



THE SENATE SPECIAL COMMITTEE ON ILLEGAL DRUGS

DISCUSSION PAPER ON  
**CANNABIS**

*Chair*

*The Honourable Pierre Claude Nolin, P.C.*

*Deputy Chair*

*The Honourable Colin Kenny*

MAY 2002

**WHY THIS DISCUSSION PAPER?**

The **Senate Special Committee on Illegal Drugs** is scheduled to table its report *focusing on cannabis* in August 2002. Its recommendations will address key elements of Canada's public policies on cannabis. We know there is no clear consensus on this issue in Canadian society. We also know, as do you, that it is our legislators who will, in the end, have to decide the direction and content of our nation's public policy on illegal drugs. And in so doing, legislators must balance between various, sometimes conflicting, influences. Scientific evidence is but one of these influences and most of this paper is about sharing some of these facts with you. Another influence is what Canadians think ought to be done. Still other influences include basic principles, our Constitutional framework, and international law.

This discussion paper is intended to provoke a fruitful dialogue with Canadians across the country, a dialogue based on some of the key elements of the scientific evidence we have gathered. Through this discussion paper we hope to *share with you what we have learned so far and expand our knowledge further before we make our recommendations*. Only through sharing information, will all Canadians be better positioned to assess any reform proposals we, or others, make.

**BASING THE DIALOGUE ON EVIDENCE**

Everyone has opinions on drugs generally, on cannabis in particular. Yet opinions are often biased, based on myths and lack of information. Indeed, some of our own opinions were just that when we began our study. This is why our first task was to hear experts and gather knowledge accumulated here and abroad.

During the past year, we have heard many experts from Canada and other countries tell us what they have learned. We have also requested research reports to gather and analyze existing information. We have examined knowledge from many disciplines; from pharmacology to criminology, law, medicine and psychology. In the last few years, similar commissions have examined drug policies in Australia, Switzerland and the UK. Scientific task forces have also reported on the state of knowledge in France, the USA and five European countries. We also examined these reports. Our first process decision was to be fully *transparent in our work*. All of our documents, whether public hearings or research, have been posted on our internet site.

Cannabis may well be one of the most studied of all plants. Yet, evidence, even scientific evidence, is sometimes contradictory, even equivocal. Our challenge is to produce intelligent, reasoned interpretations of this information and recommend workable and effective public policies.

**THE STRUCTURE OF THE PAPER**

We purposefully kept this discussion paper brief and clear, organized around a few frequently asked questions. It presents some of the key findings emerging to date from our study and from scientific knowledge, knowledge that must be constantly updated and subjected to interpretation. Some of the conclusions that emerge from the research may shock some of you, though it may come as no surprise to others. Beyond the inevitable passions and emotions, we are looking to examine together with you the facts on which such conclusions are based, to establish a truly fruitful dialogue.

Since this discussion paper is intended to support our Committee's public hearings, it proposes a series of questions to guide our debates when we visit communities across Canada this spring. We need to *hear from you to understand your experience, perceptions and feelings before we make our recommendations*. And if we don't have the opportunity to see you in person, we hope that you will write us.

**RECURRING ISSUES ABOUT CANNABIS**

- Is cannabis a gateway drug: does it lead to using other, harder drugs (such as cocaine or heroin)?
- Does cannabis use create dependency?
- What are the negative effects of cannabis on physical or psychological health?
- Is cannabis use related to criminality?
- Does cannabis impair driving capabilities?
- Are young people victims of cannabis?
- What conclusions emerge from science?
- What are the main public policy options?

**Basic terminology**

**Abuse:** *vague term. Some think that any use is abuse. It is more pertinent to distinguish between use, risk behaviour or addictive behaviour and abuse.*

**Cannabis:** *plant from which are produced marijuana (dried leaves, stems and floral summits), haschish (resin of the plant), and cannabis oil.*

**Decriminalisation:** *generally refers to removing dispositions from the Criminal Code. With respect to cannabis, some countries have adopted a policy to decriminalize in practice but not in law (referred to as de facto decriminalization), where simple possession cases are no longer prosecuted.*

**Dependence:** *modification of the nervous (physical dependence) or emotional system (psychological dependence) resulting from the reduction of use following continued and repeated use.*

