Health Canada Santé Canada

Canada

How has cannabis legalization impacted public health in Canada?

Office of Cannabis Science and Surveillance

Strategic Policy Directorate

Controlled Substances and Cannabis Branch

Health Canada

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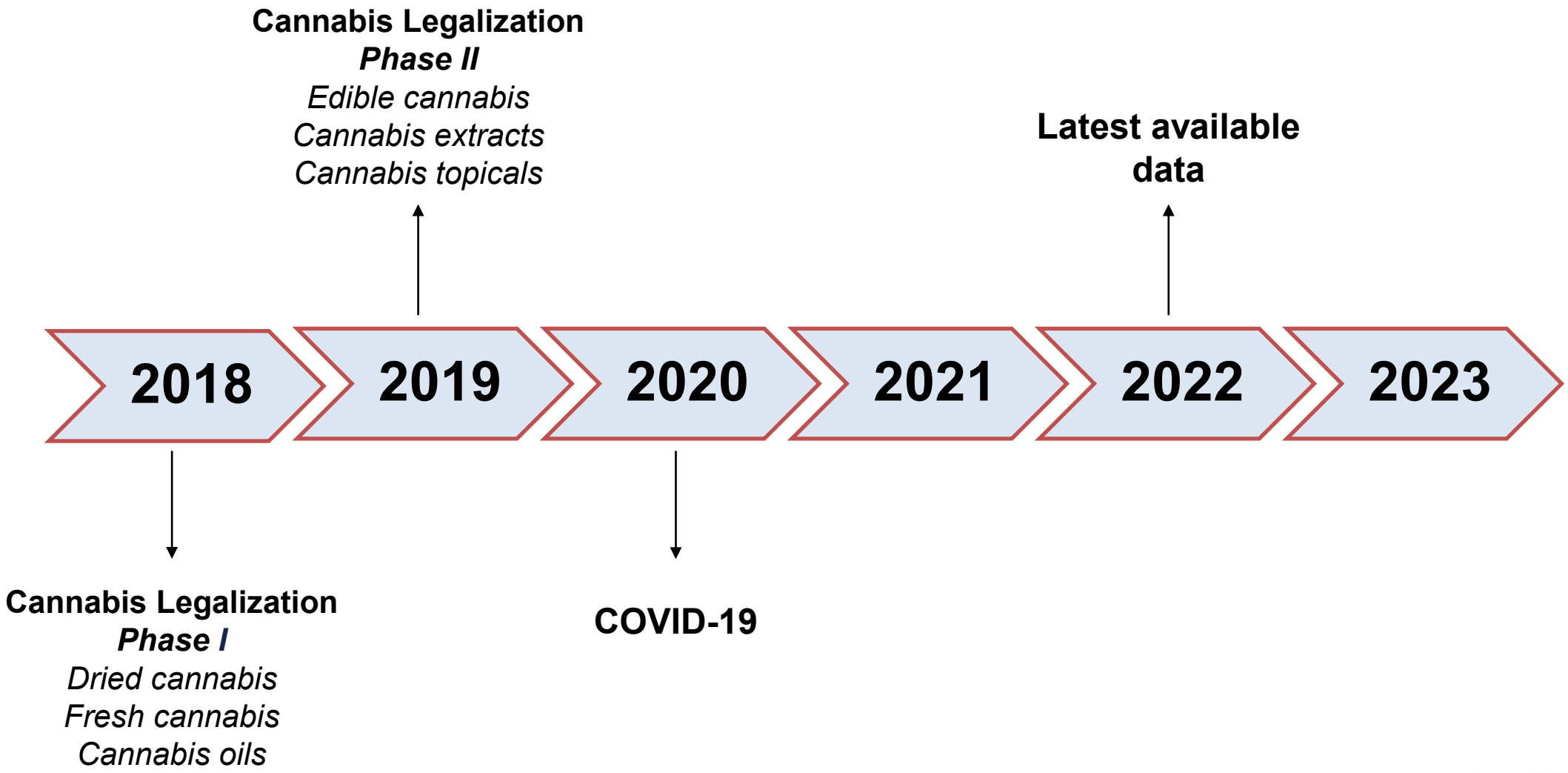
YOUR HEALTH AND SAFETY... OUR PRIORITY.

Purpose and Objectives of the *Cannabis Act*

The purpose of the *Act* is to protect public health and public safety and, in particular, to:

1. Protect the health of young persons by restricting their access to cannabis;
2. Protect young persons and others from inducements to use cannabis;
3. Provide for the licit production of cannabis to reduce illicit activities in relation to cannabis;
4. Deter illicit activities in relation to cannabis through appropriate sanctions and enforcement measures;
5. Reduce the burden on the criminal justice system in relation to cannabis;
6. Provide access to a quality-controlled supply of cannabis; and
7. Enhance public awareness of the health risks associated with cannabis use

