

# cannabis

– in depth



dope  
marijuana  
weed  
hash  
skunk  
grass  
herb

DRUGS, THE LAW  
& HUMAN RIGHTS  
0845 4500 215

**RELEASE**

## What is it?

Cannabis is one of the world's most commonly used leisure drugs. It is estimated that at least one person in ten in the UK has used it.

Cannabis comes from the same plant as hemp. This plant has many uses in addition to the use of cannabis as a psychoactive (or mind altering) substance, including the manufacture of clothing, paper, plastics, building materials, food, beverages, cosmetics, methanol fuel, cleaning and paint products. Cannabis plants grow in a variety of climates and can reach up to 15 feet in height. Their leaves are made up of four to eight smaller, lance-shaped leaves with saw-toothed edges.

Although there is much debate about their origins, it is generally accepted that there are three subspecies of the cannabis *genus*. These are *Sativa* (the most prominent), *Indica* and the less favoured *Ruderalis*. Many growers cross breed these strains to produce cannabis of varying qualities.

When it is prepared for use as a psychoactive substance, cannabis comes in three main forms: cannabis resin (or hashish), herbal cannabis (or marijuana) and cannabis oil. When smoked, cannabis has a sweet, herbal smell. Stronger smelling, high strength marijuana, known as 'skunk', has become increasingly popular in recent years.

Despite an increased political interest in cannabis and the reclassification of the drug, our understanding of how cannabis works on the brain is still less than complete. We know that it contains hundreds of different chemicals, a small proportion of which are psychoactive. The most significant of these is a chemical called *delta-9 tetrahydrocannabinol* (THC). Cannabis activates cannabinoid receptors in the brain to produce a range of effects. The strength or purity of the drug is measured according to the amount of THC it contains, calculated by weight.

## Cannabis resin (Hashish)

Cannabis resin is a brown substance which is scraped from the surface of the leaves, growing buds and flowers of the plant. The resin is then sieved and pressed into a solid lump.

Resin is usually bought in street quantities, ranging from a sixteenth to a quarter of an ounce, but regular users may buy greater quantities. It is sometimes eaten, but more often it is mixed with tobacco and smoked.

The strength (or purity) of resin varies enormously. More than two-thirds of cannabis sold in the UK comes from Morocco, which exports much of the world's poorest quality cannabis. Moroccan cannabis resin generally varies from a low 2% purity to a moderate 8%. Higher quality hashish is available from Morocco and the Middle East, with purity

levels of up to 20%. As with most products, the better the quality, the higher the price.

## Herbal cannabis (Marijuana)

The reduced availability of good quality cannabis resin and the wider availability of good quality herbal cannabis has caused a growing trend to use this form of the drug.

Herbal cannabis is produced by drying the leaves and flowering buds of the cannabis plant. It looks like dried herbs and may be mixed with stems and seeds. It is smoked, usually with tobacco, in a 'spliff' or 'joint', or in a range of purpose-made or home built pipes.

Herbal cannabis is imported from the Caribbean, Holland, Africa and South America, with purity ranging from around 8% to 17%.

## Skunk

Skunk is a more potent variant of herbal cannabis, both in its mind altering effects and its aroma (hence the name). It emerged from Holland in the late 1980s, and impressed devotees so rapidly that all high strength varieties have today adopted that generic description. Often the labelling of cannabis as 'skunk' has no bearing on its actual content. Many varieties sold as skunk are no more than mass produced standard cannabis variants.

Skunk is produced by using a variety of cultivation techniques to produce specific, desired effects. These techniques include organic methods, hydroponic culture (using controlled heat, lighting and liquid feed) and specialised plant training techniques. Plant characteristics can be altered by cross pollination, varying nurture and storage environments, light and water management and harvesting stages. The drug is then prepared for use by drying the unfertilised female, flowering buds of a mature cannabis plant.

Before skunk became widely available, a seedless cannabis variety, called *Sinsemilla*, was common. This variety was similar in strength to skunk but naturally occurring, rather than artificially modified.