**Legalisation:** *opponents to prohibition are often presented as "legalizers". In this approach, use and possession of cannabis for personal use are allowed (while some form of interdiction is maintained for sales to minors, traffic, etc.). No country has yet adopted this approach.*

**Psycho-active substance:** *refers to any substance modulating the psyche of individuals and leading to changes in perceptions, conscience, mood, etc. Includes tobacco, alcohol, numerous prescribed medication and illicit substances.*

**THC:** *tetrahydrocannabinol, the active ingredient in cannabis. Although estimates vary considerably, it is usually found in concentration of 8% to 10% in cannabis and up to 15% in haschich..*

### Is cannabis a gateway drug?

Cannabis may induce some people to using other, more potent drugs, as will alcohol or tobacco. This was a recurring concern expressed to the Committee.

In order to confirm or infirm this assertion, rigorous and systematic data on use patterns and histories of users are essential. However, the 2001 report of the Auditor General noted, as did we, that such data on the Canadian population are weak and dated. This is an obvious shortcoming when assessing a policy.

#### **Cannabis and the gateway hypothesis**

- *There is no convincing evidence to establish the gateway hypothesis.*
- *Data from population surveys show that out of 100 cannabis users in adolescence, about 10 will become regular users and 5 will move to using other drugs.*
- *Pharmacological studies of cannabis active ingredients have not found any element that predisposes users to more potent drugs. Some studies would show that cannabis may be an effective substitute to treat dependency to hard drugs.*

Sources: National Institute of Medicine 1999; Roques, 1999; INSERM, 2001; Cohen & Sas, 1997; ben Amar, in print; National Drug Research Institute, 2000.

Presuming that Canadian patterns may not differ significantly from those of other countries, we must rely on research from abroad. Studies conducted in Australia, England, France, Netherlands and the USA indicate that the vast majority of cannabis smokers never progress to other drugs. This finding remains constant despite policy differences between these countries. While it is true that most users of hard drugs have also used cannabis before these other drugs, they are also likely to have used alcohol and tobacco at a younger age. Other factors, mainly psychosocial, would better explain progression to other drugs.

#### **Cannabis and dependency**

- *Pharmacological, epidemiological studies and life stories of drug users conducted in many countries show that psychoactive substances rank as follows in terms of their addictive power:*
  - *tobacco and heroin: 35% to 50% of users*
  - *alcohol and cocaine: 15% to 20% of users*
  - *psychoactive medication: 5 to 10% of users*
  - *cannabis: 8 to 10% of users.*
- *Based on the psychiatric criteria defined in the American manual of psychiatry, studies in the USA indicate that around 8% of users develop dependency.*
- *Dependency rates tend to be higher among younger users (15 to 24) at about 15%.*
- *Auto-administration in laboratory animals, generally considered the most objective criterion for inducing dependency, has systematically been found not to occur.*

Sources: Roques, 1999; INSERM, 2001; Grinspoon & Bakalar, 1997; Swiss Federal Commission on Drugs, 1999; International Scientific Conference on Cannabis, 2002.

#### **Does cannabis cause dependency?**

Cannabis is a drug. Like other drugs, it is a psychoactive substance with toxicological effects which, in some users, will lead to some form of dependency.

Research conducted internationally shows that between 8 to 10% of cannabis users may develop some psychological dependency, a much smaller proportion than for many other drugs, illegal and legal, and comparable to some prescribed medications.

When developed, addiction to cannabis usually does not require therapy and existing forms of therapy have demonstrated their effectiveness. For most dependent users, stopping use for a few days is usually sufficient to eliminate any symptom of addiction. Physical dependence is a rare occurrence.

**What are the health effects of cannabis?**

Cannabis has been known for over 2000 years and has been used for religious, social as well as medical purposes in various cultures and societies.

Cannabis, like any other drug, has potential negative health effects. But cannabis, like other drugs, also has positive effects. These include relaxation, euphoria and sociability. Cannabis also has therapeutic applications.

Like other drugs – and any addiction prone activity from over-eating to extreme sports – cannabis can cause harm to those using it. In pharmacology, a distinction is made between the acute (short term) and chronic (long term) effect of the drug.

The acute effects include reductions of:

- attention and concentration
- motor abilities (reflex, coordination)
- short-term memory.