Setting the stage



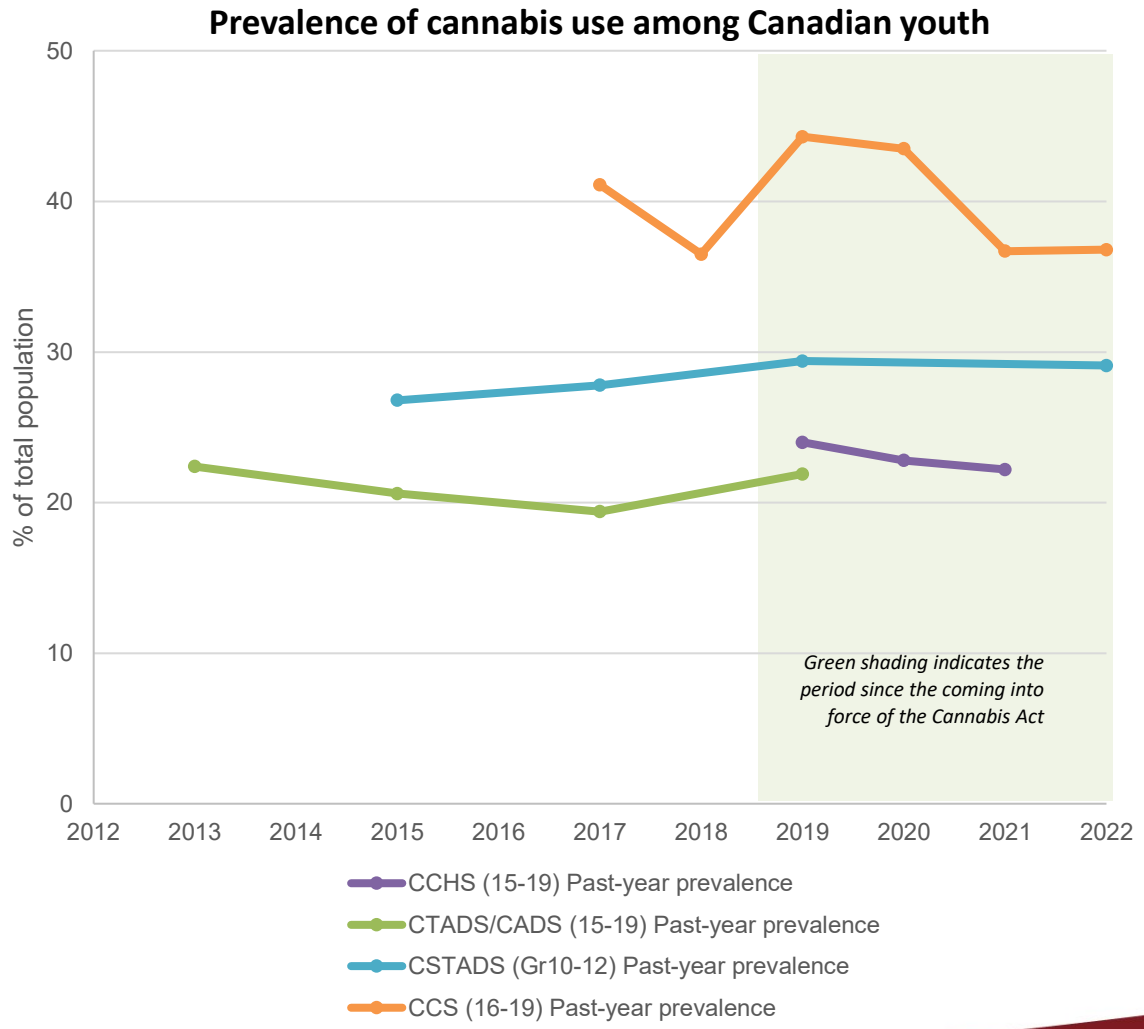
Youth

CANNABIS USE

- No change in past-year use (multiple sources)
- No change in daily/almost daily use* (multiple sources)

Prevalence remains high

- 29% reported past-year use among Grades 10-12 (Canadian Student Alcohol and Drug Survey, 2019)
- 21% of those who used cannabis in the past-year reported daily / almost daily use (Canadian Cannabis Survey, 2022)



*CSTADS 2021/22 significantly higher than CSTADS 2018/19

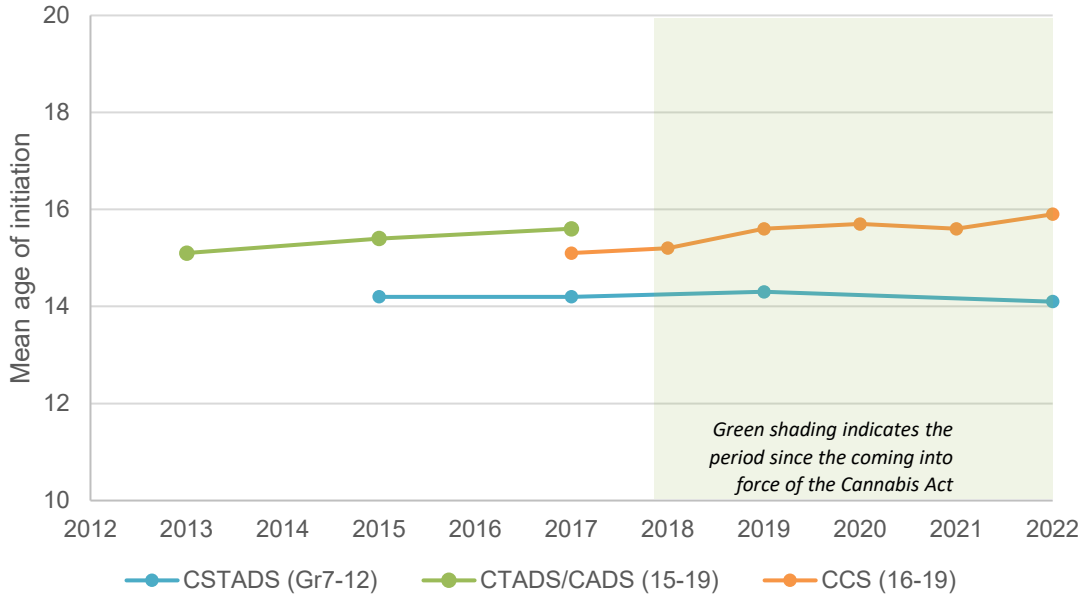
Youth

AGE OF INITIATION - PERCEIVED EASE OF ACCESS

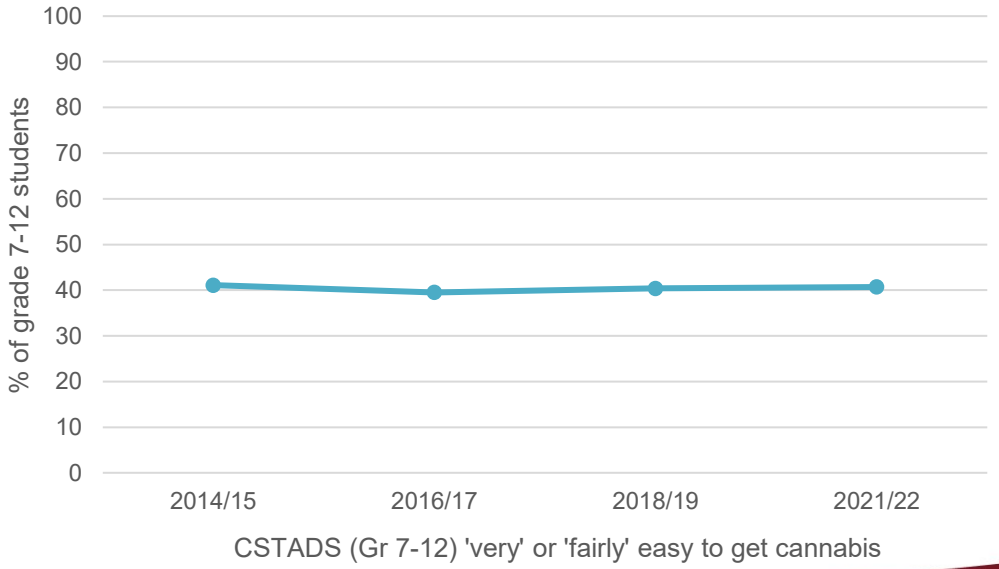
- No change in age of initiation (multiple sources)
- Average age of initiation is **~14 years** old (Canadian Student Alcohol and Drug Survey, 2019)