It is worth noting that very high quality hashish may contain more THC than an equivalent amount of skunk.

## Home grown cannabis

The increased popularity of herbal cannabis has coincided with a trend towards growing cannabis at home. This carries serious legal risks (see 'Cannabis and the Law' below). However, it can promote better knowledge of the effects of the drug among users, and can allow quality and quantity control, thereby reducing the risks associated with use. It can also allow growers to test their product and to try and produce qualities other than high strength, and the risks that brings with it. That said, the THC levels in home produced herbal cannabis have

been known to attain 27% under special conditions. Many of the growing techniques are common with the preparation of skunk (see above).

## Cannabis oil

Cannabis oil is a treacle-like liquid, refined from cannabis resin or, less frequently, from the plant itself. The oil is prepared by solvent extraction of the plant material or resin, and yields a particularly powerful form of the drug. It is smoked with ordinary tobacco, either by mixing it with the tobacco or by smearing it on cigarette paper which is then used to roll up tobacco.

## Desired effects of Cannabis

***'The brain and organism on which hashish operates will produce only the normal phenomena peculiar to that individual – increased admittedly, in number and force, but always faithful to their origin. A man will never escape from his destined physical and moral temperament: hashish will be a mirror of his impressions and private thoughts – a magnifying mirror it is true, but only a mirror.'***

Charles Baudelaire (1821–1867)

## Recreational effects

The effects of the drug depend upon the type of cannabis used, as well as your mood, your surroundings and the amount taken. The drug may bring on feelings of contentment, relaxation and happiness. Heightened sensory perception may be experienced, particularly in relation to colours and sound. Many people also attest to the aphrodisiac effects of cannabis.

## Medicinal applications

Cannabis is considered by many to have beneficial medicinal applications as an appetite stimulant, muscle relaxant, anxiety-reducing drug and analgesic. There is a considerable amount of research being done in the UK at the moment, looking at the possible benefits of cannabis for the treatment of muscular and somatic pain, and the symptoms of multiple sclerosis (MS) and wasting diseases, amongst others.

There is a strong research base to support the use of cannabis to control nausea. More recent research supports the beneficial effects of cannabis and THC-based medications in the treatment of symptoms arising from conditions such as MS and AIDS; for example, as an appetite stimulant to combat physical wasting.

Most medicinal cannabis is low in THC content. It usually comes in a capsule or as a sub lingual spray. Cannabis is not generally available in

medicinal form in the UK, although trials are being carried out into its possible medicinal uses. There is continuing debate as to whether the medicinal benefits of cannabis outweigh any harmful side effects (see below).

The Court of Appeal decided in May 2005 that it was not a defence against cannabis charges to argue that it was required for medical purposes.

## Harmful effects of Cannabis

The reclassification of cannabis should not be viewed as a signal that cannabis is a safe drug. Its continuing inclusion in the list of controlled substances reflects the consensus that this is not the case.

The risks associated with cannabis use are increased by lack of knowledge about the strength of the cannabis being used, as well as the risk of adulterants being present. The increased availability of high strength cannabis increases some of these risks, including adverse effects on mental health (see below). It is, however, impossible to take a lethal dose of cannabis.

Some relatively minor side effects include tiredness, reddening of the eyes, increased appetite (due to reduced blood sugar levels) and a dry mouth. More serious side effects include an increase in your pulse rate and a drop in blood pressure. Other harmful effects of cannabis are considered below.

## Interaction with medication

As with all drugs, users should be aware of any potential harmful interaction with prescribed or 'over the counter' (OTC) medication. Please contact your doctor or Release for specific advice.

## Effects on concentration, co-ordination and reflexes

Concentration levels, co-ordination and reflexes can be affected while under the influence of cannabis, as well as the perception of distance and speed. It is therefore dangerous to drive or operate machinery when using cannabis.

## Effects on short term memory

The *hippocampus*, an area of the brain implicated in the processing and retention of new memories, is particularly rich in cannabinoid receptors. Recent research, based on experiments using rats and primates, suggests that previously learned tasks are unaffected by cannabis use, but that short term memory and the ability to learn may be affected when under the influence of cannabis.