Chronic effects, more likely to be found in heavy users, include:

- increased risk of lung cancer (research has yet to distinguish between effects of cannabis and tobacco) and other respiratory diseases;
- possibility of cannabinoid psychosis among persons predisposed to psychosis;
- possibility of amotivational syndrome [apathy, indifference and loss of interest and ambition].

**Cannabis and health effects**

- *Among recognized therapeutic benefits are: anti-vomiting, anti-spasmodic, and pain management.*
- *Some of the chronic somatic effects of smoked cannabis include: increased likelihood of respiratory tract diseases and bronchitis; increased risk of lung cancer.*
- *Some of the long-term cognitive effects of cannabis may include reduced attention and memory capabilities.*

*Cannabis has a very high therapeutic safety index of 40,000: in other words, dying from cannabis overdose is close to impossible.*

Sources: National Institute of Medicine, 1999; INSERM, 2001.

**Cannabis and crime**

- *Cannabis use does not induce users to commit other forms of crime.*
- *Cannabis use does not increase aggressiveness or anti-social behaviour.*
- *Over one and a half million Canadians have a criminal record for simple cannabis possession.*
- *In 2000, over 30,000 persons were accused of simple cannabis possession.*
- *Cannabis possession offences represent over 50% of all drug related offences reported by police.*
- *Overall, traffic and importation offences have diminished during the 1990's.*

Sources: Statistics Canada, 2000; Brochu, 1995; Erickson, 1980 & 1986; Casavant & Collin, 2001; Ati-Dion, 1999 & 2000.

**Is cannabis use a cause of crime?**

Many of us perceive that a significant proportion of ordinary criminality is related to drugs. Alcohol abuse is significantly related to increased aggression (notably inside the family). Abuse of some illegal drugs is associated with such crimes as residential burglary, car theft and street prostitution, in part to pay for the daily doses. Nevertheless, the relationship between drugs and crime is more complex than often thought.

Research indicates that this relationship *does not apply* in the case of cannabis, that cannabis use does not lead to the

commission of crime with two exceptions. Because it is illegal, cannabis production and distribution is partly controlled by organized crime. The second exception is driving a vehicle under the influence of cannabis.

Cannabis users are considered “criminals” as they are in possession of a prohibited substance. Every year, about half of all drug charges are cannabis offences. While total Criminal Code offences have diminished in Canada each of the last 8 years, drug related offences have increased. It is impossible to estimate the total costs of cannabis criminalization. The most recent Auditor General’s Report mentions that the annual cost of fighting illegal drugs *for federal agencies only* is over \$500 million.

**Cannabis and driving**

- Available epidemiological studies do not allow to reach definitive conclusions on the effects of cannabis on driving abilities;
- However, studies tend to indicate that at high doses or combined with alcohol, cannabis use increases risks significantly;
- Cannabis use impairs motor coordination as well as straight line control and continued attention;
- However, cannabis use decreases average speed, and diminishes risk-taking behaviour.

Sources: INSERM, 2001; Robbe, 1994; International Scientific Conference on Cannabis, 2002.

**Does cannabis use impair driving abilities?**

No one wants to repeat the experience we have had with motor vehicles and alcohol. At this time there is no recognized tool for the police to detect the level of THC in blood as there is for alcohol.

Cannabis, like other drugs, impairs motor and coordination abilities. Yet studies are inconclusive and unable to distinguish between the effects of alcohol and those of cannabis. Laboratory studies indicate that driving abilities are affected for a period of 2 to 8 hours after

ingestion of cannabis. Laboratory studies also indicate that drivers under the influence of cannabis are more cautious and less aggressive and drive more slowly than drivers under the influence of alcohol. Studies on pilots have revealed a significant reduction in abilities under the influence of marijuana, without them being conscious of impairment.

**Are young persons victims of cannabis?**

The health and well-being of youth are key considerations in setting cannabis policy. Some witnesses before the Committee and individuals writing to us are concerned that a more “liberal” drug policy would mean increased use, especially by youth.

Studies show that youth are already the principal user group, though Canadian data are weak and inconsistent. Surveys of high school students in Ontario and Quebec reveal that close to 50% of them have used cannabis at least once during the past year, similar to findings in European surveys.

