

# ALCOHOL AND OTHER DRUG USE IN AVIATION

What is cannabis? Cannabis is the generic term for the various psychoactive preparations of the Cannabis sativa or Cannabis indica plants.

The term covers marijuana leaf, flowers, seeds, oil and resin from the plant. The principal psychoactive component is delta-9-tetrahydrocannabinol (THC). THC is concentrated in the heads of the plant, and lower levels are found in the leaves.

### Cannabis and safety

Most of the research on the impact of cannabis on safety centres on driving. The evidence regarding cannabis-related driving impairment is inconclusive. There is evidence that cannabis impairs driving, whereby drivers are more likely to hit obstacles, miss signs or drive more slowly. There is also evidence that driving ability is not dramatically impaired, with drivers compensating by slowing down and maintaining greater distance between vehicles.

Common effects of cannabis, however, include reduced coordination, slowed reaction times and slower information processing, all of which pose a potential risk to safety.

# Long-term and short-term effects of cannabis

Typically, people who use cannabis do not progress to regularly using the drug for the rest of their lives. Most users experiment with cannabis every now and then during adolescence and early adulthood, then stop in their mid to late 20s. However, some people will use cannabis for longer and more regularly, and become dependent on the drug. Historically, cannabis was not seen as a drug of dependence in the same way as heroin or alcohol, but it is now well recognised that cannabis dependence is a meaningful syndrome.

The short-term effects of using cannabis may include:

- → feeling of wellbeing
- → talkativeness
- → drowsiness
- ightarrow loss of inhibitions

- → decreased nausea
- → increased appetite
- $\rightarrow$  loss of coordination
- → bloodshot eyes
- ightarrow dryness of the eyes, mouth and throat
- → anxiety and paranoia.

There is limited research on the long-term effects of cannabis. On the available evidence, the major probable adverse effects are:

- increased risk of respiratory diseases associated with smoking, including cancer
- → dependence
- decreased memory and learning abilities
- decreased motivation in areas such as study, work or concentration.

### Cannabis and mental health

The link between the use of cannabis and mental health problems receives a lot of attention in both research and the media.

There have been reports of people experiencing psychotic symptoms after smoking a lot of cannabis or more than they are used to. This is rare and the symptoms, although frightening at the time, usually go away once cannabis use stops. Cannabis has been shown to make psychotic symptoms worse in those who already have a psychotic disorder such as schizophrenia. Evidence suggests that cannabis may trigger schizophrenia in those who are already at risk of developing the disorder. Those with a vulnerability to schizophrenia, such as a family history of the illness, are advised against using cannabis for this reason.

The link between cannabis and other more common mental health disorders, such as depression and anxiety, is confusing because often cannabis is used to relieve the symptoms of these disorders. Cannabis may work well at easing depression before the effects of the drug wear off; however, smoking cannabis may ultimately make depression worse. It has been shown that those who use cannabis have higher levels of depression and depressive symptoms than those who do not use the drug. Cannabis can lead to symptoms of anxiety, such as panic, in the short term but there is a lack of evidence pointing to cannabis as an important risk factor for chronic anxiety disorders.



### **Aviation workplace requirements**

In accordance with Civil Aviation Safety Regulation Part 99, personnel who perform, or are available to perform, safety-sensitive aviation activities are subject to random alcohol and other drug (AOD) testing. Testing may be conducted to detect the presence of cannabinoids and cannabis metabolites above the permitted level.

For testable drugs, the permitted level is a concentration of the testable drug in 100 mls of blood that is less than the confirmatory target concentration for that drug specified in Table 5.1 of the Australian Standard 4760–2006.

The aim of the testing program is preventative, not punitive. However, the regulations provide for a suitable enforcement regime to deal with personnel whose tests return confirmed readings over the permitted levels for drugs or alcohol.

# Community support services

### Alcohol and Drug Information Service

Each state and territory has an AOD information telephone service. Many operate 24 hours and offer a free-call number for people living in regional areas.

### **Australian Capital Territory**

**24** Hour Alcohol and Drug Telephone Line 02 6207 9977

#### **New South Wales**

# Alcohol and Drug Information Service

02 9361 8000 or 1800 422 599 (rural)

#### **Northern Territory**

# Alcohol and Drug Information Service

1800 131 350

#### Queensland

### Alcohol and Drug Information Service

07 3236 2414 or 1800 177 833 [rural]

#### **South Australia**

# Alcohol and Drug Information Service

1300 13 13 40

#### **Tasmania**

# Alcohol and Drug Information Service

1800 811 994 (24 hour)

#### **Victoria**

### DirectLine

1800 888 236

### DrugInfo

1300 85 85 84

### Family Drug Helpline

1300 660 068

### Youth Substance Abuse Service

03 9418 1020 or 1800 014 446 (rural)

#### **Western Australia**

### Alcohol and Drug Information Service

08 9442 5000 or 1800 198 024 (rural)

#### **Parent Drug Information Service**

08 9442 5050 or 1800 653 203 (rural)

#### **CASA** contacts

CASA has established a virtual resource centre on AOD in the Australian aviation sector, providing comprehensive policy and program advice, resources for education and training purposes, self-assessment tools, links to useful documents and services, and a range of other materials. The website can be found at www.casa.gov.au/aod.

### CASA AOD Program Manager

The Program Manager for the CASA AOD initiative can be contacted at aod@casa.gov.au.