These experimental findings are corroborated by the anecdotal reports of cannabis users. For example, of the man who composed great guitar

riffs in his head when smoking, but had forgotten them by the time he got home to a guitar.

This research causes concern about young people using cannabis at a time in their lives when learning is of key importance. However, the research has not been conclusively supported by studies using human subjects.

## Effects of smoking

Smoking is by far the most common method of taking cannabis. Like tobacco, cannabis smoke contains toxins that are known to be hazardous to the respiratory system. These toxins are essentially a byproduct of combustion, separate from the THC and other pharmaceutically active components of cannabis. Although there is no proof that smoking cannabis (without tobacco) causes cancer, heavy users have been shown to be more at risk of bronchitis and respiratory infections.

One alternative to smoking is to eat cannabis, either on its own or in a variety of forms ranging from tea to cakes. However, the effects of eating cannabis can be far less predictable, partly because people often do not measure the quantity as carefully, or may not know how much of the drug is being consumed. The effects of ingesting cannabis can also vary widely between individuals.

Other alternatives to smoking cannabis with tobacco include using pipes, of varying sophistication, or vapourisers. Vapourisation is a technique used to avoid inhaling the irritating respiratory toxins in cannabis smoke. Further research is required into the carcinogenic effects of smoking cannabis, and safer ways of using the drug.

## Effects on mental health

Most people who use cannabis will never experience mental health problems as a result. However, it appears indisputable that cannabis does have a detrimental effect on the mental health of a minority of individuals. The risks seem to be highest for young people, those who use cannabis heavily and those who suffer from, or have a vulnerability to, mental illness.

Few well controlled studies have been carried out, and those that have still fail to replicate findings. In view of the widespread use of cannabis, and the implications these findings have on general public health, better evidence is clearly needed.

The Advisory Council on the Misuse of Drugs (ACMD) published a report in March 2002 which stated that there was no conclusive evidence to suggest a causal link between smoking cannabis and the development of mental health problems.

Several subsequent reports have disputed this. One recent study (Fergusson, Horwood & Ridder, 2005) concluded that regular cannabis

use may increase the risk of psychosis. Another study (Van Os et al., 2005) concluded that cannabis use moderately increases the risk of psychotic disorders, but that the risk was considerably greater for those with an established vulnerability to psychosis.

Other studies have reached seemingly contradictory conclusions. For instance, a 2004 report (MacLeod et al.) reviewed a number of longitudinal studies and concluded that the available evidence did not strongly support an important causal relation between cannabis use by young people and psychosocial harm. However, they could not exclude this possibility.

There are significant limitations on the research methods used in most of these studies. Most are reliant on self-reports of cannabis use, which often results in under-reporting, especially if the information is not collected anonymously. In addition, the diagnosis of mental health disorders is notoriously difficult. For example, heavy cannabis use can produce temporary psychotic states which may be diagnosed as schizophrenia. However, these temporary psychoses have not been proven to be a cause of psychiatric disorders.

There is often a time lapse between cannabis use and the onset of psychiatric disorders. Furthermore, other factors such as general health, family and social relations, education and employment are difficult to exclude. Genetic predisposition is another complicating factor. It is also difficult to isolate the effects of cannabis in circumstances where it is often used in conjunction with other substances.

The wider availability of higher strength cannabis, and concerns about its implications for mental health, have led to further debate about its legal classification. The position at the time of going to print is set out below (under 'Cannabis and the Law').

## Dual Diagnosis

'Dual diagnosis' is a term that has been developed to describe the condition of a person who has an emotional or psychiatric condition as well as a problem with drink or drugs. Psychiatric conditions could include schizophrenia, phobias, obsessive compulsive disorder, mania, bipolar disorder and other personality disorders.

Dual diagnosis can be unreliable. Short-term drug related psychoses often resemble the symptoms of mental health disorders, such as schizophrenia. This is a condition characterised by a distortion of reality, delusions, hallucinations, depression and anxiety.

