# An Overview of Scientific and other Information on Cannabis (2004)



## Research conducted by:

A collaboration of researchers from a range of disciplines and backgrounds including Dr Claire Collins, Mr. Johnny Connolly, Dr Dominique Crowley and Dr Mark Morgan.

#### Aim:

To examine the pharmacological and toxicological effects of cannabis, public health risks and the psychological, criminal and sociological consequences of cannabis for the individual and society.

## Method:

Review of literature published up to early 2003.

## **Key Findings:**

- Cannabis contains 483 chemicals of which delta-9-THC is largely responsible for its psychological and physical effects.
- The potency of cannabis available in Ireland has increased in recent years due to improved cultivation techniques.
- There is a strong association between regular cannabis use in adolescence and poor educational outcomes, especially early school leaving.
- Evidence exists to support an association between cannabis use and schizophrenia among vulnerable individuals.
- Evidence shows that heavy cannabis use produces subtle cognitive impairments of memory, attention and the organisation of complex information.
- Cannabis combined with alcohol has resulted in road accidents and deaths. Evidence shows that drivers under the influence of cannabis are often aware of their impairment but are unable to compensate for the loss of capability in some psychomotor skills such as staying in lane.
- Cannabis smoke contains more cancer-causing chemicals than tobacco smoke leading to bronchitis and a doubling of the risk of certain types of cancer.

- It is estimated that up to four times the amount of tar can be deposited on the lungs of cannabis smokers as cigarette smokers if a cigarette of comparable weight is smoked.
- Cannabis has been shown to have beneficial outcomes for certain types of pain relief, treatment of nausea and vomiting and appetite stimulation.

#### NACD Recommendations to Government:

- Prevention approaches currently available are effective as long as they are community based, comprehensive and age specific.
- Public health workers should be made aware of increased cancer risk and lung/heart disease to those who smoke cannabis.
- Further research is needed on drug markets and drugrelated crime and the extent to which law is enforced and penalties applied in the courts for possession, dealing and for trafficking offences.
- The NACD identified a number of knowledge gaps where further work is needed to help inform drug policy. They are:
  - The need to establish the potency of cannabis available in Ireland;
  - The need to establish the extent and significance of cannabis use among people with mental health problems in Ireland;
  - Investigate whether there is any relationship between cannabis use and suicide or deliberate self-harm in the Irish population;
  - The need to establish the extent of cannabis use in people with respiratory illness and certain cancers;
  - The need to look at cannabis use in studies of educational achievement as one of the factors in early school leaving and educational outcomes in Ireland;
  - The need to investigate the consequences for individual cannabis users who come in contact with the criminal justice system.