

# Cannabis

## Acute health effects of cannabis use

The acute effects of cannabis use have been recognized for many years, and recent studies have confirmed and extended earlier findings. These may be summarized as follows:

- Cannabis impairs cognitive development (capabilities of learning), including associative processes; free recall of previously learned items is often impaired when cannabis is used both during learning and recall periods;
- Cannabis impairs psychomotor performance in a wide variety of tasks, such as motor coordination, divided attention, and operative tasks of many types; human performance on complex machinery can be impaired for as long as 24 hours after smoking as little as 20 mg of THC in cannabis; there is an increased risk of motor vehicle accidents among persons who drive when intoxicated by cannabis.

## Chronic health effects of cannabis use

- selective impairment of cognitive functioning which include the organization and integration of complex information involving various mechanisms of attention and memory processes;
- prolonged use may lead to greater impairment, which may not recover with cessation of use, and which could affect daily life functions;
- development of a cannabis dependence syndrome characterized by a loss of control over cannabis use is likely in chronic users;
- cannabis use can exacerbate schizophrenia in affected individuals;
- epithelial injury of the trachea and major bronchi is caused by long-term cannabis smoking;
- airway injury, lung inflammation, and impaired pulmonary defence against infection from persistent cannabis consumption over prolonged periods;
- heavy cannabis consumption is associated with a higher prevalence of symptoms of chronic bronchitis and a higher incidence of acute bronchitis than in the non-smoking cohort;
- cannabis used during pregnancy is associated with impairment in fetal development leading to a reduction in birth weight;
- cannabis use during pregnancy may lead to postnatal risk of rare forms of cancer although more research is needed in this area.

The health consequences of cannabis use in developing countries are largely unknown because of limited and non-systematic research, but there is no reason *a priori* to expect that biological effects on individuals in these populations would be substantially different to what has been observed in developed countries. However, other consequences might be different given the cultural and social differences between countries.