

# Cannabis health knowledge and risk perceptions among Canadian youth and young adults

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## BACKGROUND

Although recreational cannabis is now legal in Canada, little empirical evidence exists regarding young Canadians' cannabis literacy, risk perceptions, or how public health education may impact these perceptions. The present study sought to address these knowledge gaps to examine health knowledge and risk perceptions associated with cannabis use.

## METHODS

An online cross-sectional survey was conducted from October 10th to October 24th, 2017. The inclusion criteria were individuals aged 16 to 30 years of age with a Canadian IP address, and included cannabis users and non-users. Recruitment occurred via e-mail through a commercial consumer panel. The study examined awareness of negative health effects related to cannabis and risk perceptions of different forms of administration.

Logistic regression models tested whether cannabis use was associated with perceived likelihood of addiction, worry for future health, mental health harm, and perceived addiction. Logistic regressions also examined whether different forms and modes of administration or use of different forms of cannabis and synthetic cannabinoids were associated with risk (physical or in other ways). All of the models were adjusted for age, sex, ethnicity, cannabis use status, and exposure to cannabis risk education.

## RESULTS

### SAMPLE CHARACTERISTICS

Characteristic	Unweighted % (N) N=870	Weighted % (N) N=867
Sex		
Female	52.1 (453)	49.2 (427)
Male	47.9 (417)	50.8 (441)
Age (yrs.)		
16–18	25.2 (219)	17.0 (148)
19–24	30.7 (267)	40.3 (350)
25–30	44.1 (384)	42.7 (370)
Ethnicity		
White	64.5 (561)	64.6 (560)
Non-white	35.5 (309)	35.4 (307)
Cannabis use status		
Never use	41.5 (361)	37.4 (325)
Ever use, not in past 30 days	36.0 (313)	38.7 (336)
Current use, within past 30 days	22.5 (196)	23.8 (207)
Reported exposure to education on risks associated with cannabis	31.8 (277)	32.8 (284)

“In your opinion, what are the most important negative health effects from marijuana use?” (N=870)

### MOST COMMONLY REPORTED (%N)

**78%** Reported **PHYSICAL** concerns

- Decreased brain function (24.7%)
- Decreased respiratory function (23.8%)
- Addiction (16.4%)

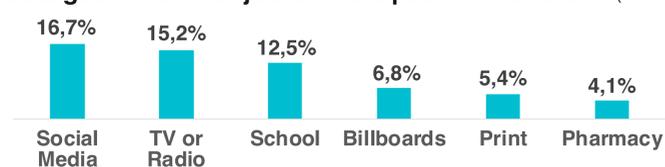
**43%** Reported **PSYCHOLOGICAL** concerns

- Decreased reaction time (9.3%)
- Mental health issues (9.3%)
- Compromised judgement (8.5%)

**5%** Reported **SOCIAL** concerns

- Gateway to other drugs (1.7%)
- Behavioural changes (1.5%)
- Financial problems (1.0%)

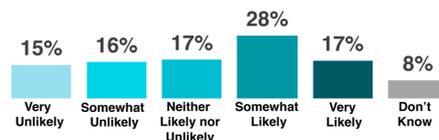
“Where have you seen education campaigns or public health messages about marijuana in the past 12 months?” (N=870)



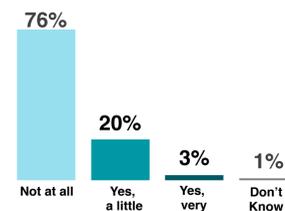
\*Locations accounting for <4% of responses not shown here

## RESULTS (continued)

“How likely is someone to become addicted to smoking marijuana?” (N=870)

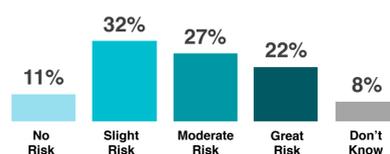


“Do you consider yourself addicted to marijuana?” (n=267)\*

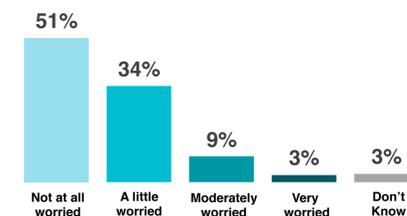


\*Asked among past 3-month users

“In general, do people risk harming their mental health when they use marijuana on a regular basis?” (N=870)

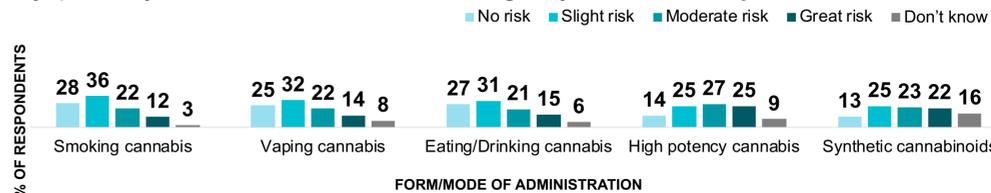


“Are you worried that using marijuana will damage your health in the future?” (n=267)\*

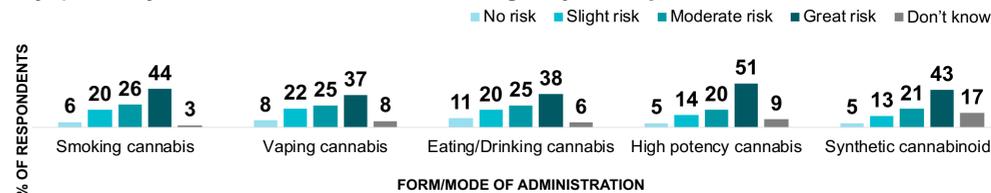


\*Asked among past 3-month users

“How much do you think people risk harming themselves (physically or in other ways), if they use cannabis in the following ways, occasionally?” (N=870)



“How much do you think people risk harming themselves (physically or in other ways), if they use cannabis in the following ways, daily?” (N=870)



## FINDINGS

Most respondents were aware of a cannabis-related physical health effect (78.0%).

Approximately one-third of respondents reported having been exposed to public health messaging about cannabis; digital media was reported most frequently.

Compared to individuals that reported being never users, ever users were less likely to report general likelihood of addiction ( $p < 0.001$ ), and harm to mental health ( $p < 0.001$ ).

Approximately one-quarter of past 3-month cannabis users reported they were at least ‘a little’ addicted.

Respondents who reported using a particular form of cannabis self-administration were less likely to perceive harm than those who did not use each form ( $p < 0.001$ ).

## CONCLUSIONS

The current study is among the first to measure cannabis health knowledge and perceptions of risks among Canadian youth in the time immediately preceding legalization; it may serve as a reference point for future studies examining changes in cannabis literacy. The findings complement and add to the very limited literature specific to young Canadians' cannabis health knowledge and ability to evaluate associated risks. More generally, the study highlights the wide discrepancy of views about the potential health effects and addictive potential of cannabis.

## DISCLOSURES

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