Studies also show that in the Netherlands, despite its more liberal approach than in most other countries, the proportion of youth using cannabis is not higher. In fact, it is in the middle of the pack.

Does cannabis use affect academic performance or social abilities? Studies tend to indicate that problem young cannabis users are also problem alcohol users, manifesting other “risk-taking” behaviour. These are therefore symptoms of other underlying problems, rather than causes.

### **Cannabis and youth**

- *In some Canadian studies, some 30% of 15-16 year olds report having used cannabis in the past month.*
- *Last year prevalence among the 12-19 is estimated at around 16%. Similar proportions are found in the USA, England, and France. In Portugal and Sweden it is much lower (about 8%).*
- *Use tends to peak at around 19 and gradually declines after 25.*
- *Studies tend to indicate that the proportion of youth using cannabis has increased over the past five years.*
- *Studies indicate that there would be an increase also in poly consumption (using multiple substances) among youth.*
- *Studies indicate that about 10% of young people using cannabis can be considered as problem users (using alone, in the morning, repeatedly).*
- *Studies tend to indicate that problem users also experience other types of problem behaviour (e.g., school drop-out or truancy)*

Sources: CCSA, 1999; EMCDDA, 2001; CAMH, 2000; Zoccolillo et al. 1999 ; OFDT, 2000.

### **What are the key findings?**

Scientific research we have examined to date indicates that:

- **Cannabis is a psychoactive substance and it is therefore better to not use it.**
- **The vast majority of recreational users use cannabis only temporarily and irregularly; approximately 10% become chronic users and 5 to 10% become addicted.**
- **Cannabis may have some negative effects on the health of individuals, but considering the patterns of use, these effects are relatively benign.**
- **Cannabis has very limited effects on public safety insofar as ordinary crime is concerned. However, its illegal status contributes to fuelling organized crime elements. Impaired driving under the sole influence of cannabis has not been established firmly in research although it likely affects driving abilities.**
- **Each year, over 30,000 Canadians are charged by police for simple cannabis possession;**
- **Over 1 Canadian in 10 and 30% to 50% of youth aged 15-24 have used cannabis in the last year despite its illegality; this may cause greater disrespect for the rule of law;**
- **The illegality of cannabis means significant expenditure of public funds, particularly for law enforcement; it also means less information and prevention action is undertaken.**

**What are the public policy approaches?**

Much to our surprise, research indicates that *public policies have little impact on use levels and patterns*. They may, however, have effects on use contexts. Prohibition and criminalization entail a criminal record for simple cannabis possession, fuel a black market that brings young people into contact with criminal elements and force them to hide to avoid police scrutiny.

Public policies also entail other negative effects. Prohibition makes public health approaches, balanced information, prevention, and quality control of substances difficult if not impossible. Users receive little information on the effects of the substances and are not informed about the quality from reliable sources. Criminalization benefits

organized crime, increasing its wealth, power and possibility of corruption.

National policies on drugs find much of their legitimacy in the international conventions and treaties signed since the 1912 Hague Convention. Yet, to a large extent, these international agreements evolved in the absence of any significant drug problem in developed countries that pushed them. For example, the 1961 Single Convention was developed and adopted long before the youth movements and drug use explosion in Western countries at the end of the 1960's.

**THE NEED FOR GUIDING PRINCIPLES**

We mentioned in our introduction that scientific evidence alone is insufficient to inform policy-making. Other influences must be taken into consideration, including the opinions of Canadians. Furthermore, the Committee thinks that a public policy on illicit drugs should be firmly rooted in well-defined basic principles. In the next few months, we will be examining a series of principles around the following five issues:

- What should be the role of scientific information on public policy decisions in respect of illicit drugs, especially in relation to cannabis?
- What should be the role of the State? In particular, what priority should be given to preventative and educational approaches in order to prevent abuse of drugs?
- What is the role of the criminal law? Should it intervene only when demonstrable and significant harm is caused to others?
- What should be the role of public health principles? To what extent should a public policy on illegal drugs seek to reduce the negative impacts of drug abuse on public health?
- What should be the role of ethical considerations? In particular, how important is it that public policies aim at minimizing the negative impacts of public policies themselves (first do no harm)?

