



## Implications of Cannabis Legalization on Youth and Young Adults

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*A position statement developed by the Canadian Psychiatric Association's Research Committee and approved by the CPA's Board of Directors on February 17, 2017.*

The Canadian Psychiatric Association (CPA) is the national leading authority on psychiatric matters in Canada with a stated vision of a **strong profession for a healthy population**. As an evidence-based profession, part of the CPA's mission is to advocate for policies that allow the best possible mental wellness for Canadians, working collaboratively with governments and mental health stakeholders.

The federal government has committed to legalizing and regulating access to cannabis in 2017. The government appreciates the complexity of this process as evidenced by their writing a discussion paper and forming a Task Force on Marijuana Legalization and Regulation (Task Force) that was charged with engaging multi-stakeholder groups and knowledge leaders to better inform the design of the new framework.

This CPA position statement is focused on youth and young adults as mental illness and substance use disorders often begin in this age group, with the objective to ensure optimal mental health outcomes. The CPA recognizes the Canadian Medical Association's (CMA) submission to the Task Force that covers recommendations related to overall health as well as mental health.

Cannabis is the most commonly used illicit drug for Canadian youth, and Canadian youth are the top users of cannabis in the developed world. While there are variations by jurisdictions, approximately 22% of youth aged 15 to 19 reported using cannabis during the past year; in this group, 20% report daily or almost daily use.

The CPA recognizes the following evidence-based knowledge:

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**Note:** It is the policy of the Canadian Psychiatric Association to review each position paper, policy statement and clinical practice guideline every five years after publication or last review. Any such document that has been published more than five years ago and does not explicitly state it has been reviewed and retained as an official document of the CPA, either with revisions or as originally published, should be considered as a historical reference document only.

- The human brain undergoes a maturational process during adolescence that includes reorganization, refinements and functional improvements. This is driven by changes in brain grey matter (GM) due to synaptic pruning (elimination of underutilized or unnecessary neural connections), and white matter (WM) due to myelination.
- These changes continue at least until the mid-20s and thus brain maturation is vulnerable during this time to stressors/insults.
- The endocannabinoid system plays a role in this brain maturation and thus exogenous cannabinoids from cannabis can affect this process directly in a negative way.
- Regular cannabis use in youth and young adults can affect aspects of cognition, including attention, memory, processing speed, visuospatial functioning and overall intelligence. Worse performance is related to earlier adolescent onset of use. Abstinence following regular use may improve some, but not all, of these cognitive domains.
- Early and regular use increases the risk of developing a primary psychotic illness in those individuals who are vulnerable. Vulnerability factors are not currently clear, but may include factors such as childhood trauma and genetics. In those young adults who have developed psychosis, continued cannabis use worsens long-term symptom and functional outcomes.
- Cannabis may increase the risk of depression and early regular use is associated with younger age of onset of symptoms of psychosis and of bipolar disorder.
- Cannabis with high tetrahydrocannabinol (THC) content (high potency) can result in significantly worse mental health and cognitive outcomes, including worsening of panic disorder and other anxiety disorders.
- Early age of use of cannabis increases the potential for adult dependence to cannabis.
- Cannabis may be associated with increased progression to other illicit drug use in the context of particular factors (e.g., high frequency and early age of use).

As this CPA position statement is focusing on youth and young adults, it recognizes the possibility of cannabis use in young women of reproductive age. Prenatal cannabis exposure (PCE) may have adverse effects on cognitive development, behaviour and academic achievement in offspring due to the effects of cannabis on the fetal

endocannabinoid system modulating neurodevelopment. PCE has been hypothesized to potentially compromise the brain so that a “second hit” (postnatal stressors/ environmental triggers) precipitates the emergence of these abnormalities.

The CPA acknowledges and agrees with the CMA recommendations to the Task Force. With respect to protection of mental wellness for youth and young adults the CPA highlights the following:

- Since regular cannabis use is associated with increased risk of schizophrenia, and may also negatively interact with depression, bipolar and anxiety disorders due to its biological effects on brain maturation, and since mental disorders frequently start before the age of 25, age of access to cannabis should not be prior to age 21, with restrictions on quantity and THC potency for those between 21 and 25 years of age.
- Significant support is needed for public health education and resources targeting youth and young adults, in collaboration with mental health stakeholder groups.
- Significant support of further biological and psychosocial research is needed to better understand the impact of cannabis and its legalization on mental health.
- Expand support for prevention, early identification and cannabis cessation treatments (i.e., using change-based treatment models including harm reduction strategies) within the framework of mental health and addictions.
- Prudent consideration of advertising and marketing guidelines with clear markings of THC and cannabidiol content, as well as consistent public health warning messaging, including regarding potential adverse consequences of the use of cannabis during pregnancy, are needed.

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