- No change in perceived ease of access (Canadian Student Alcohol and Drug Survey)

Age of initiation to cannabis use



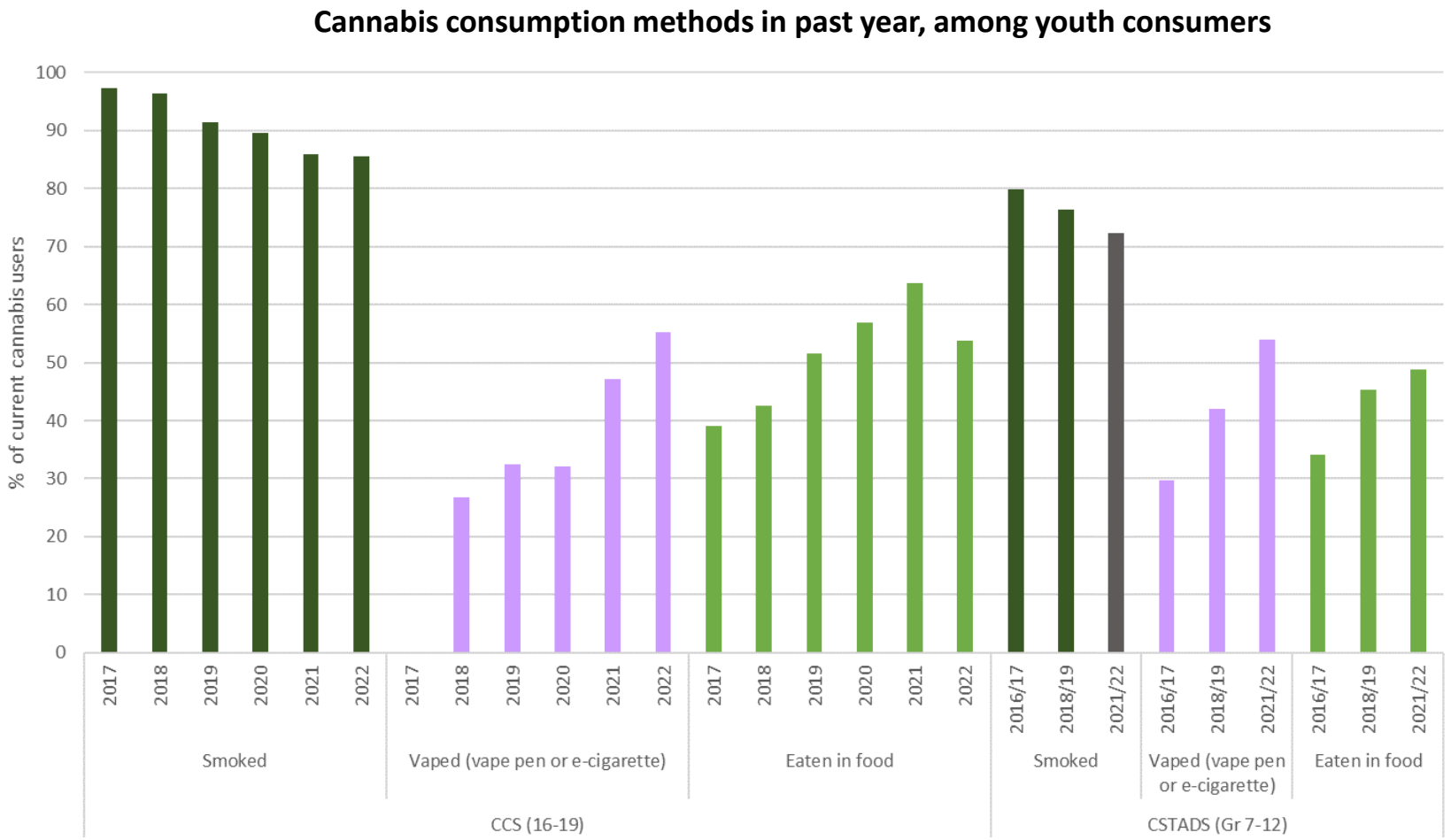
Ease of accessing cannabis ('very' or 'fairly' easy)



Youth

CONSUMPTION METHOD

- Decrease in smoking cannabis, though leading consumption method
- Increase in ingesting and vaping of cannabis

