

## THE PUBLIC HEALTH IMPLICATIONS OF CANNABIS LEGALIZATION

### Background

The legislating of cannabis varies globally from complete prohibition, such as in Canada, to decriminalization in Portugal, to legalization with and without strict regulation in the US. Canada's leading organization for mental health and addiction, the Centre for Addiction and Mental Health (CAMH), did a global evidence review on the public health impact of cannabis practices. In doing so, CAMH published the [Cannabis Policy Framework](#). This CAMH document provides public health with an excellent evidence-based perspective of the issue of cannabis legalization and provides harm reduction strategies similar to those in use for tobacco and alcohol. As stated in the report, the question for public health is to consider what legal and regulatory approach can best reduce the risks of health and social harms associated with cannabis use.

Although cannabis is illegal in Canada, it is the most widely used illicit drug in Ontario. In 2013, CAMH determined that 42.6% of the general population has used cannabis in their lifetime with 14.1% admitting to use in the past year. Greater use is found in the younger population with 23% of grade 7-12 students indicating past year use and 40.4% of 18-29 year olds admitting to cannabis use in the last 12 months (OSDUHS 2013).

### Southwest Conference

For the last 16 years, the Southwest Injury Prevention Network has been providing an educational conference, Not By Accident (NBA), for injury prevention specialists. In 2014, one of the NBA conference topics was drug impaired driving, specifically related to cannabis use. This spurred the interest of the participants to identify the need for a better understanding about cannabis decriminalization and legalization, the pros and the cons given the current Federal discussion. The 2015 NBA conference is titled "Cannabis Legalization: Is this a trip we want to take?" The organizing committee has intentionally structured the day with a blend of speakers with varying positions and research, outlining both the positive and negative consequences of cannabis legalization.

### Public Health Implications

Cannabis use, like other drug use, is associated with health risks. Evidence has shown that these health risks generally increase with frequent consumption (daily or nearly-daily) and when used at an early age. The need for a public health approach in discussions of cannabis decriminalization or legalization is paramount. A delicate balance between the health risks, social harms and legal ramifications is necessary when considering this complex issue.

**Cannabis-Impaired Driving** – Evidence has shown that driving while impaired by cannabis is associated with performance deficits in tracking, reaction time, visual function, concentration, short-term memory, and divided attention which increases the risk of motor vehicle crashes (CCSA, 2015 - Clearing the Smoke on Cannabis). Among young drivers, driving after using cannabis is more prevalent than driving after drinking alcohol (OSDUHS Report, 2013). In addition to these concerns, testing for drugged driving is complicated, inconsistent and the criteria for impairment levels has not been broadly established.

**Youth Brain Development** – There is growing evidence that regular cannabis use in adolescence can seriously harm the developing brain. Early regular cannabis use is associated with low levels of educational attainment, diminished life satisfaction, higher likelihood of developing cannabis use disorder, and increased risk of developing mental health problems (CAMH, 2014 – Cannabis Policy Framework). Given that a large portion of cannabis users are in this young population, this is a great public health concern.

**Pregnancy** – Cannabis use during pregnancy has been shown to affect the development and learning skills of children including children’s cognitive functioning, behaviour, substance misuse and mental health (CCSA, 2015 – Clearing the Smoke on Cannabis).

**Normalization** – How will legalization and increased availability of cannabis normalize its use in our society and will it bring a false sense of safety to this drug? There is evidence from Colorado that the commercialization of cannabis has been associated with lower risk perception, especially among the younger population (Schuermeyer et al., 2014).

**Addiction** – Although much lower than the dependence rates for other drugs (e.g., nicotine, alcohol and cocaine), about 9% of cannabis users develop dependence (CAMH, 2014 – Cannabis Policy Framework). Cannabis is the 3<sup>rd</sup> highest drug reason (behind alcohol and alcohol & other drug) for admissions to publicly funded substance abuse treatment programs in the United States (Substance Abuse and Mental Health Services Administration, 2008).

**Mental Health** - Research has found that individuals who use cannabis, especially frequent and high potency users, are at increased risk for psychosis and psychotic symptoms (CCSA, 2015 – Clearing the Smoke on Cannabis and CAMH, 2014 – Cannabis Policy Framework).

### **Comparison of Decriminalization and Legalization**

Currently in Canada cannabis is governed under the Controlled Drugs and Substances Act (CDSA). According to CAMH, 60,000 Canadians are arrested annually for possession which accounts for 3% of all arrests. There are approximately 500,000 Canadians with a criminal record for possession which can limit a person’s employment opportunities and place restrictions on their travel. Enforcement of cannabis legislation is very costly with an estimated \$1.2 billion spent in 2002 for police, court, and corrections costs. The evidence demonstrates that prohibition and tougher penalties do not lead to lower rates of use. The ineffectiveness and high cost of criminalization has been reported by the Le Dain Commission (1972), the Senate (1974), the Canadian Bar Association (1994), the Canadian Centre for Substance Abuse (1998), CAMH (2000), the Frasier Institute (2001), the Senate Special Committee on Illegal Drugs (2002), the Canadian Drug Policy Coalition (2013) and the Canadian Public Health Association (2014).

Decriminalization is considered by those that have researched it as a half measure. The evidence shows that decriminalization of cannabis reduces the adverse social impact of criminalization as the possession of the substance is no longer subject to the criminal code. There is a reduction of individuals caught in the criminal system and a reduction of enforcement costs. However, because cannabis use remains illegal (although not criminal) the costs are transferred to the civil system. In countries such as Portugal, which decriminalized cannabis in 2001, there has been evidence of decline in substance misuse and in drug-related harms, reduced burden on the criminal system, and reduction in use of illicit drugs by adolescents. Portugal’s model focuses on diversion, referring users to a three-person panel whose primary aim is to direct people to treatment.

Although there are benefits to decriminalization, the model fails to address several harms due to cannabis remaining unregulated: little is known about the potency or quality of unregulated cannabis; as long as it remains illegal there is an enforcement focus, making it more difficult to provide prevention, risk reduction and treatment services; and the production and distribution remains under the control of an illicit market, perpetuating criminal activity.

Legalization with strict regulation can remove the social harms and costs of prohibition. More than \$1 billion annually could be saved in enforcement costs. Regulation is meant to mitigate the risk of harm from cannabis similar to other substances that are regulated in our community (e.g., tobacco and alcohol). Globally, the legalization of cannabis has been limited. In 2012, Uruguay was the first country to legalize and regulate the possession and production of cannabis. In 2014, the states of Colorado and Washington legalized recreational cannabis, neither adopting a regulatory model with strict controls on availability, marketing and production. It is too early to draw any conclusions about the impact of legalization.

### **Conclusion/Next Steps**

The available research, together with the growing rate of users, especially young adults, validates that prohibition and criminalization of cannabis in Canada has not been effective in reducing use or harm. There are indications that the legalization of cannabis will be a topic of debate during the upcoming federal election. There is an opportunity for public health to carefully consider the decriminalization/legalization issue to help determine the most effective legislative system for reducing the risks of health and social harms associated with cannabis use.