

This booklet summarises what we know about the impact of cannabis use on young people. We have done our best to present the facts without any bias. Future research may change some of the information contained in this booklet, but at the time of printing, the information was accurate and up-to-date.

#### what is cannabis?

Cannabis is the name used for products made from the plant *Cannabis sativa*, such as marijuana, hash and hash oil. This plant contains up to 500 chemicals, with about 80 creating its unique effects. The main mindaltering ingredient in cannabis is THC (delta-9-tetrahydrocannabinol). It is mostly responsible for the changes in the mood, thoughts, perceptions and behaviour of a person who uses the drug. Cannabis works by entering the bloodstream through the lungs when smoked, then travelling to, and activating, specific cannabis receptors in the brain.

- cannabis works by turning on cannabis receptors in the brain
- the main mind-altering ingredient is THC (delta-9tetrahydrocannabinol)



#### is cannabis stronger than it used to be?

When people refer to the strength, or potency, of cannabis they usually mean how much THC it contains. This varies from plant to plant and between the parts of the plant that are used.

Data collected over the last 30 years in the USA, Europe and New Zealand show that while the average THC content of cannabis has increased in some countries, there is enormous variation between samples. This means that cannabis users may be exposed to greater variation in a single year than over years or decades. It would appear, however, that the strength of cannabis has increased, possibly doubling, over the past three decades.

 the strength, or potency, of cannabis may have doubled in recent years

### how long does cannabis stay in my body?

Depending on how cannabis is used, the body absorbs, metabolises (breaks down) and gets rid of THC differently. When it is smoked, the effects come on quickly, because the THC is rapidly absorbed into the lungs and enters the bloodstream within minutes.

Cannabis can also be cooked in foods and eaten, or drunk in tea, although this is less common than smoking. When it is used in this way the THC takes much longer to be absorbed into the blood, so the effects come on more slowly (taking about an hour), and last a lot longer than when smoking it. Because you might use more while you are waiting for the effects to come on, it is harder to control the dose and the effects.

Cannabis is stored in the fatty tissues, slowly released back into the bloodstream and excreted from the body. As a result, traces of cannabis can be found in urine for up to a month or more, depending on how much, how long and how often the drug is used.

- when cannabis is smoked it is quickly absorbed and broken down, but this process is slower and more unpredictable when the drug is eaten or drunk
- cannabis may be detected in urine for up to several weeks after it is used

#### what effects does cannabis have on my body?

Unlike other drugs (such as alcohol or heroin) cannabis does not affect the parts of the brain that control breathing. As a result, when only cannabis is used, overdose is not known to be fatal. However, cannabis users may experience a variety of negative effects which can affect their health and functioning. The severity of these effects depends on several factors. These include: how much and how frequently cannabis is used, how it is used (e.g. smoked or eaten), and whether other drugs are being used.

 cannabis use alone is very unlikely to cause death, but it can negatively affect health and well-being

#### what happens to my lungs when I smoke cannabis?

Cannabis and tobacco smoke are similar. Cannabis smoke contains even more of some cancer-causing ingredients than tobacco smoke. This smoke can damage the lungs and affect physical fitness (e.g. for sport) and general health, even when you are young.

Regular cannabis smoking may increase the chances of developing lung disease, such as chronic bronchitis, or make it worse. Bronchitis causes symptoms such as coughing, phlegm and wheezing. Regular smoking may also interfere with the lungs' ability to resist infections. There is also growing evidence that regular, long-term cannabis smoking may lead to cancers of the respiratory system (e.g. tongue, lip, throat) in young adults.



The way cannabis is smoked affects the risk of experiencing these problems. Smoking rapidly, inhaling deeply and holding your breath increases the toxins that are absorbed into the lungs, without making the user feel more stoned. If tobacco is smoked or mixed with cannabis, the effects of both of them together are worse than either of them alone.

- smoking cannabis can harm the lungs and affect physical fitness, even when you are young
- smoking rapidly, inhaling deeply and holding your breath exposes the lungs to more toxins without making the user feel more stoned
- smoking cannabis and tobacco together can also make things worse for the lungs than using either of the drugs by themselves

### i've heard that cannabis can help my asthma — is that true?

One of the short-term effects of the THC in cannabis is to expand the airways in your lungs, even if you have asthma.

While you may feel this short-term effect of smoking cannabis provides you with relief, you are also exposing your lungs to the toxins contained in the smoke. Regular smoking can cause irritation and damage to your lungs, especially if you have a lung disease. Cannabis is not a treatment for asthma and causes it to get worse rather than better because of its inflammatory effects.

 some cannabis smokers may feel short-term relief when smoking cannabis, but regular cannabis smoking will irritate and damage your lungs



## can I become dependent on cannabis? i.e. is cannabis addictive?

Most people do not use cannabis regularly or develop problems with it. A small proportion of people, however, will become dependent on cannabis. The chance is similar to the chance of becoming dependent on alcohol or amphetamines. If a person is dependent they may have difficulty controlling their use, and spend a lot of time involved with cannabis and less time on other things in their life.

Some regular users also experience withdrawal symptoms when they stop because their body has become so used to the drug. They may feel restless and anxious, have difficulty sleeping, develop cravings for cannabis and lose their appetite. Symptoms are usually quite similar to tobacco withdrawal and compared with alcohol withdrawal are quite mild. They usually stop after a few days, but sometimes they last up to a few weeks. As with tobacco though, the withdrawal symptoms may lead to taking up cannabis use again to reduce the discomfort.