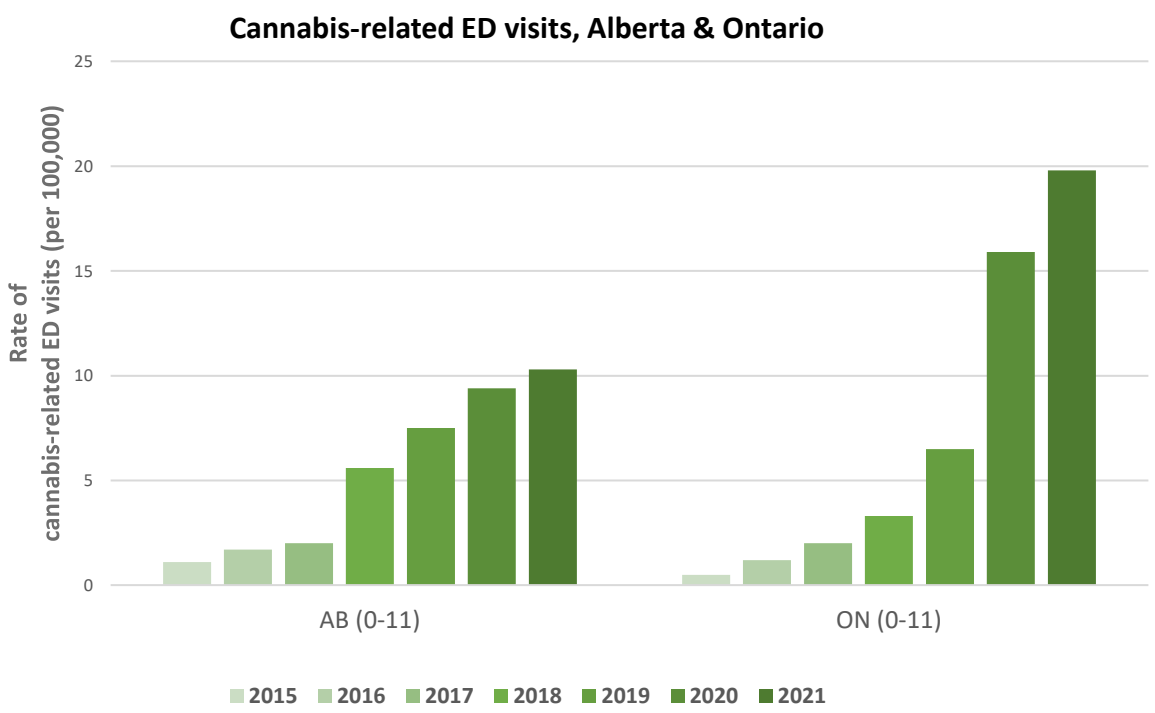


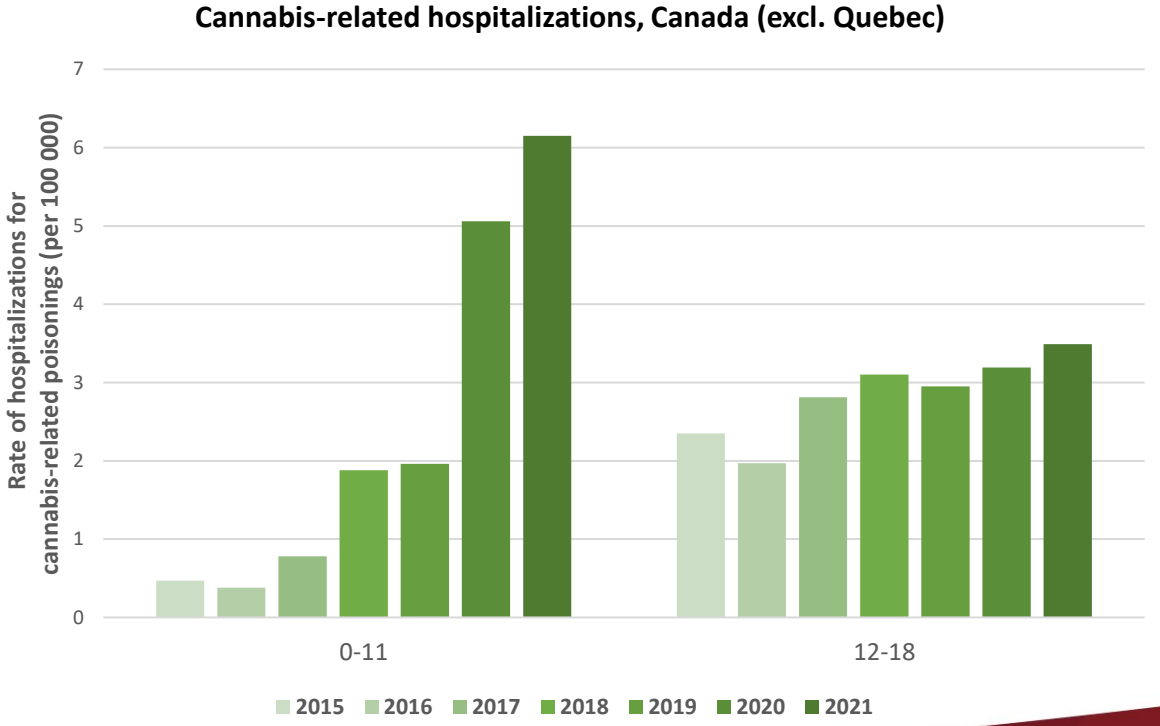
Youth

EMERGENCY DEPARTMENT VISITS /HOSPITALIZATIONS

- Increases in ED visits and hospitalizations among **children ages 0-11** due to cannabis poisonings (National Ambulatory Care Reporting System/ Discharge Abstract Database, Canadian Institute for Health Information)

- Other Canadian and U.S. data sources and academic literature also attribute increases to **accidental ingestion** of **cannabis edibles**, sources that are **illegal** or **unknown**, and among children **younger than 5**



