Cannabis in Canada: can there be smoke without fire?

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'Grey' Cannabis Market

'Medical Marijuana' 2001/2014/2016

Recreational Cannabis 2018/2019
Number of Legal Cannabis Stores (2018 vs. 2020)

- 2018 (N = 182)
- 2020 (N = 1445)
Cannabis plants at home (2020)

- 7% grow plants in or around the home (15% among recent users)
- Average number of plants = 3.
- 7% prepared cannabis edibles or beverages (past 12 months)
- 19% of recent cannabis users had prepared edibles

Canadian Cannabis Survey (2020)
THINK OF IT AS THE COST OF FREEDOM...

...YOUR DEALER'S HERE...
Tobacco (cigarette/cigar/smokeless tobacco)

E-cigarettes (vaping a liquid with nicotine)

Vaping cannabis for non-medical purposes

Eating cannabis for non-medical purposes

Smoking cannabis for non-medical purposes

Alcohol

Canadian Cannabis Survey (2020)
Source of cannabis information (%) - campaign

- TV/radio: 50%
- Social media: 32%
- Public display of posters or billboards: 30%
- Health care setting: 25%
- Print newspapers or magazines: 19%
- Not aware: 22%

Canadian Cannabis Survey (2020)
Perception of moderate/ great risk (%)

Canadian Cannabis Survey (2020)
Access to trustworthy information/health warnings

10% of Canadians were aware of Lower-Risk Cannabis Use Guidelines

77% enough trustworthy information

38% had population had seen health warnings on product packages or Health Canada website

68% of cannabis users had seen warnings

57% felt warnings improved their knowledge of harms related to cannabis

Canadian Cannabis Survey (2020)
Perceived credibility of cannabis information = 73%

- Driving – 81%
- Harms – 43%
- Dependence – 29%
- Lower risk guidelines – 14%
Knowledge or beliefs regarding cannabis-associated harms (%)

- Teenagers are at greater risk of harm from cannabis than adults
- Daily cannabis use increases risk of mental health problems
- Cannabis smoke can be harmful (%)*

Canadian Cannabis Survey (2020)
CITY LIGHTS
(CRITICAL KUSH)
Genre: Hybrid
THC (per unit / par unité): 3.45 mg
CBD (per unit / par unité): 0 mg
Total THC per unit / THC total par unité: 81.5 mg
Total CBD per unit / CBD total par unité: <0.35 mg

WARNING: Do not use if pregnant or breastfeeding. Substances found in cannabis are also found in the breast milk of mothers who use cannabis.

MISE EN GARDE : Ne consommez pas si vous êtes enceinte ou allaitez. Les substances présentes dans le cannabis se retrouvent aussi dans le lait maternel des mères qui en consomment.

Health Canada / Santé Canada
Health Canada – Former Warning Labels
(2018-2019) – now changed

• **Regular use of cannabis can increase the risk of psychosis and schizophrenia.** Higher THC content can increase the risk of psychosis and schizophrenia.

• **Regular use of cannabis can increase the risk of psychosis and schizophrenia.** Higher THC content can lower the age of onset of schizophrenia.

• **Regular use of cannabis can increase the risk of psychosis and schizophrenia.** Young people are especially at risk.

• **Adolescents are at greater risk of harms from cannabis.** Early and regular use increases the risk of psychosis and schizophrenia.

• **Adolescents are at greater risk of harms from cannabis.** Using cannabis as a teenager can increase your risk of becoming addicted.

• **Adolescents are at greater risk of harms from cannabis.** 1 in 6 people who start using cannabis in adolescence will become addicted.
WARNING: The smoke from cannabis is harmful.

WARNING: Do not drive or operate heavy equipment after using cannabis.

WARNING: Do not use if pregnant or breastfeeding.

WARNING: It can take up to 4 hours to feel the full effects from eating or drinking cannabis.

WARNING: The effects from eating or drinking cannabis can be long-lasting.
WARNING: Frequent and prolonged use of cannabis containing THC can contribute to mental health problems over time.

Daily or near-daily use increases the risk of dependence and may bring on or worsen disorders related to anxiety and depression.
WARNING: Adolescents and young adults are at greater risk of harms from cannabis.

Daily or near-daily use over a prolonged period of time can harm brain development and function.
WARNING: The higher the THC content of a product, the more likely you are to experience adverse effects and greater levels of impairment.

