

# Cannabis: Effects and risks

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**Topic Reviewers:** Mental health editorial sub-committee

The following summary is largely drawn from 'The Health and Psychological Consequences of Cannabis Use', National Drug Strategy Monograph Series No.25. 1998.

## Effects

Acute effects of cannabis include:

- Psychological impairment (anxiety, panic) especially in naive users
- Cognitive impairment (attention, memory) while intoxicated
- Psychomotor impairment (increased risk if driving, operating machinery)
- Increased risk of psychotic symptoms in vulnerable (personal or family history of psychosis)
- Increased risk of low birth weight babies if used in pregnancy.

Chronic effects of cannabis are less certain. The probable effects include:

- Respiratory disease (with smoking) e.g. chronic bronchitis
- Cannabis dependence syndrome (inability to abstain or control use)
- Subtle cognitive impairment (especially attention and memory) which may persist after cannabis use is ceased.

The possible effects include:

- Increased risk of cancers in the aerodigestive tract e.g. oral, pharynx, oesophagus
- Increased risk of leukaemia following exposure in utero
- Impaired educational/occupational achievement (association present but causal link not clear)
- Birth defects following exposure in utero.

## High-risk groups

These include: (i) adolescents, (ii) women of child-bearing age and (iii) those with pre-existing disease.

(i) Adolescents: Association with poor school performance, causal link not established. In theory cognitive effects of cannabis could impair educational achievement. Early initiation of cannabis use increases the risk of progression to heavy cannabis use and dependence.

(ii) Women of childbearing age: Cannabis use in pregnancy may increase the risk of low birth weight babies and birth defects. Cannabis is generally considered to be contraindicated in breastfeeding as it passes into breast milk; long-term effects of exposure are unknown.

(iii) Pre-existing disease: People with the following diseases may be at increased risk of exacerbation if cannabis is used:

- Cardiovascular disease (cannabis can cause mild physiological changes characteristic of stress on the cardiovascular system)
- Respiratory disease

- Schizophrenia (an association between cannabis and schizophrenia has been identified, but a causal link has not been clearly established. It is prudent to discourage those with an increased risk of psychosis from using cannabis)
- Dependence on other drugs (greater risk of developing dependence on cannabis).

## **Dependence**

The existence of a cannabis withdrawal syndrome has been an area of debate. However, there are now clear indications from research that some cannabis users will become dependent and some will experience withdrawal symptoms upon cessation of cannabis use.<sup>1</sup>

Withdrawal symptoms experienced include anxiety, irritability, restlessness, sleep disturbance, sweating, rhinorrhoea, diarrhoea, hiccoughs and anorexia.

[Editor: There is growing evidence supporting cannabis having a causal role in a range of mental health problems (at least a dose response association between cannabis use and later depression and psychosis symptoms or illness, corrected for other drug use and prior mental health symptoms). This is summarised in an editorial in the BMJ (JM Rey & CC Tennant. Cannabis and mental health. BMJ 2002; 325:1183-4.)]

## **References**

1. From L Gowing et al. Evidence Supporting Treatment: The effectiveness of interventions for illicit drug users. Australian National Council on Drugs, 2001. ANCD research paper No 3 (website [www.ancd.org.au](http://www.ancd.org.au)).