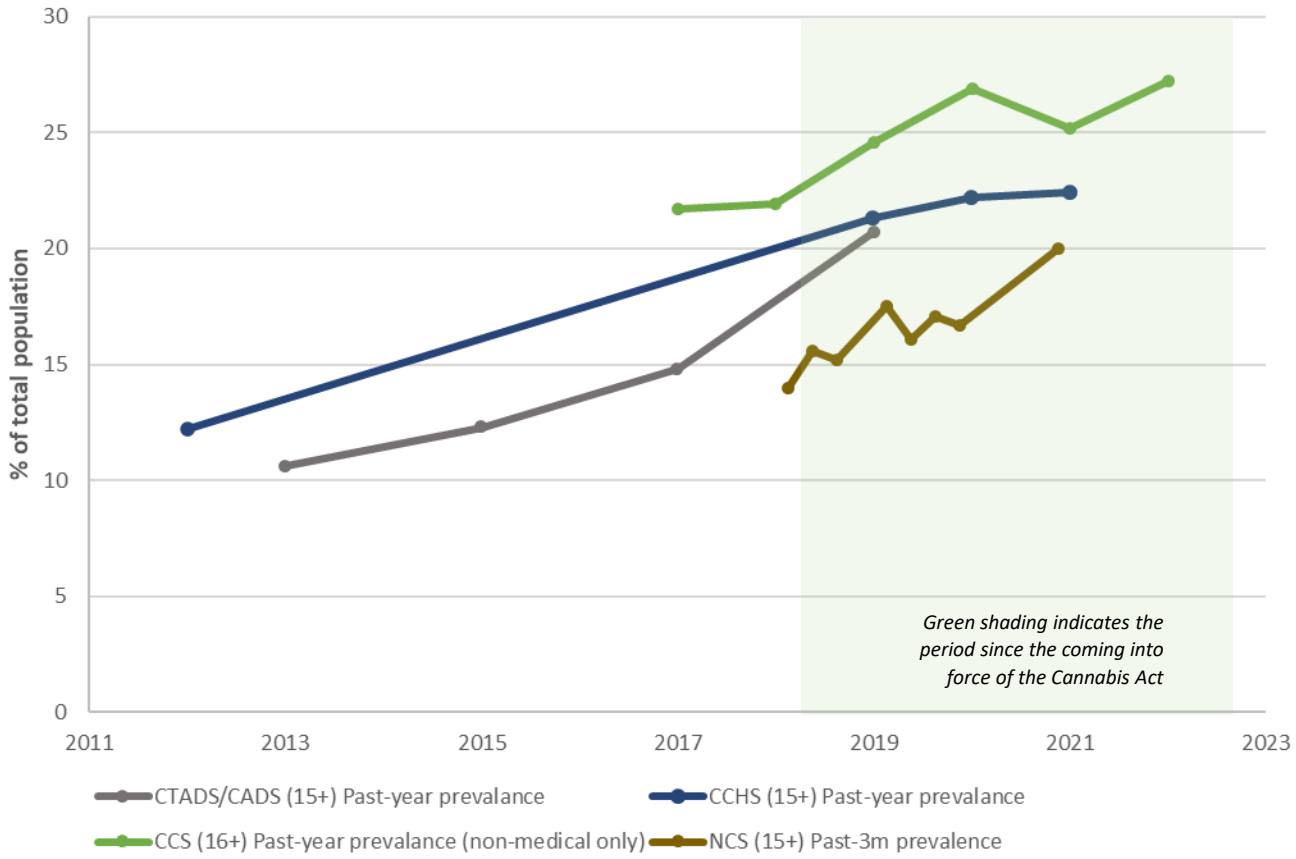


General population

CANNABIS USE

- **Increase in past 12-month/3-month cannabis use** (multiple sources)
  - More than 1/5 Canadians report past-year use
  - Increase was evident before legalization
- Sex Gender Based Analysis (SGBA+) findings
  - Notable increase among **young adults** (Canadian Alcohol and Drug Survey)
  - Prevalence is still higher in males than females (multiple sources)

Prevalence of cannabis use among Canadians

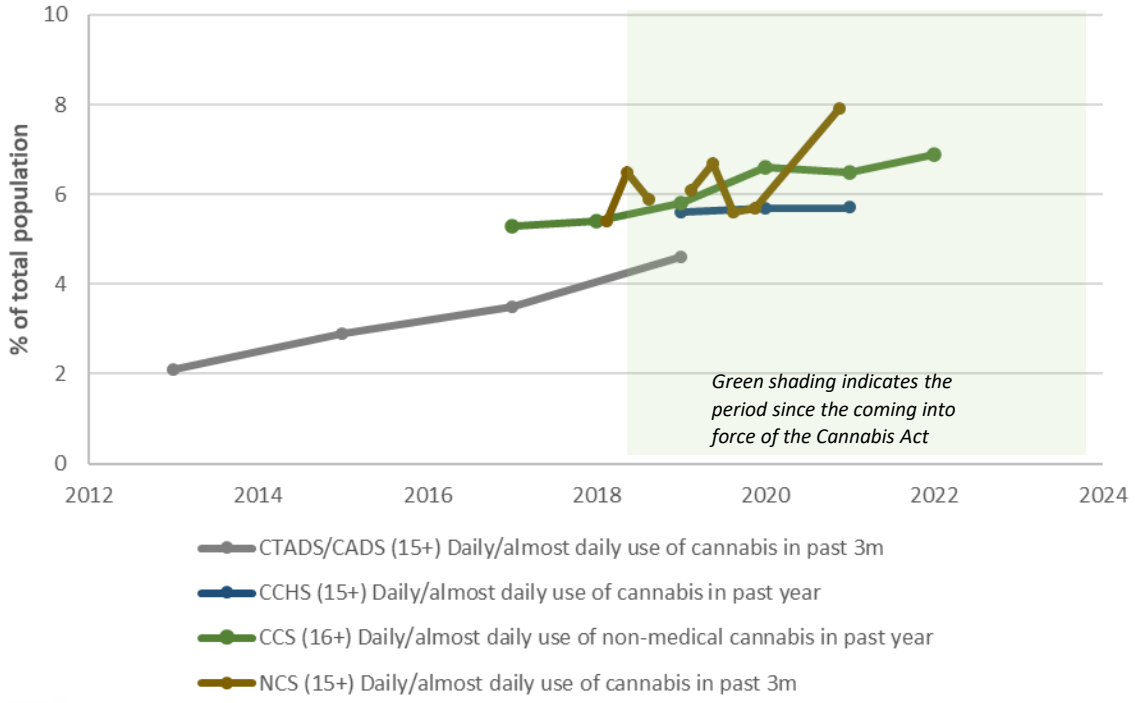


General population

FREQUENT CANNABIS USE

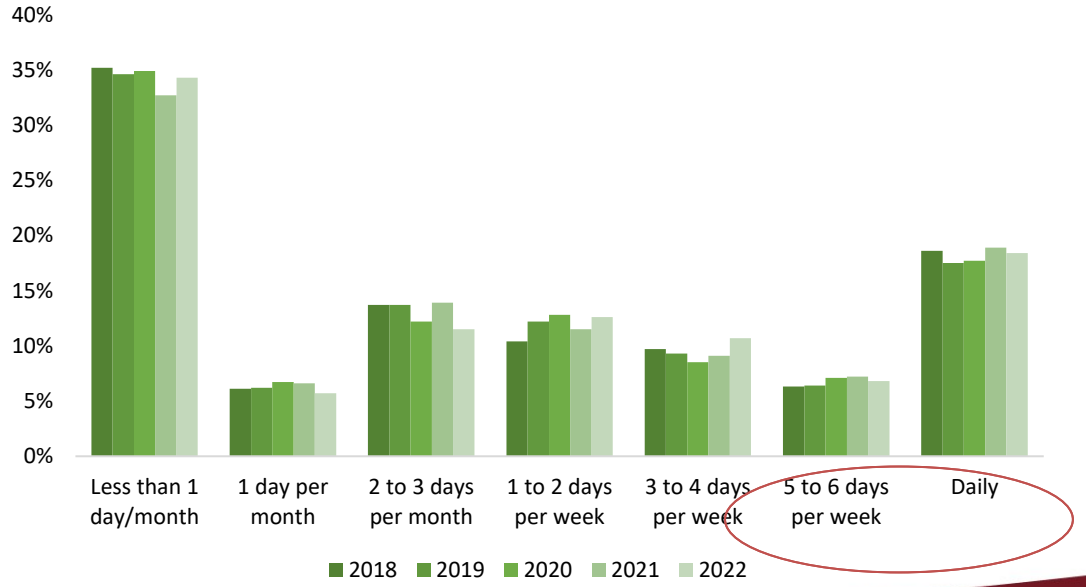
- Among total Canadian population: No clear trend in daily/almost daily use (multiple sources)
- 6% of all Canadians report daily/almost daily use (Canadian Community Health Survey, 2021)