Public policy options are not limited to the legal regime governing cannabis. They are, however, a central component. In the following table, we have identified three overall approaches, each comprising two possible alternatives. We invite you to look at them based on the facts presented thus far.

**Public policy and use patterns**

Country	Lifetime prevalence (15-69)	Policy approach
Canada	15%	Prohibitionist
Netherlands	19%	Liberal
Spain	20%	Liberal
Sweden	13%	Prohibitionist
Australia	38%	Liberal
USA	34%	Prohibitionist

*Whether countries are prohibitionist such as Canada, Sweden or the USA or more liberal as in Australia, The Netherlands or Spain, levels and patterns of use vary according to other factors and are little influenced by the policy.*

Sources: INSERM, 2001; MacCoun et Reuter, 1997; Cohen et.al, 2001; EMCDDA, 2001; Kilmer, 2002.

*Senate Special Committee on Illegal Drugs*

<b>Public policy options: What are your views?</b>						
	<b>Prohibitionist options</b>		<b>Mixt options</b>		<b>Liberal options</b>	
	<b>Status quo</b>	<b>Enhanced criminalisation</b>	<b>De facto de-criminalisation</b>	<b>De-criminalisation</b>	<b>Legalisation</b>	<b>De-penalisation</b>
<b>Definition</b>	Maintain the current legal system	Increase the repression and penalisation of cannabis possession	Instruct the Crown not to bring simple possession cases to trial	Abrogate Criminal Code sections on possession (other sanctions possible)	Governmental controls over production and distribution	Free market with unrestricted access
<b>Possible impacts on :</b>						
• use (augments ↑ diminishes ↓ or stable -)						
• abuse (augments ↑ diminishes ↓ or stable -)						
• capacity to inform on risks (augments ↑ diminishes ↓ or stable -)						
• youth use (augments ↑ diminishes ↓ or stable -)						
• public health (augments ↑ diminishes ↓ or stable -)						
• public safety (augments ↑ diminishes ↓ or stable -)						
• illegal traffic (augments ↑ diminishes ↓ or stable -)						
• organized crime involvement (augments ↑ diminishes ↓ or stable -)						
• respect for individual rights and freedoms (augments ↑ diminishes ↓ or stable -)						
• effectiveness of public expenditures (augments ↑ diminishes ↓ or stable -)						

**QUESTIONS FOR THE CONSULTATION PROCESS**

This Spring, the **Senate Special Committee on Illegal Drugs** will visit communities across Canada. We need to hear directly from citizens. Those we do not meet are invited to write to us.

These are some of the key questions that arise from our findings to date:

- 1) Do you agree with the research conclusions we have received? What are your reasons and sources of information?
- 2) Research evidence we have received to date does not appear to support criminalization and penalization of cannabis. Do you share this view?
- 3) Studies appear to indicate that the current policy approach may cause more harm than good. Do you agree? Why?
- 4) It is better for youth not to use cannabis (or to smoke tobacco), yet we also know that youth have and will do so if only because of the rebellion and soul searching of adolescence. Do you think that penal prohibition is the right way to define what is allowed and what is not for youth?
- 5) Should public polices aim to prevent use or minimize the negative consequences of use?
- 6) Studies indicate that more liberal policy approaches have little effect on actually increasing or decreasing use patterns of cannabis. Do you agree? Why?
- 7) If Canada was to adopt a different, more liberal approach to cannabis, should it take into account the reaction of the USA? What would the reaction likely be?
- 8) Some politicians have already indicated that the present public policy regime would not change whatever the conclusions of this Committee or others. What, if anything, should be done to advance this kind of debate? What role should the Senate play?

**Senate Special Committee on Illegal Drugs**

Address: 40 Elgin Street, 10<sup>th</sup> floor, Ottawa, Ontario, K1A 0A4

Telephone: (613) 996-1101

Fax: (613) 943-7867

E-mail: [iddi@sen.parl.gc.ca](mailto:iddi@sen.parl.gc.ca)

Web site: [www.parl.gc.ca/illegal-drugs.asp](http://www.parl.gc.ca/illegal-drugs.asp)

