so) as if they had had nine drinks.

Ongoing heavy use of cannabis can affect your ability and motivation to engage in sport and exercise and perform at work to your maximum. As usage increases it will affect family and interpersonal relationships and cause financial burdens. It may also bring you to the attention of law enforcing agencies and crime related activity. Some people can lose everything.

How to Find out more information and/ or Get Help

INFORMATION RESOURCES

General drug policy information: Drug Policy website www.ndp.govt.nz.

Information about cannabis is available for young people on the Urge/Whakamanawa youth website www.urge.org.nz or www.whakamanawa.co.nz

Visit the CADS (Community Alcohol & Drugs Services) website www.cads.org.nz/Sorted/default.asp

FINDING HELP FOR YOU OR OTHERS

There are a number of services around New Zealand that offer counselling, support and assistance to people who are trying to cut down or stop their cannabis use. If you feel that you or anyone you know needs help, then you can call these services in strict confidence.

If you are faced with an emergency, call 111 immediately.

To talk to someone about your or someone else's drug use, call the Alcohol Drug Helpline - 0800 787 797.

You can also get contact details for your local alcohol and other drug counsellor or treatment provider by calling the helpline or by visiting www.addictionshelp.org.nz.

Narcotics Anonymous:

Wellington 04 801 9933

Auckland 09 303 1449

Christchurch 03365 0686

Other Information

Medicinal cannabis

The scientific and clinical evidence to support the medicinal use of cannabis and cannabis-derived products is not yet overwhelming but is well-established enough to suggest that cannabis has therapeutic benefits in treating people with serious conditions.

In particular, these conditions include:

- chronic pain for which other pain relief treatments are ineffective, or have other adverse or side-effects
- neurological disorders, including multiple sclerosis, Tourette's syndrome, epilepsy and motor neurone disease
- nausea and vomiting in cancer patients undergoing chemotherapy, for which existing drugs are ineffective or have other harms and/or side-effects
- HIV-related and cancer-related wasting (cachexia).

Cannabis provides a 'broad spectrum' effect. For example, for patients with HIV/AIDS-related conditions, cannabis can reduce nausea, pain and joint aches, while providing appetite stimulation and potentially reducing anxiety.

Currently, research continues into cannabis-derived medicines, such as sprays and tablets so that users can avoid the harmful effects of smoking cannabis. However, until these alternative methods become available, smoking remains the most effective form of delivery of cannabinoids.

Under present law in New Zealand, the Minister of Health has the power to authorise the medicinal use of cannabis products. There have been applications, but to date, no Minister of health has ever approved the use of medicinal cannabis.

The Gateway theory

The issue of whether cannabis leads to the use of harder, more dangerous drugs has been a controversial subject for many years. One side of the argument states that if someone uses cannabis they will begin on a path to using harder drugs.

The other side of the argument says there is no evidence of cannabis causing the use of harder drugs, and that links between cannabis and other-drug use is due to societal and legal factors, as well as a person's predisposition to risky behaviour.

A study by Otago University researcher Professor David Fergusson, published in 2006, indicated that nearly 80 percent of the 1000 15 to 25 year-old people surveyed had tried cannabis, and over 40 percent had used other illicit drugs.

This study found a clear tendency for those using cannabis to have higher usage rates of other illicit drugs, but concluded that a number of reasons could be responsible.

- experience with cannabis may encourage experimentation with other drugs

- because cannabis is illegal, people who obtain cannabis come into contact with the illegal market and are therefore exposed to drug dealers
- cannabis might actually change the brain's chemistry to make young people more susceptible to trying other drugs.

In other research cited by the Health Select Committee's 2003 report into cannabis use in New Zealand, it was found that people who had used cannabis more than 50 times a year were 60 times more likely to try other illicit drugs than young people who had never tried cannabis.

However, again this study did not identify one singular causal link with the Committee report concluding: "These findings suggest that cannabis, when used frequently, may be a 'gateway' drug to other illicit drug use, although whether this is a result of contact with the illegal market or an effect of cannabis use is uncertain."

The New Zealand Context

Conservative estimates state that at least half of all New Zealanders have tried cannabis, with nearly 80 percent of young people (under 25 years old) having tried it.

Current trends indicate that an increasing number of New Zealanders admit to having tried cannabis. Studies found about 40 percent of 15 to 45 year-olds in 1990 admitted using cannabis at some stage. This increased to 50 percent in 1998 and 52 percent in 2001.