Daily/almost daily use of cannabis among Canadians



- Among past-year consumers: no change in the proportion of daily/almost daily use (multiple sources)
- 25% of past-year cannabis consumers report frequent use (Canadian Cannabis Survey, 2022)

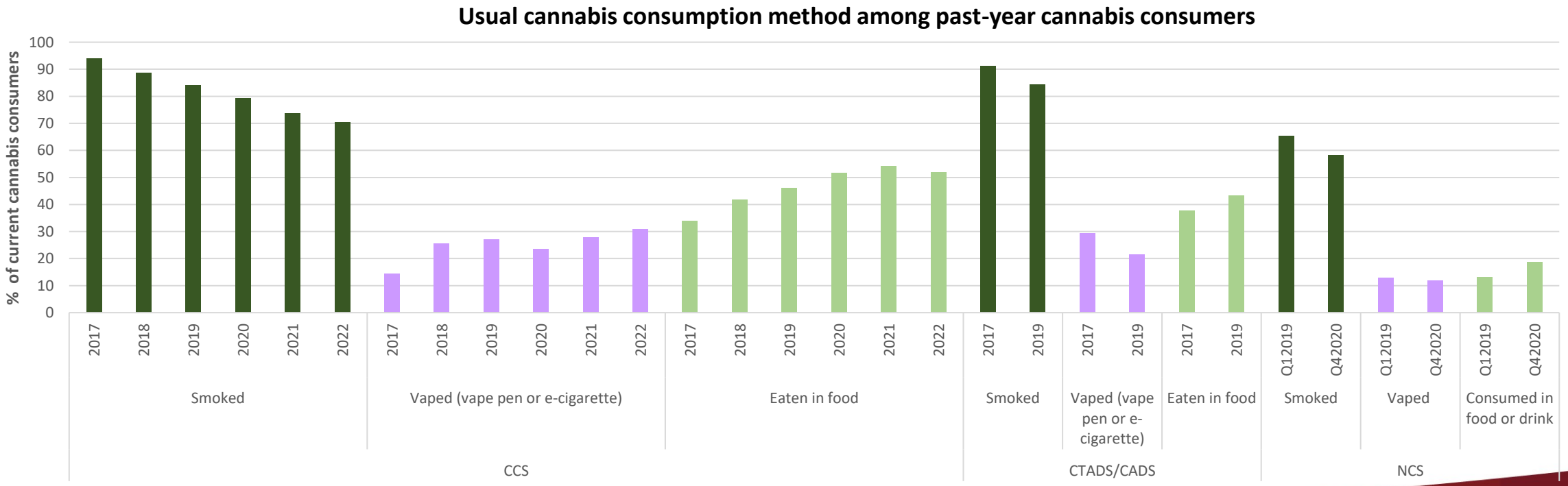
Frequency of cannabis use among past-year cannabis consumers, CCS (16+)



General population

CONSUMPTION METHOD

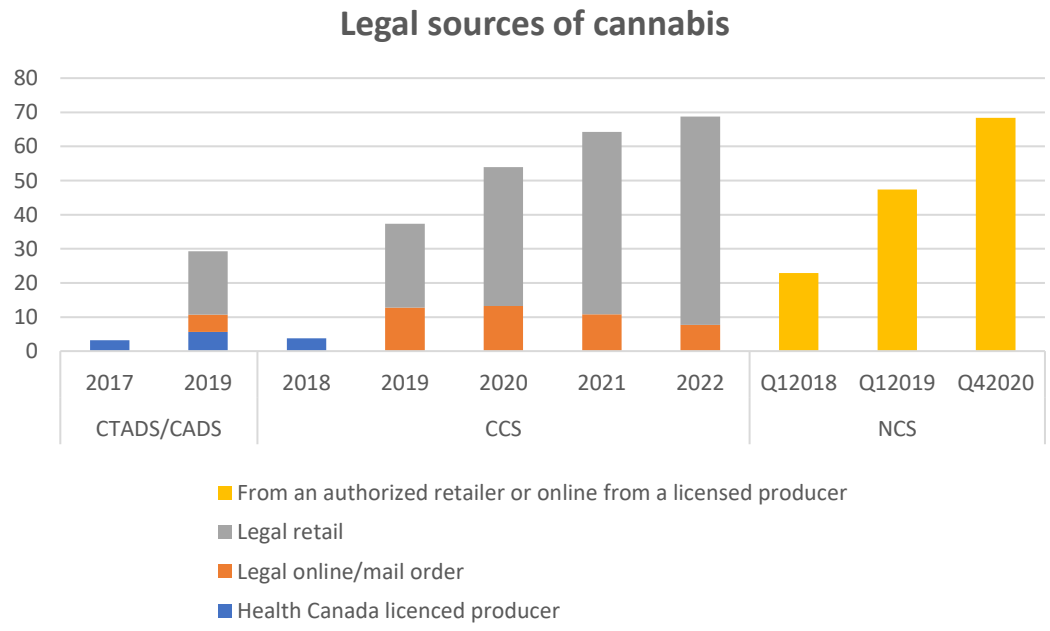
- Decrease in cannabis smoking, though it remains the leading method of use
- Increase in ingesting cannabis/edible use
- No clear trend concerning vaping cannabis