## Sources

- Ati-Dion, G. (2000) « Législation nationale et disparités régionales : le cas du Canada. » in *Psychotropes. Revue internationale des toxicomanies*. Vol. 6, no 4.
- Ati-Dion, G. (1999) *Les pratiques policières et judiciaires dans les affaires de possession de cannabis et autres drogues de 1995 à 1998 : portrait statistique*. Québec: Comité permanent de lutte à la toxicomanie.
- ben Amar, M. (in press) "Le cannabis".
- Brochu, S. (1995) *Drogues et criminalité. Une relation complexe*. Montréal: Presses de l'Université de Montréal.
- Casavant, L. and C. Collin (2001) *Illegal Drug Use and Crime: A Complex Relationship*. Ottawa: Library of Parliament. Report prepared for the Senate Special Committee on Illegal Drugs. Available on line at: <http://www.parl.gc.ca/37/1/parlbus/commbus/senate/com-f/ille-f/library-f/collin-f.htm>
- Canadian Centre on Substance Abuse (1999) *Alcohol, Tobacco and Other Drugs. Canadian Profile*. Ottawa: author.
- Centre on Addiction and Mental Health (2000) *Ontario Student Drug Use Survey 1999*. Toronto: auteur. Disponible en ligne à l'adresse : [http://www.camh.net/addiction/ont\\_study\\_drug\\_use.html](http://www.camh.net/addiction/ont_study_drug_use.html)
- Cohen, P. and A. Sas (1997) « Cannabis use, a stepping stone to other drugs? The case of Amsterdam. » in Böllinger, L. (ed.) *Cannabis Science*. Frankfurt und Main: Verlag.
- Cohen, P. and H.L. Kaal (2001) *The irrelevance of drug policy*. Amsterdam : CEDRO. Available on line at: <http://www.cedro-uva.org/lib>
- Erickson, P.G. (1980) *Cannabis Criminals*. Toronto: Addiction Research Foundation.
- Erickson, P.G. (1986) "Cannabis criminals revisited." *British Journal of Addiction* 81 (81-85).
- European Monitoring Centre for Drugs and Drug Addiction (2001) *Annual report on the state of the drugs problem in the European Union*. Lisbon: author. Available on line at: <http://www.emcdda.org/infopoint/publications/annrep.shtml>
- Grinspoon, L. and J.B. Bakalar (1997) *Marihuana: The Forbidden Medicine*. Revised and expanded edition. New Haven: Yale University Press.
- INSERM, (2001) *Cannabis. Quels effets sur le comportement et la santé ?* Expertise collective. Paris: author.
- International Scientific Conference on Cannabis* (2002) Brussels: Ministry of Public Health.
- Kilmer, B. (2002) « Do cannabis possession laws influence cannabis use? » in *International Scientific Conference on Cannabis* (2002) Brussels: Ministry of Public Health.
- Léonard, L. and M. Ben Amar (2000) « Classification, caractéristiques et effets généraux des substances psychotropes. » in Brisson, P. (éd.) *L'usage des drogues et la toxicomanie*. Volume III. Montréal: gaëtan morin.
- MacCoun, R. and P. Reuter (1997) « Interpreting Dutch cannabis policy: Reasoning by analogy in the legalization debate. » *Science* 278: 47-52.
- National Drug Research Institute (2000) *The Regulation of cannabis possession, use and supply*. Perth, Australia : author.
- National Institute of Medicine (1999) *The Science of Cannabis*. Washington, DC, author.
- Observatoire français des drogues et des toxicomanies (2002) *Drogues et dépendances. Indicateurs et tendances*. Paris : auteur. Disponible en ligne à l'adresse : <http://www.drogues.gouv.fr/fr/index.html>
- Robbe, H.W.J. (1994) *Influence of marijuana on driving*. Maastricht: University of Limburg.
- Robbe (1994b) "Marihuana use and driving." *Journal of the International Hemp Association*. 1: 44-48.
- Roques, B. (1999) *La dangerosité des drogues*. Paris: Odile Jacob.
- Swiss Federal Commission on Drug Issues (1999) *Cannabis Report 1999*. Bern: author. Available on line at : <http://www.lindesmith.com>
- Statistics Canada (2000) *Drugs and Crime*. Ottawa: author.
- Zoccolillo, M. et al. (1999) « Problem drug and alcohol use in a community sample of adolescents. » *Journal of the American Academy of Child and Adolescent Psychiatry* (38:7).