

cannabis and driving

Please note that the information on cannabis and driving given on this factsheet does not constitute legal advice and should not be relied upon in this way. The information is correct at the time of publication. People wanting legal advice on this issue should consult a lawyer.

It is well-known that driving under the influence of alcohol increases the risk of having a car crash. Recently, the role that other drugs play in car crash risk has also received a lot of attention. Both the short-term effects of cannabis intoxication and the long-term effects of being a regular user of the drug have been suggested to have a negative effect on driving ability.

studies on cannabis and driving

There are three main ways to study whether or not cannabis impairs driving: laboratory studies, which test the effects of cannabis on skills that are used in driving, such as reaction time and attention; simulator studies, which assess the effect of cannabis on driving using specially-made equipment that mimics what it is like to drive a car; and field studies, which assess the relationship between car crashes and cannabis use in the real world.

laboratory studies

Laboratory studies have shown that cannabis compromises reaction time, attention, decision-making, time and distance perception, short-term memory, hand-eye coordination, and concentration. These studies have the advantage of being able to test the effects of large doses of cannabis under controlled conditions, but it is unclear to what extent these results apply to real world driving.

simulator studies

Simulator studies are more realistic than laboratory studies, but are still not the same as driving in real life. Some of these studies have found that cannabis causes a range of problems, such as a poor ability to maintain lane control. However, other studies have shown that people under the influence of cannabis are more likely to reduce risks by driving more slowly and maintaining a greater distance between themselves and the car in front, than those who have not used cannabis. This may be because the cannabis-affected drivers are compensating for their slowed reaction time. This strategy has been shown to last just over an hour and does not help if something unexpected happens on the road.

field studies

Cannabis-induced impairment of driving has been demonstrated in on-the-road driving tests where subjects were accompanied by licensed driving instructors in vehicles fitted with another set of controls to ensure safety at all times. These studies have also shown that when cannabis is consumed in combination with even a low dose of alcohol, the impairment is far more severe. An alternative method of studying the effects of cannabis on real life driving is to look at the relationship between cannabis use (known from blood or urine analysis or from self-report) and car crashes that have already happened. These studies have found higher rates of cannabis use

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among people who have been involved in car crashes than cannabis use rates in the general population. A recent study on fatal driving crashes conducted a culpability (responsibility) analysis and concluded that cannabis users were significantly more culpable than non-cannabis users and the likelihood of being responsible for a crash increased with cannabis dose. Other studies that have asked people about cannabis use and their involvement in crashes have found that long-term cannabis use is associated with car crashes. However, there may be something about people who are involved in crashes that mean they are also more likely to be cannabis users (such as being young and male). Nevertheless overall, the results from studies in the field confirm that cannabis use can adversely affect driving performance.

The latest review of the evidence reports that driving under the influence of cannabis appears to increase the risk of motor vehicle crashes by a factor of two to three times. In addition, it is also important to remember that many people mix cannabis with alcohol. There is now good evidence to suggest that using cannabis and alcohol together, even at low doses, could have a worse effect on driving than either cannabis or alcohol alone.

prevalence of driving under the influence of cannabis

According to the 2010 National Drug Strategy Household Survey, 21.5% of males and 13.2% of females reported driving under the influence of an illicit drug, but these proportions declined significantly in 2010 from 2007. From the available evidence, cannabis is likely to be the most common illicit drug used when driving. The likelihood that an individual would drive under the influence of cannabis is increased when that individual believes the risk is low, if the individual is cannabis dependent, or if they also use other illicit drugs.

is drug driving tested for in Australia?

Road-side breath testing for alcohol intoxication has been around for a long time in Australia. Testing for intoxication due to other substances has until recently, only occurred if police suspect that a driver is under the influence of a drug other than alcohol. In these cases, the police officer would request a blood or urine sample. The results of the test would then be taken into account by the court, in addition to the testimony of the police officers and experts. Prosecution of drug driving has been uncommon in Australia because of the expense involved in obtaining the testimony of experts, and because police officers often find it hard to determine whether someone is intoxicated.

In all jurisdictions in Australia, legislation has been passed or drafted that allows for roadside saliva testing for drug driving, including cannabis. Victoria was the first state to introduce random roadside drug driving legislation at the end of 2004. South Australia followed suit in 2005, followed by Tasmania in 2006. New South Wales, Western Australia and Queensland began testing in 2007 and the Australian Capital Territory, in 2010. The Northern Territory also has powers to test drivers under the Northern Territory Traffic Act.

Although procedures vary across jurisdictions, most are based on the protocols developed in Victoria. In that state, saliva tests are used to determine whether the person has taken cannabis, amphetamines or ecstasy (MDMA). A screening test is used first to detect the presence of one or more of these substances. If this is positive, then a second salivary confirmatory test is used to determine the amount of drug that is present.

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It is claimed that the tests can detect cannabis for several hours after use. However, as THC does not as easily pass from the blood stream into the saliva as amphetamines or ecstasy do, saliva tests appear to be less effective at picking up cannabis than these other drugs. What this means is that if someone tests positive for THC, it is likely they have recently used the drug. Saliva tests cannot detect the residual amount of the drug that stays in the body for days or even weeks after use. If someone is caught driving under the influence of drugs in Victoria, they cannot be charged for drug possession offences, although this may be the case in other states.

For more information please see the NCPIC research brief [‘driving under the influence of cannabis: a brief review of the literature’](#).