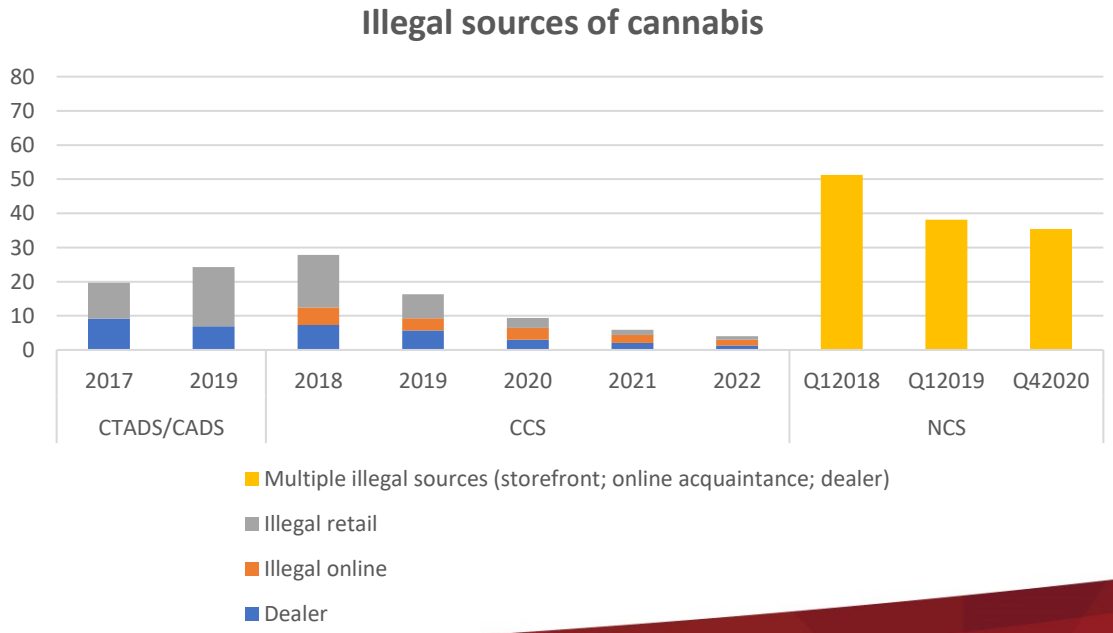


General population

SOURCE

- Increase in those accessing cannabis from a legal source
  - Consumers accessing from legal sources increased from **40%** in 2019 to **69%** in 2022 (Canadian Cannabis Survey)
  - Males, individuals who consume frequently/heavily, and individuals with lower educational attainment and/or lower income more likely to source cannabis from illegal sources (International Cannabis Policy Study, 2021, Canadian Cannabis Survey 2020-2022)





General population

CANNABIS-RELATED ED VISITS/HOSPITALIZATIONS

- Increase in cannabis-related ED visits in 3 jurisdictions (Ontario, Alberta, Yukon) where data are available (2015-2020) (National Ambulatory Care Reporting System, Canadian Institute for Health Information)
  - Majority of ED-visits relate to **mental & behavioural disorders** (e.g., harmful use, psychotic disorders, dependence/withdrawal)

- No change in cannabis-related hospitalizations (Discharge Abstract Database, Canadian Institute for Health Information)

Summary

- Cannabis use among youth has remained stable since legalization
- Past-year cannabis use among the general population has increased, extending a pre-legalization trend
  - No change in the proportion of daily/near-daily consumers among past-year consumers
- Cannabis poisonings from accidental ingestion of edible cannabis have increased, notably among children ≤5
- Majority of consumers sourcing from the legal market and continuing displacement of the illicit market
- Smoking cannabis remains the most common method, but smoking decreased while ingestion increased
- Vaping cannabis (vape pen/e-cigarette) has increased among youth
- The market is still in its infancy – more data will help elucidate the impacts of legalization

Thank you!

For further inquiries, please contact the Office of Cannabis Science and Surveillance:
cannabis_oss-cannabis_bss@hc-sc.gc.ca