The New Zealand Health Select Committee conducted a report into cannabis use in New Zealand, published in 2003, and concluded that the prohibition of cannabis had not prevented or reduced its use.

Most surveys show an increase both in use of marijuana and frequency of use among both men and women and across all age groups.

New Zealanders appear to prefer using cannabis at home, with surveys indicating that private residences were the most common places to use the drug. It was also shown that marijuana smoking tended to be in social circumstances, often smoked between three or four people rather than alone.

Cannabis in New Zealand is often sold in relatively small amounts. An ounce of marijuana tends to cost around \$300. A 'tinny', a foil-wrapped amount containing enough cannabis for about three cigarettes or joints, costs around \$20. Other amounts are often sold for \$50 or \$100.

Statistics

The Alcohol and Public Health Research Unit's Drug Use in New Zealand National Surveys Comparison 1998 and 2001 was published in 2002 and contains the most recent analysis of cannabis use in New Zealand. Some findings included:

- 69 percent of people who said they had tried cannabis had stopped using it
- 38 percent of women aged 15 to 17 had tried in 2001, up from 26 percent in 1998
- 30 percent of those who had tried cannabis had done so by age 15
- 59 percent of people who had tried cannabis in 2001 stated that they never drove under the influence of cannabis, down from 67 percent in 1998

- four percent of the sample were heavy users (defined as having smoked cannabis more than 10 times in the past month) and only four percent were daily smokers
- in 2005, the police recorded 14,713 cannabis-only offences, down from 16,409 in 2004.

The Law and Penalties in New Zealand

It is illegal to grow, sell, distribute or possess cannabis in New Zealand. People can be charged under the Misuse of Drugs Act 1975. Marijuana is scheduled under Class C of the Act, and stronger forms such as Hashish and cannabis oil are scheduled under Class B.

The maximum penalty for possession of marijuana (Class C) is three months jail and/or a \$500 fine. The maximum penalty for importing, cultivating and/or supplying cannabis is eight years imprisonment.

The maximum penalty for Class B offences (hashish, oil) is 14 years imprisonment for importation, manufacture and supply. Possession offences carry a maximum three month jail term and/or a \$500 fine.

Having a conviction for drug offences can have a significant impact on a person's ability to travel overseas and apply for certain jobs.

In some cases, first offenders or when the offending is on a minor scale, a person may be offered police 'diversion'. This means that someone can avoid the court process and the likelihood of a conviction, often in return for a donation and/or approved counselling course.

It must be noted that the diversion scheme is up to the discretion of the police, and that it is not uniformly applied in some regions. A report by New Zealand's Health Select Committee in 2003 concluded that there were racial and regional inconsistencies with police diversion. In particular, this report found that Maori were discriminated against and it urged the police to examine their procedures so that greater consistency and fairness could be achieved.

References

Books, Journals & Leaflets

Ashton H.C. (2001) Pharmacology & the Effects of Cannabis: A Brief Review, British Journal of Psychiatry, Vol. 178, Feb. 2001, pgs. 101-106

Laraia M.T. & Jefferson L.V. (2005) Chemically Mediated Responses & Substance Related Disorders in Stuart G.W. & Laraia M.T. (2005) (Eds) Principles & Practice of Psychiatric Nursing (8th Edition) Elsevier/Mosby, St. Louis, Missouri USA pgs 423-444

Lowe G. (1995) Alcohol and Drug Addiction in Lazarus A.A. & Coleman A.M. (1995) Abnormal Psychology, Longman, London

Ministry of Health (2007) Cannabis & Your Health, Leaflet

Sparrowhawk I (2008) Smoke Signals, Openmind 151, May/June 2008, pgs. 12-13

Links

'At the heart of the Matter: NZ Drug Foundation: www.nzdf.org.nz/cannabis

www.druglibrary.org/schaffer/library/mjfaq1.htm A list of common myths and realities about the risks of smoking cannabis.

www.parliament.nz The Health Select Committee report into cannabis use in New Zealand. Contains comprehensive research summaries and different policies related to cannabis use.

www.youthlaw.co.nz A youth information service that includes health and legal information about alcohol and other drugs.

www.urge.co.nz Youthline's website containing health and safety information and guidelines for young people.

www.ndp.govt.nz New Zealand Country Report prepared for the 46th Session of the Commission on Narcotic Drugs in Vienna.

www.police.govt.nz/service/statistics/ Crime Statistics from the New Zealand police