THC can cause anxiety and impair memory and concentration.
Relative levels of **THC** and CBD in cannabis recreational products

- 29% **higher THC** and lower CBD
- 11% higher CBD and lower THC
- 10% equal levels of THC and CBD
- 6% THC only
- 2% CBD only
- 16% mix of products.
- 25% levels of THC and CBD unknown

Canadian Cannabis Survey (2020)
Relative levels of THC and CBD in cannabis products used for medical purposes

- 21% indicated higher THC and lower CBD
- 26% indicated higher CBD and lower THC
- 12% equal levels of THC and CBD
- 15% CBD only
- 14% mix of products.
- 7% levels of THC and CBD unknown
Cannabis for Medical Purposes

76% - No medical document

24% - Medical document (approval)

Canadian Cannabis Survey (2020)
Daily cannabis use (%) by age & sex in past 12 months

*Significant differences between males aged 16-19 years compared to 25+ years

Canadian Cannabis Survey (2020)
## Frequency of Cannabis Use per Day (past 30 days)

<table>
<thead>
<tr>
<th>Frequency of Cannabis Used / Day</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>..or more</td>
<td>16%</td>
</tr>
<tr>
<td>1-3 times</td>
<td>6%</td>
</tr>
<tr>
<td>4 times</td>
<td>12%</td>
</tr>
<tr>
<td>5-6 times</td>
<td>21%</td>
</tr>
<tr>
<td>7+ times</td>
<td>44%</td>
</tr>
</tbody>
</table>

Canadian Cannabis Survey (2020)
Number of hours ☑️ “stoned” or “high”/ day (past 30 days)

<table>
<thead>
<tr>
<th>Hours “stoned” or “high”/ day</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 4 hours</td>
<td>14%</td>
</tr>
<tr>
<td>4-7 hours</td>
<td>35%</td>
</tr>
<tr>
<td>8-11 hours</td>
<td>36%</td>
</tr>
<tr>
<td>12-15 hours</td>
<td>9%</td>
</tr>
<tr>
<td>&gt; 15 hours</td>
<td>7%</td>
</tr>
</tbody>
</table>
Perceived benefits of cannabis (%) in past 12 months

Mental health (46%)
Physical health (25%)
Friendships/ social life (35%)
Quality of life (50%)
Home life/ marriage (27%)
Work and education (14%)

Canadian Cannabis Survey (2020)
"No effect or harm" from cannabis (%) in past 12 months

- Mental health (47%)
- Work and education (80%)
- Physical health (66%)
- Friendships/ social life (69%)
- Quality of life (46%)
- Home life/ marriage (27%)

Canadian Cannabis Survey (2020)
Professional help for cannabis use (treatment/ counselling)

97% of persons who had ever used cannabis did feel they needed professional help

Only 2% had received professional help

Canadian Cannabis Survey (2020)
MINT IRISH CREAM

flavor: MILK CHOCOLATE

180 MG THC
45 MG THC PER SERVING

ESPRESSO

flavor: DARK CHOCOLATE

CBD: 60 MG
THC: 60 MG
15 MG CBD/THC PER SERVING

VANILLA CHAI

flavor: MILK CHOCOLATE

180 MG THC
45 MG THC PER SERVING
Methods of Consumption

- Smoked: 79%
- Edible: 52%
- Vape Pen: 24%
- Vaporizer: 12%

Canadian Cannabis Survey (2020)
Cannabis use by school grade in Ontario - 2017 vs 2019

<table>
<thead>
<tr>
<th>Grade</th>
<th>2017</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 7 (age 12)</td>
<td>1.7</td>
<td>1.3</td>
</tr>
<tr>
<td>Grade 8 (age 13)</td>
<td>7</td>
<td>4.7</td>
</tr>
<tr>
<td>Grade 9 (age 14)</td>
<td>10.3</td>
<td>12.8</td>
</tr>
<tr>
<td>Grade 10 (age 15)</td>
<td>25.2</td>
<td>21.7</td>
</tr>
<tr>
<td>Grade 11 (age 16)</td>
<td>35.1</td>
<td>33.1</td>
</tr>
<tr>
<td>Grade 12 (age 17)</td>
<td>37.2</td>
<td>40</td>
</tr>
</tbody>
</table>

Ontario Student Drug Use and Health Survey (OSDUHS) (2017, 2019)
Stress and Cannabis in School (2019)

Elevated stress (%)