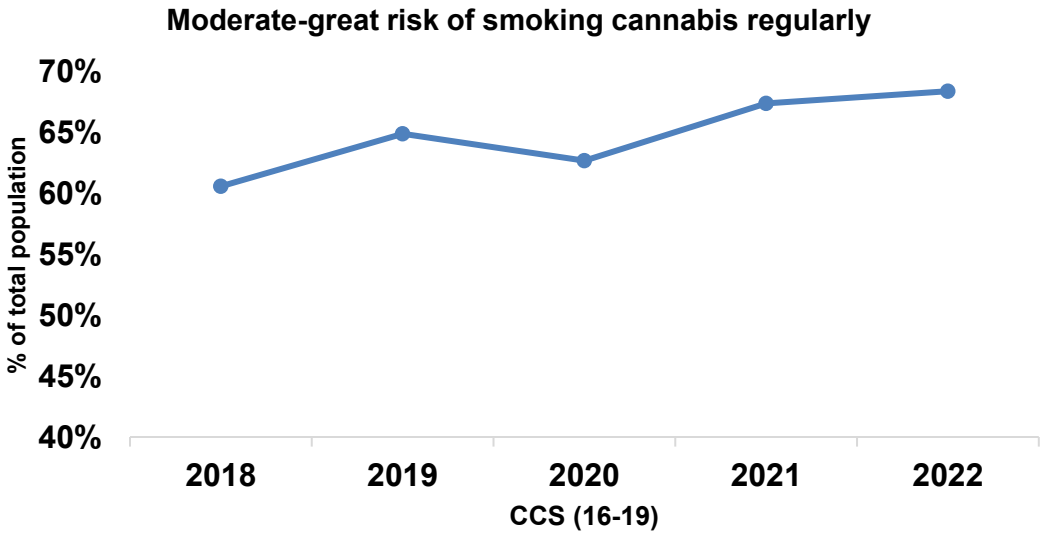
Appendix

Extra Slides

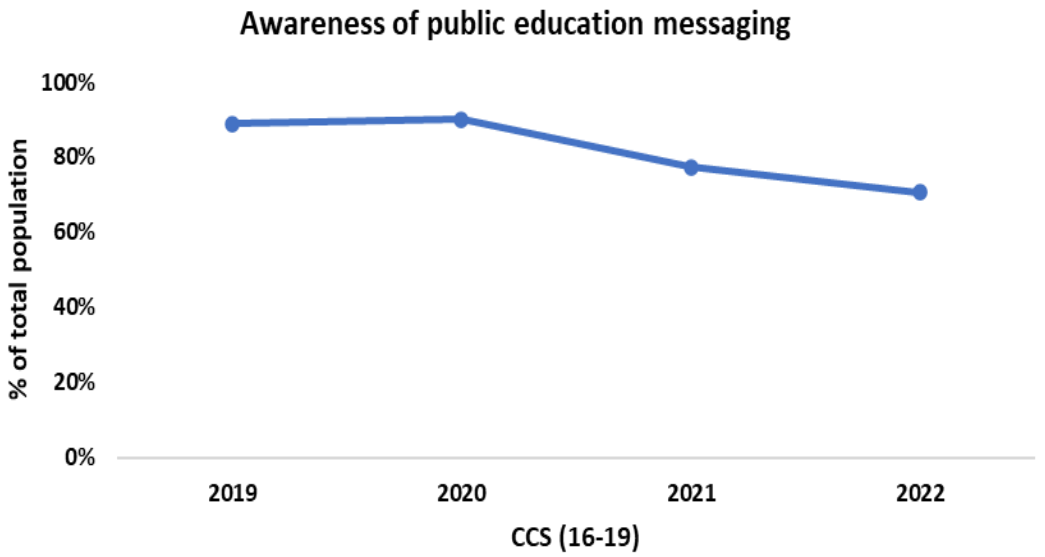
Youth

RISK PERCEPTION – AWARENESS OF PUBLIC EDUCATION

- More youth perceiving regular smoking of cannabis to carry risk



- Decrease in awareness of public education



LIMITATIONS - DATA GAPS - NEXT STEPS

Limited post-legalization data

- Data reflects ‘early years’ following legalization

Strengthen data

- Cannabis-related poisonings (e.g. source, type of edible, family socio-economic status)
- Associations of legalization and mental health disorders (e.g., cannabis use disorder, anxiety/mood disorders, schizophrenic/psychotic disorders)
- Associations of legalization and polysubstance use (e.g., concurrent use of alcohol and cannabis, nicotine and cannabis vaping among youth)
- SGBA+ (e.g., Indigenous/2SLGBTQ+ community, regional and provincial ‘geographical’ differences)

Next steps

- Working with partners to help identify further ‘public health data’ gaps and strengthen/harmonize data sources
- Continued data surveillance (e.g., Canadian Cannabis Survey, National Cannabis Survey)

National Population Surveys

	CTADS/CADS	CSTADS	CCHS	CCS	NCS	ICPS
	Canadian (Tobacco), Alcohol and Drugs Survey	***Canadian Student Tobacco, Alcohol and Drugs Survey***	***Canadian Community Health Survey***	***Canadian Cannabis Survey***	***National Cannabis Survey***	***International Cannabis Policy Study***
Description	• Biennial • Cross-sectional • 10 Provinces • Ages: 15+ • Approx. size: 10,000 • Data collection: Jun-Dec (2019)	• Biennial • Cross-sectional, school-based • 10 Provinces • Ages: Grade 7-12 • Approx. size: 60,000 (2018/19); 36,000 (2021/22) • Data collection: Oct-Jun (2018/19)	• Annual • Cross-sectional • 13 Provinces & Territories • Ages: 12+ • Approx. size: 65,000 (2019); 42,000 (2020) • Data collection: Jan-Dec (interruptions in 2020 & 2021)	• Annual • Cross-sectional • 13 Provinces & Territories • Ages: 16+ • Approx. size: 10,000 • Data collection: Apr-Jun (2021)	• Quarterly • Cross-sectional • 10 Provinces • Ages: 15+ • Approx. size: 5,000 • Data collection: Nov-Jan (Q4 2020)	• Annual • Cross-sectional • 13 Provinces & Territories • Ages: 16-65 • Approx. size: 10,000 • Data collection: Sep-Nov (2020)
Objective	• Produce provincial and national level estimates by age groups each cycle	• Produce consistent measures across survey cycles, and timely and reliable data on tobacco, alcohol, and drug use	• Produce national estimates every 2 months, at the provincial level annually, and for health regions every 2 years	• Collect in-depth annual data on cannabis use and use patterns, sources, products, pricing, perception, and behaviour	• Produce provincial level estimates, to better understand the frequency of cannabis usage and to monitor changes in behaviour as a result of legalization	• Examine population-level impact of cannabis legalization, and evaluate differences in cannabis policies across Canadian provinces and US states
Key considerations	• Multi-substance survey; moderate amount of cannabis content	• Multi-substance survey; moderate amount of cannabis content	• General health survey; limited cannabis content • National estimates not available for 2013-2018 • Current estimates for 2019 and 2020 exclude territories	• Cannabis-specific; extensive content • Risk of participation bias, not appropriate for prevalence • Unique separation of medical/non-medical use	• Cannabis-specific; extensive content • Quarterly collection with a 3-month reference period • 3 cycles in 2020 skipped, discontinued Q42020	• Cannabis-specific; extensive content • Sample drawn from commercial panel; not appropriate for prevalence

Administrative/other data sources

	NACRS	DAD	PC data	Cannabis AR reporting	CPSP	CHIRPP
	National Ambulatory Care Reporting System	***Discharge Abstracts Database***	***Poison Centre Data***	***Canada Vigilance Program: Adverse Reaction Reporting for Cannabis***	***Canadian Pediatric Surveillance Program***	***Canadian Hospitals Injury Reporting and Prevention Program***
Description	• Administrative dataset on hospital- and community-based ambulatory care • 25M records (2019-20)	• Administrative dataset on hospital discharges (e.g., deaths, sign-outs, transfers) • 3.4M abstracts (2019-20)	• Summary data on exposures to cannabis reported poison centres • ~180,000 total exposure calls (2020)	• Dataset of spontaneous and solicited reports of adverse reactions to cannabis	• Spontaneous reports originating from >2,700 pediatricians & specialists • Collects data on clinical presentations, diagnoses, and medical needs of youth seeking medical attention with serious and life-threatening events	• Sentinel surveillance system collecting reports from 11 pediatric hospitals, one outpatient clinic, and 9 general hospitals
Key considerations	• Incomplete geographic coverage; complete data for period of interest available for ON, AB & YT • Administrative data; lacks detail on circumstances of incident	• Incomplete geographic coverage (excludes QC) • Administrative data; lacks detail on circumstances of incident	• Discontinuity due to changes in reporting practices; inconsistent data collection and reporting • Summary data; lacks details on circumstances of incident	• Substantial, case-level details are available for all reports submitted. • Reporting of serious ARs is mandatory for licence holders; non-serious reactions and reports from other parties may be underrepresented	• Voluntary reporting may under-represent events occurring in the population • Focus on pediatricians/ pediatric specialists may not capture events reported to other physicians, and may under-represent rural/remote populations	• Not representative; data collected at 20 facilities, with a high proportion of pediatric hospitals