Psychiatric services will normally insist that patients stop using drugs completely in order to concentrate on dealing with their emotional or psychiatric condition. Treatment will be dependent on the range of symptoms and the history of the subject.

Dual diagnosis treatment is a specialised discipline requiring skilled practitioners. General Practitioners and drug services should be able to refer patients to local agencies which offer specialist interventions.

## Dependence on cannabis

Dependence on cannabis is generally agreed to be relatively uncommon. However, a minority of users can become dependent on cannabis for a number of reasons. A 1997 study (Kleiber et al.) found that 2–10% of those exclusively using cannabis were substance dependent.

## Tolerance to cannabis

One recognised way in which people become dependent on drugs is by building up a tolerance to the substance through prolonged use. This can lead users to take higher doses in order to maintain a 'baseline' effect. Regular users clearly do develop some tolerance to the effects of cannabis but it is not clear to what extent and how this develops. This is an area where more research is needed.

## Cannabis withdrawal

Withdrawal symptoms are another factor that can lead to substance dependence. Withdrawal from cannabis use is not nearly as extreme as withdrawal from certain other drugs, such as heroin, tranquillisers or alcohol. However, it does appear to have a withdrawal syndrome.

A study carried out in 2000 indicated that cannabis smokers became more irritable and aggressive when they quit. A 2003 study observed a range of withdrawal symptoms, including aggression, anger, anxiety, decreased appetite, decreased body weight, irritability, restlessness, shakiness, sleep problems, and stomach pain. Onset typically occurred between days one and three, peaked between days two and six, and usually lasted four to 14 days.

Many non-cigarette smokers who use tobacco in 'joints' may also experience nicotine withdrawal when they stop smoking cannabis. This will obviously worsen withdrawal symptoms. Medical help is available to combat the symptoms of nicotine withdrawal, in patch, chewing gum and tablet form.

## Reducing, or stopping, cannabis use

### Drug treatment services

Conventional drug treatment services in the UK sometimes regard cannabis use as a low priority unless there is evidence of an underlying mental health problem (see 'Dual Diagnosis'). Young people's services

tend to offer more help, but again the emphasis can be on mental health.

Nonetheless, local drug treatment services should be able to help users to reduce or stop cannabis use through a variety of techniques, including advice and support from a key worker and complementary therapies. Joining a local support group is a further option.

## Detoxing

Detoxing from cannabis use is not physically dangerous. However, medical advice should be sought if there are concerns about stopping use, particularly if cannabis is being used to relieve depression.

There will be limited physical discomfort when detoxing from cannabis. The main problems encountered are likely to include difficulties relaxing and lack of sleep. Other symptoms may occur, as outlined above (under 'Cannabis withdrawal'). This can lead people to use other medication, such as tranquillisers, which are considerably more addictive.

Physical exercise can help increase natural endorphin levels and therefore assist with sleep. Complementary therapies, especially auricular acupuncture, can also promote relaxation, as can herbal teas such as 'detox' tea, 'sleep' tea and 'lung' tea. These can be accessed through local drug treatment services, herbalists or alternative medicine outlets.

## Cognitive behaviour therapy

Elements of Cognitive Behaviour Therapy (CBT) can be applied to stopping cannabis use. CBT can be useful to help people learn to alter their responses to certain stimuli related to their drug use. This can help them to avoid risky situations or to take stock when their thought patterns drift towards using, by enabling them to implement learned coping strategies. This is particularly useful in avoiding ritualistic use, which can be a major obstacle to achieving abstinence.

## Peer pressure and the 'cool' factor

Peer pressure can be very influential on behaviour patterns, and the perception of drug use as being glamorous can lead people to experiment and form a habit. The provision of accurate, objective information will help people to make more informed choices about cannabis use.

## Drug testing and cannabis

### Detection times

Cannabis is one of the slowest drugs to be eliminated from the body.

This is due to the build-up of cannabis metabolites, which are excreted slowly and absorbed by the body's fatty tissues. The detection periods vary depending on the testing equipment used, your metabolism and the amount of cannabis taken.

