



# Provincial Patterns and Trends in Cannabis Use among Youth: Alberta

## Background: Cannabis Use in Canada

This factsheet presents recent patterns and trends of cannabis use among young people in Alberta, including prevalence of use, perceptions of harm, cannabis use and driving, and dimensions of risk.

- In October 2018, the Government of Canada implemented the *Cannabis Act*, legalizing cannabis for non-medical use in Canada.
- The legislation prioritizes the health and safety of young Canadians by restricting youth access to cannabis through regulations on its production, sale and consumption.
- Canadian youth report the highest prevalence rates of non-medical cannabis use among developed countries.
- Patterns of non-medical cannabis use among Canadian youth vary by region.
- Some subgroups of youth, including Indigenous youth and youth belonging to gender-based minorities, demonstrate increased risk of experiencing cannabis-related harms.
- Increasing awareness and understanding of the risks and harms unique to Canadian youth can inform the development and implementation of cannabis public education efforts.

## Highlights

- In 2016–2017, Alberta students reported the third lowest prevalence of cannabis use in Canada, with 10.2% of students having used cannabis in the past 30 days.
- Students in grades 10–12 reported six times greater prevalence of cannabis use in the past 12 months than students in grades 7–9 (27.7% vs 4.5%).
- Prevalence of past-year cannabis use was similar among males and females (16.1% and 15.9%).
- Among students in grades 7–12 who reported using cannabis in the past year, one in three (34%) reported using it once or more per week.
- Among students in grades 7–12 who reported using cannabis in the past year, the majority reported smoking it (94%), followed by dabbing (44%), vaping (42%) and eating it in foods (40%).
- Among youth aged 15–24 who reported using cannabis at least once in their lifetime, the mean age of initiation was 16.8 years of age for males and 17.2 years for females.
- Almost two-thirds of youth in grades 10–12 (59%) reported cannabis to be fairly easy or very easy to obtain. The usual ways of obtaining it were sharing among friends (42%), getting or buying it from someone else (24%), or getting or buying it from a friend or family member (12%).



## Data Sources

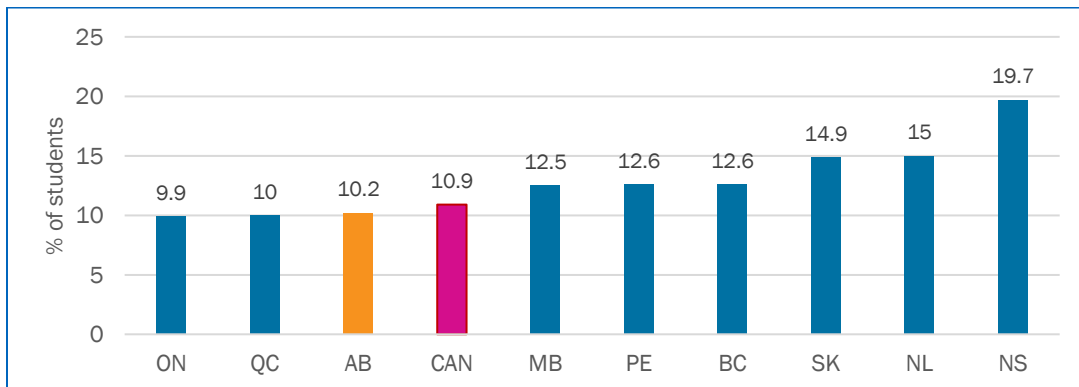
This report is based on the following sources of school and population-based survey data on cannabis use among youth.

- Canadian Student Tobacco Alcohol and Drugs Survey (CSTADS) is a biennial school-based survey of students in grades 7 to 12, conducted on behalf of Health Canada.
- Cancer Risk Assessment among Youth (CRAYS) is a school-based survey of students in grades 9 to 12 in Ontario, Newfoundland and Labrador, Nova Scotia, Quebec, Saskatchewan, Alberta and British Columbia.
- Canadian Tobacco Alcohol and Drugs Survey (CTADS) is a telephone-based (including cell phones) survey of the Canadian population aged 15 and older, living outside of institutions and First Nations reserve communities, conducted by Statistics Canada.

## Prevalence of Cannabis Use among Youth across Canada

- Alberta students had low prevalence of use in Canada in 2016–2017.
- Around 1 in 10 students in grades 7 to 12 had used cannabis in the past 30 days.