Ontario Student Drug Use and Health Survey (OSDUHS) (2017, 2019)
<table>
<thead>
<tr>
<th>Measure</th>
<th>Age Group</th>
<th>Start Year-End Year</th>
<th>Trend</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>% mental health care visit (past year)</td>
<td>7–12</td>
<td>1999–2019</td>
<td>🟪</td>
<td>Increased from 12% to 27%</td>
</tr>
<tr>
<td>% medical use of ADHD prescription drugs</td>
<td>7–12</td>
<td>2007–2019</td>
<td>🟪</td>
<td>Increased from 2% to 4%</td>
</tr>
<tr>
<td>% prescription for anxiety, depression, or both</td>
<td>9–12</td>
<td>2001–2019</td>
<td>🟪</td>
<td>Increased from 3% to 7%</td>
</tr>
<tr>
<td>% fair or poor self-rated mental health</td>
<td>7–12</td>
<td>2007–2019</td>
<td>🟪</td>
<td>Increased from 11% to 27%</td>
</tr>
<tr>
<td>% elevated level of stress</td>
<td>7–12</td>
<td>2015–2019</td>
<td>🟪</td>
<td>Increased from 29% to 33%</td>
</tr>
<tr>
<td>% moderate-to-serious psychological distress</td>
<td>7–12</td>
<td>2013–2019</td>
<td>🟪</td>
<td>Increased from 24% to 44%</td>
</tr>
<tr>
<td>% serious psychological distress</td>
<td>7–12</td>
<td>2013–2019</td>
<td>🟪</td>
<td>Increased from 11% to 21%</td>
</tr>
<tr>
<td>% suicidal ideation (past year)</td>
<td>7–12</td>
<td>2001–2019</td>
<td>🟪</td>
<td>Increased from 11% to 16%</td>
</tr>
<tr>
<td>% suicide attempt (past year)</td>
<td>7–12</td>
<td>2007–2019</td>
<td></td>
<td>Stable</td>
</tr>
</tbody>
</table>
Ontario Student Drug Use (Grade 7-12)

- **22%** cannabis use in past year
- **2%** of all students use daily
- **5%** Grade 12 use daily
- **3%** Grade 9 -12 report dependence symptoms

- Legalization – **27%** no change, **14%** increased
1 in 20 hospital stays among youth in Canada were related to harmful substance use in 2017–2018.

Canadian Institute for Health Information (2019)

7 in 10 hospital stays for harm caused by substance use among youth in Canada involved care for a concurrent mental health condition in 2017–2018

The most common substances associated with hospital stays among youth in Canada in 2017–2018 were

- 40% Cannabis
- 26% Alcohol

Early Psychosis Intervention Program

- 14-35 years
- Male 2.6 : Female 1
- 82.8% self report cannabis use
- 68.9% positive urine toxicology
- 68% < 25 years
- 13.5% failure to complete high school
Ranking Canadian Universities by Marijuana Use of...

How will Canadian universities handle legal marijuana?
MJ-101: time for ‘higher’ knowledge about cannabis

What is ideal an age for cannabis literacy to start and when should it stop, if ever? Start young and don’t stop. Many youth may face challenges with employment screening, insurance and professional regulatory bodies. What does a positive cannabis test mean, without a criminal record?

Oyediji Ayorinde

Cannabis Library

Kingston, Ont.—While many cafés, clubs, tobacco and hemp have plant origins, none has present a contemporary social phenomenon as marijuana—a plant with both medicinal and recreational potential. Few companies or indeed countries can boast the iconic brand recognition of the cannabis leaf, certainly not of the aforementioned plants. Scientific, industrial, legislative, education and policy have now converged as the green rush collides with grey areas.

CANNABIS
THE HILL TIMES POLICY BRIEFING
JANUARY 22, 2018

CANNABIS LEGALIZATION IN CANADA: THE CASE FOR PARDONS & PREVENTATIVE LICENSING
GOVERNMENT FAILING BEHIND ON CANNABIS PUBLIC EDUCATION AND PREVENTION
LIBERALS’ ANSWER TO DRUG IMPAIRED DRIVING? PRECIOUS LITTLE

Policy Briefing

Edible cannabis: countdown to the rocket launch

Health Canada has proposed regulating edibles that allow a maximum of 10 mg of THC per portion. However, it will take considerable literacy and self-awareness to gauge individual dose responses.

Oyediji Ayorinde

Opinion

less than a year ago, cannabis was legalized for personal consumption. This was a momentous, calculated legislative and policy change that passed under the world’s watchful gaze. Canada did not blow up in an incandescent ball of flames. On the contrary, it seems that the country is quite adapt to the changes as the years have gone by.
COVID & Cannabis

52% of cannabis users increased consumption during first wave of COVID-19 (CAMH, 2021)

40% cannabis users report increased use (Mental Health Commission, 2021)

40% cannabis users report problematic use (Mental Health Commission, 2021)