As a rough guide, smoking a medium strength joint a couple of nights a week may take about 14 days to clear the system. Heavy use of high strength cannabis can be detected for about 42 to 56 days after stopping use. A very occasional smoker may clear the drug in four to five days.

Urine, blood and saliva tests provide a snapshot of your system at the moment of testing. Hair testing can detect substances for about six months after use has stopped, although it may not pick up occasional 'one off' use. Hair testing is more expensive than other methods and therefore less common. It is used when the purpose of testing is to provide a history of use (or abstinence).

## Testing and young people

It is becoming increasingly common for schools and even parents to test young people for the presence of drugs in their system. Cannabis, being by far the most widely used substance, is also the most common cause for concern.

As an alternative to testing, Release strongly advocates the opening of a positive dialogue with young people about drugs, based upon honesty on both sides, with an acknowledgement of peer pressure and the desire among young people to experiment with altered states.

Parents and teachers should consider what they hope to achieve by testing young people and what the downsides of testing are. Testing young people for drugs is costly and fraught with difficulties, and is unlikely to lead to the resolution of any drug problem. Crucially, it carries the serious risk of alienating those young people who do need help.

It is essential to have planned what will happen if the test is positive. If it is decided that testing will be carried out, care must be taken to ensure that the testing itself and the processing of the results are carried out sensitively and lawfully.

Account must be taken of the fact that tests are not always accurate. Any positive result should be confirmed by a laboratory test on a Gas Chromatography/Mass Spectrometry ('GC/MS') machine.

Advice should be sought from Release, or local drug treatment services, when considering testing young people.

## Testing in the workplace

Many employers now routinely screen their employees for drugs, and most look at cannabis use as dismissible conduct. Workers in the

transport and construction industries are particularly likely to be asked to undergo random testing.

It is essential for safety standards to be met, particularly where employees are operating machinery. However, what currently goes unrecognised is that drug tests do not determine whether the person tested is under the influence of the relevant substance. This is particularly relevant where cannabis is concerned, as it may still be detected several weeks after it was last used, although the effects of the drug will have worn off after a few hours.

Employers, however, do not generally take these issues into account and dismissals resulting from positive drug tests will often be justified on the basis of misconduct (a positive test being evidence of illegal activity) rather than any performance problems.

We would recommend that employers who are considering the introduction of drug testing should go through the same thought processes as those considering the testing of young people (see above), and should seek independent, professional advice.

## **Cannabis and the Law**

Cannabis (including cannabinol, cannabinol derivatives and cannabis oil) is a Class C, Schedule 1 drug under the Misuse of Drugs Act 1971. It is a criminal offence to possess, supply, cultivate, produce, import or export cannabis.

### **Possession for personal use ('simple possession')**

Simple possession of cannabis now carries a maximum sentence of two years in prison and a fine. Sentences are usually limited to fines, however, and only in exceptional circumstances will a tougher sentence be imposed. Many first time offenders, if arrested, will simply receive a caution. Sentences for any drug offence depend upon the quantities involved, previous convictions and other relevant circumstances.

The police still have the power to arrest for simple possession of cannabis. However, the Association of Chief Police Officers (ACPO) has issued guidance to the police force that they should not arrest adults found in possession of a small amount of cannabis (that is, where it is clearly for personal use), unless aggravating factors exist.

Aggravating factors include smoking in public, being repeatedly caught in possession of cannabis, and having cannabis in your possession while in the vicinity of children. There are other factors, and you should contact Release or consult your solicitor for further information.

If there are no aggravating factors, it is likely that an informal warning will be given and the cannabis will be confiscated. However, it is important to remember that the decision whether to arrest is at the discretion of the police officer involved.

The new guidelines on arrest do not apply to under 18 year-olds. If caught in possession of cannabis, they will still be arrested under the Crime and Disorder Act 1998 which requires young offenders to be dealt with at the police station.

## Supply offences

The offence of supply does not have to involve money changing hands. Technically, it includes passing somebody a joint. The maximum penalty for supply offences is 14 years' imprisonment and a fine. Penalties of this level of severity will only be applied in the most serious cases.