Past-30-day cannabis use among grade 7–12 students

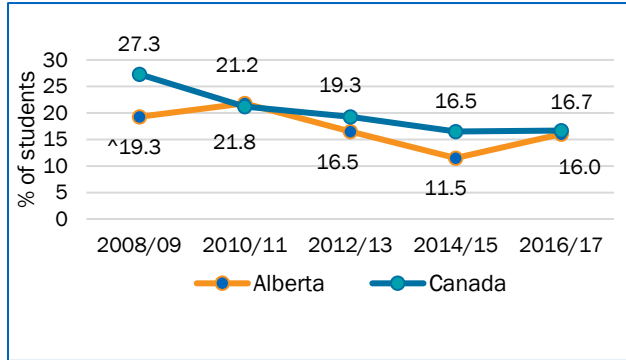


Source: CSTADS 2016–2017



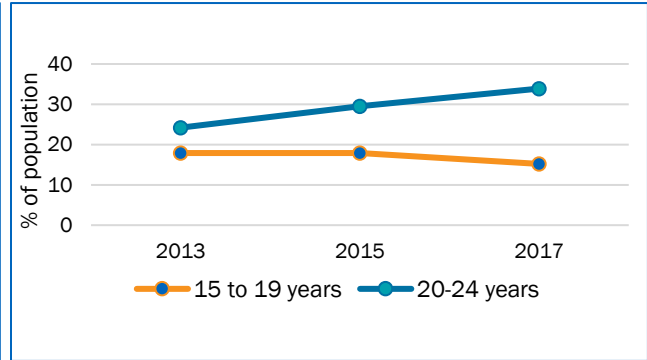
### Patterns of Cannabis Use among Youth in Alberta

Past-12-month cannabis use by grade 7–12 students (2008–2009 to 2016–2017)



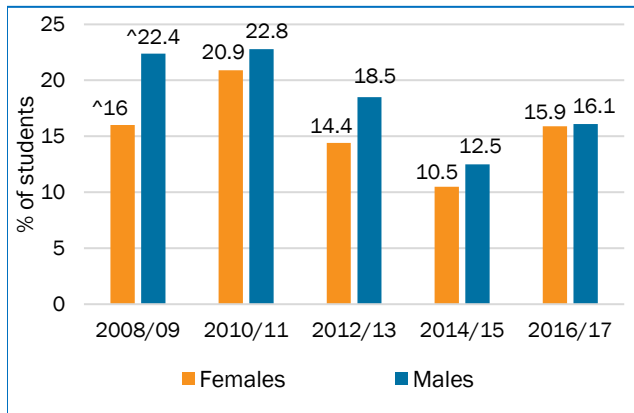
^ Moderate sampling variability, interpret with caution. Source: CSTADS 2008–2009 to 2016–2017

Past-12-month cannabis use by youth aged 15–24 (2013 to 2017)



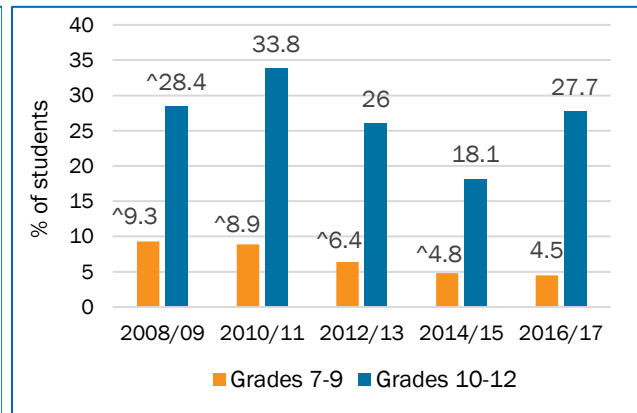
Source: CTADS 2013, 2015, 2017

Past-12-month cannabis use by sex (2008–2009 to 2016–2017)



^ Moderate sampling variability, interpret with caution. Source: CSTADS 2008–2009 to 2016–2017

Past-12-month cannabis use by grade (2008–2009 to 2016–2017)