Being dependent on cannabis increases the exposure to its negative physical and psychological side-effects. It also means that the person does not feel that they are in control of their cannabis use.

We do not know exactly how much you need to use before you become dependent on cannabis. However, the more frequently the drug is used, the greater the chance of becoming dependent. Some research suggests that young people can become dependent on cannabis using lesser amounts, and in a shorter time, than adults. Whenever drug use starts occupying larger and larger amounts of your time, it signals that you are relying on it rather than developing other aspects of your life. These circumstances place you at risk of becoming dependent.

a small proportion of cannabis users become dependent.
 They have difficulties controlling their use even if it is causing them problems

- some people experience withdrawal symptoms when they stop using
- the more frequently cannabis is used, the greater the chance of becoming dependent

#### how does cannabis affect my brain?

Memory and attention may be affected when cannabis is used, which can interfere with the ability to take in and remember new information. Cannabis use does not cause severe irreversible damage to the brain or mental processing, but if cannabis is used heavily over many years, subtle problems with memory, attention and the ability to handle complex information may be experienced. This can affect everyday life, particularly when learning something new or doing something difficult.

- cannabis use is unlikely to cause serious irreversible brain damage
- long-term, regular users may experience some problems with memory and attention

## what effect does cannabis have on mental health?

Some people experience very unpleasant psychological effects when they use cannabis, like severe anxiety, paranoia, or panic reactions. At very high doses, confusion, delusions (beliefs not based in reality), and hallucinations (seeing or hearing things that aren't really there) may also occur, but this is uncommon. These symptoms are more likely to be felt by people who are not used to the effects of cannabis or have smoked more than they are used to. They do not usually last after the effects of the cannabis wear off, but can still be very frightening at the time.



Some people are more likely to be affected than others; they are more vulnerable to the psychological effects of cannabis and should avoid using. If you have a family history of severe mental illness, such as schizophrenia, or are vulnerable to developing such problems, cannabis use might trigger an episode. Young people, in particular, may not be aware that they are vulnerable. If you, or someone in your family, already have an illness like schizophrenia, cannabis use may make some of the symptoms worse, prolong episodes, or cause a relapse.

- cannabis use might trigger problems if you have a family or personal history of severe mental illness or are vulnerable to developing it
- if you already have a serious mental illness it may make some of your symptoms worse and you are strongly advised to avoid cannabis use

# are there added risks to smoking cannabis for young people?

Generally, the earlier you start using cannabis and the more heavily you use it, the more likely it is you will continue to use it and develop problems with it. Your chances of having problems with cannabis may also increase if you already have emotional problems, or problems at school, at home, or with the law.

Using cannabis regularly when you are young and your body is still developing increases your body's exposure to the harms associated with cannabis use. This may interfere with your options and choices in life, now and in the future.

 the earlier and more heavily you use cannabis, the more likely you are to continue using and develop problems. This may affect your choices and options in life

#### what if I'm pregnant or want to have kids?

Using cannabis when pregnant may affect the development of the baby, leading to premature birth and smaller birth-weight. Both of these outcomes are dangerous for the survival and health of the child. These effects may be made worse by smoking tobacco, because the effects of smoking tobacco and cannabis during pregnancy are similar.

THC can cross the placenta into the baby during pregnancy and pass into the breast milk after the baby is born. Mothers who smoke cannabis and then breast-feed therefore risk exposing their child to the THC. The developing nervous system of babies and young children is particularly vulnerable.

For these reasons it is best to be safe and not use cannabis during pregnancy or breast-feeding.

There is some evidence that cannabis may reduce fertility in men by decreasing sperm quality and testosterone levels and in women by disrupting the menstrual cycle. Although occasional cannabis use is unlikely to cause severe problems, if fertility problems are being experienced, cannabis should not be smoked.

Passive cannabis smoking by babies is also potentially risky, so children should not be exposed to cannabis smoke.

- using cannabis when pregnant or breast-feeding may affect the development of the baby, as the cannabis gets into their body too
- regular cannabis use may affect fertility and the hormones connected to reproduction
- children should not be exposed to cannabis smoke

#### is it dangerous to drive while I'm stoned?

Driving under the influence of cannabis increases the risk of having a motor vehicle crash by 2-3 times. Someone who is stoned may find it hard to divide their attention between several tasks or hold their attention for a long time. They may also find it harder to react when something unexpected happens. Some of these effects may even be experienced when the cannabis user does not feel stoned anymore. Also, combining cannabis and alcohol affects driving more severely than using either drug alone.

- cannabis affects the ability to react and pay attention on the road, even when the user is no longer stoned
- driving under the influence of cannabis increases the risk of having a motor vehicle crash by 2-3 times
- driving after using alcohol and cannabis together is even more dangerous than using either drug alone

#### is cannabis use still illegal?

Cannabis is illegal in all Australian states and territories, but each jurisdiction has their own laws and penalties. In some places the possession and use of small amounts of cannabis have been decriminalised. Cannabis use is not legal in these places — it simply means that those caught with the drug will usually have to pay a fine instead of receiving a criminal record. It is important to realise, however, that a criminal record for cannabis use is still a possibility even in places where the drug has been decriminalised.

Most of the drug arrests in Australia relate to cannabis. While being 'busted' for cannabis may not seem a big deal to some young people, having a criminal record for a cannabis offence may restrict their options for things they may want to do, such as employment or travel for the rest of their life.

cannabis is illegal in every state and territory in Australia

#### acknowledgements

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