## Cultivation of cannabis

Cultivating cannabis is a criminal offence which can lead to heavy custodial sentences, depending in part on the extent of the likely yield of the plants found. It is advisable for defendants to seek expert evidence on this question.

## Occupiers of premises

It is a criminal offence for occupiers of premises, or anyone concerned in the management of premises, knowingly to allow those premises to be used for the production, supply or smoking of cannabis. Conviction can lead to heavy custodial sentences.

## Cannabis and driving

Even though some users insist that they can drive safely on cannabis, most research concludes that cannabis slows the reflexes, and alters spatial awareness and the perception of speed, making it unsafe to drive while under the influence of the drug.

Being unfit to drive under the influence of any intoxicant, including cannabis, is an offence which is likely to lead to the loss of your driving licence and a fine, and could result in a prison sentence.

Furthermore, because of the long detection time for cannabis, you may lose your licence if you test positive for the drug, even if you were not under its influence while driving.

Getting your licence back and obtaining insurance after losing it will be difficult.

**The contents of this leaflet are correct at the date of print.  
Always seek legal advice.**

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# Glossary of cannabis terms

## **Some slang terms for cannabis (any type)**

Blow

Bob Hope

Dope

Draw

Puff

Shit

Wacky Baccy

## **Some slang terms for cannabis resin (Hashish)**

Hash

Rocky

Soap

Soap bar (usually approx 9 ounces)

Solid

## **Some slang terms for herbal cannabis (Marijuana)**

Bush

Chronic

Funk

Ganga

Ghanja

Grass

Green

Herb

Pot

Weed

## **Some well-known types of cannabis resin (Hashish)**

Afghani

Black (Pakistan, Afghanistan, Nepal)

Charas (India)

Gold seal

Lebanese

Moroccan

Pollen (Morocco)

Red Leb

Red Seal  
Sputnik  
Temple Balls (Nepal)  
Zero-Zero (Morocco)

### **Some well-known types of herbal cannabis (Marijuana)**

Acapulco Gold  
Dagga (South Africa)  
Durban poison  
Kif (Morocco)  
Lambs Bread (Jamaica)  
Maui Wowie (Hawaii)  
Oaxacan Red (Mexico)  
Panama Red  
Punto Rojo (Colombia)  
Sinsemilla (California/Jamaica – meaning ‘without seeds’)  
Skunk  
Thai sticks

### **Some well-known types of skunk**

Northern Lights  
Purple Haze  
Red Beard  
White Widow

### **Some slang terms for cannabis ‘cigarettes’**

Blunt (if rolled in a cigar)  
Joint  
Reefer  
Spliff  
Zoot

### **Some other methods of smoking cannabis**

Bong  
Bucket  
Chalice  
Chillum  
Hookah  
Hot Knife  
Vapouriser

## Useful contacts

### **Marijuana Anonymous**

07940 503438

(Support for those experiencing problems with cannabis use – call to check local meeting times and places)

### **Vaults of Erowid**

[www.erowid.org/plants/cannabis/cannabis.shtml](http://www.erowid.org/plants/cannabis/cannabis.shtml)

(Research, report addresses and postings)

### **UK Cannabis Internet Activists**

[www.ukcia.org](http://www.ukcia.org)

(Information about cannabis)

### **Mind**

[www.mind.org.uk](http://www.mind.org.uk)

08457 660 163

(Mental health charity)

### **Legalise Cannabis Alliance**

[www.lca-uk.org](http://www.lca-uk.org)

(Political lobby group)

### **MAPS**

[www.maps.org/mmj](http://www.maps.org/mmj)

(US research body and information resource on medical marijuana research)

### **GW Pharmaceuticals**

[www.gwpharm.com](http://www.gwpharm.com)

(Major pharmaceutical company working with cannabis-based medicines in the UK)

## Further information

For further advice or information on any of the above issues, contact Release by phone (0845 450 0215) or email ([ask@release.org.uk](mailto:ask@release.org.uk)) or contact your solicitor or local drug treatment service.

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