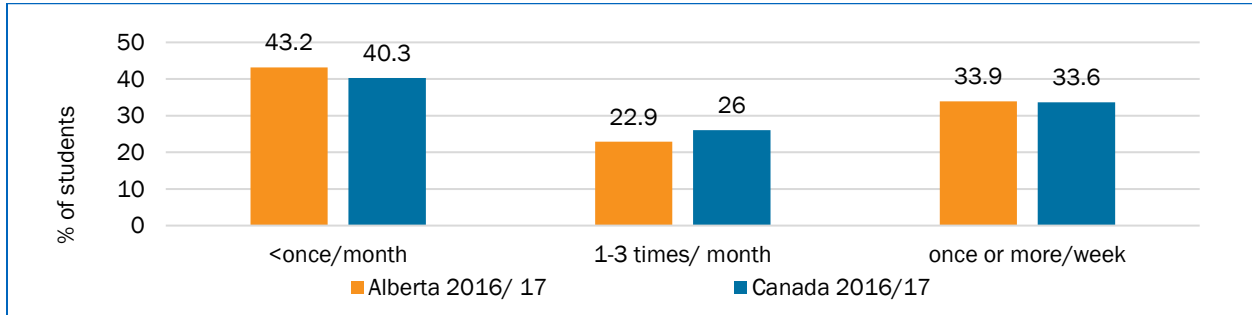
^ Moderate sampling variability, interpret with caution. Source: CSTADS 2008–2009 to 2016–2017

- Past 12-month cannabis use among youth in grades 7–12 saw a significant decrease from 2008–2009 to 2014–2015, and a slight increase from 2014–2015 to 2016–2017.
- Grade 7–9 use has decreased from 2008–2009 to 2016–2017. Grade 10–12 use decreased from 2010–2011 to 2014–2015, and has increased significantly from 2014–2015 to 2016–2017.
- Cannabis use among males and females has increased since 2014–2015; and are comparable across both sexes.



### Frequency of Cannabis Use among Students in Alberta

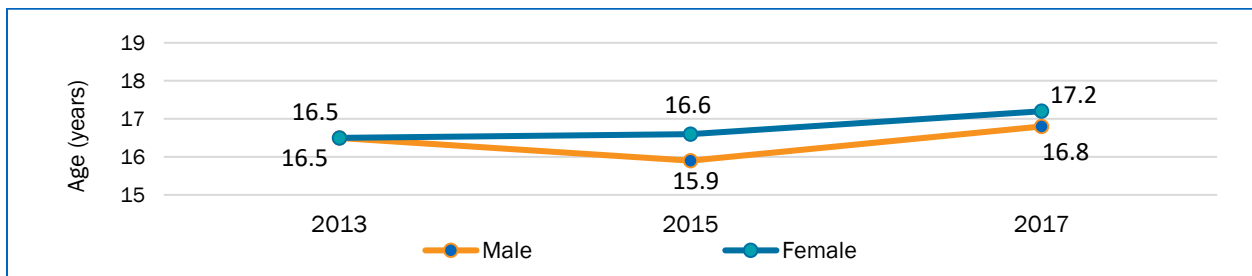
Frequency of cannabis use in past 12 months among students who have used cannabis



Source: CSTADS 2016–2017

### Age of First Cannabis Use among Youth in Alberta

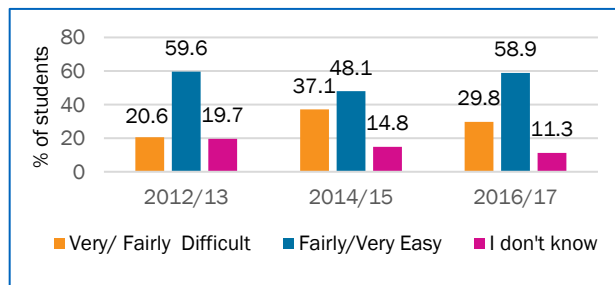
Mean age for initiating cannabis use among youth aged 15–24



Source: CTADS 2013, 2015, 2017

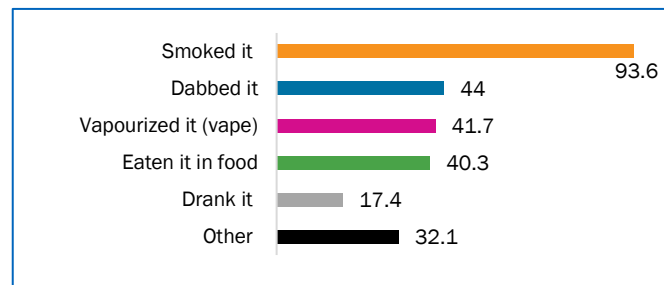
### Mode of Use and Ease of Access to Cannabis

Perceived ease of access among grade 10–12 students



Source: CSTADS 2012–2013, 2015–2016, 2016–2017

Mode of cannabis use in the past 12 months in grade 7–12 students



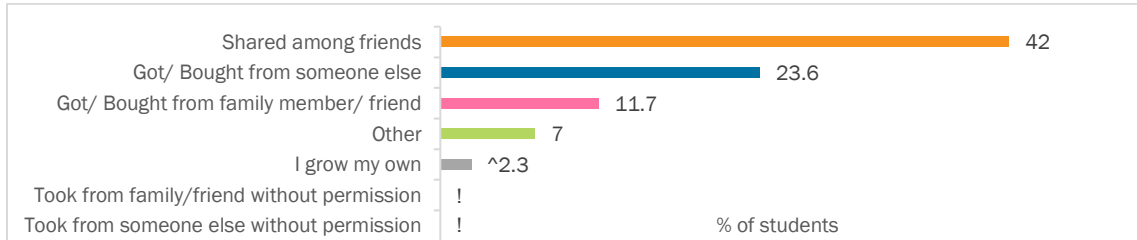
Source: CSTADS 2016–2017

- Among students who have used cannabis in the last 12 months, 43% use less than once per month.
- Age of initiating cannabis use among youth has increased slightly from 2015 to 2017 among both males and females overall to age 16.8, and 17.2 respectively.
- Among students who have used cannabis in the past 12 months, the large majority have smoked it.
- The perceived ease of access to cannabis among grade 10–12 students has remained relatively unchanged between 2012–2013 and 2016–2017, with it being reported fairly/very easily accessible by over half of students.



### Usual Source of Cannabis

Usual source of cannabis among grade 7–12 students who have ever tried cannabis (2016–2017)



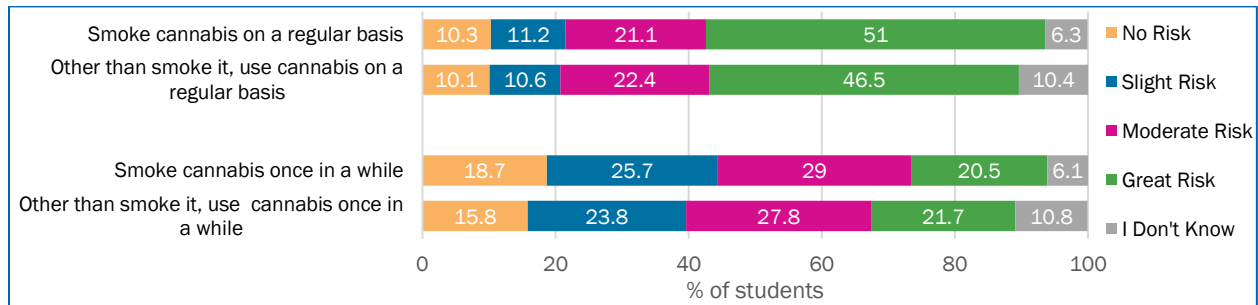
^ Moderate sampling variability, interpret with caution.

! Due to low sample size and/or large coefficients of variation, the quality of these estimates is low.

Source: CSTADS 2016–2017

### Perceived Harms of Cannabis Use

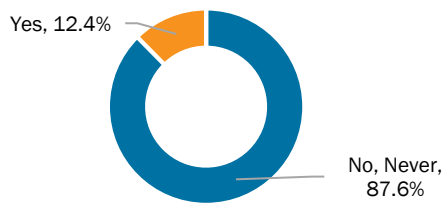
Responses to "How much do people risk harming themselves when they do each of the following activities?" among grade 7–12 students (2016–2017)



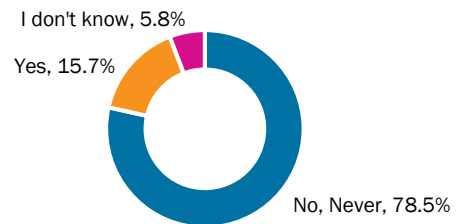
Source: CSTADS 2016–2017

### Cannabis Use and Driving

Grade 11–12 students who reported having driven a motor vehicle within two hours of using cannabis (2016–2017)



Grade 7–12 students who reported being a passenger in a motor vehicle driven by someone who had used cannabis in previous two hours (2016–2017)



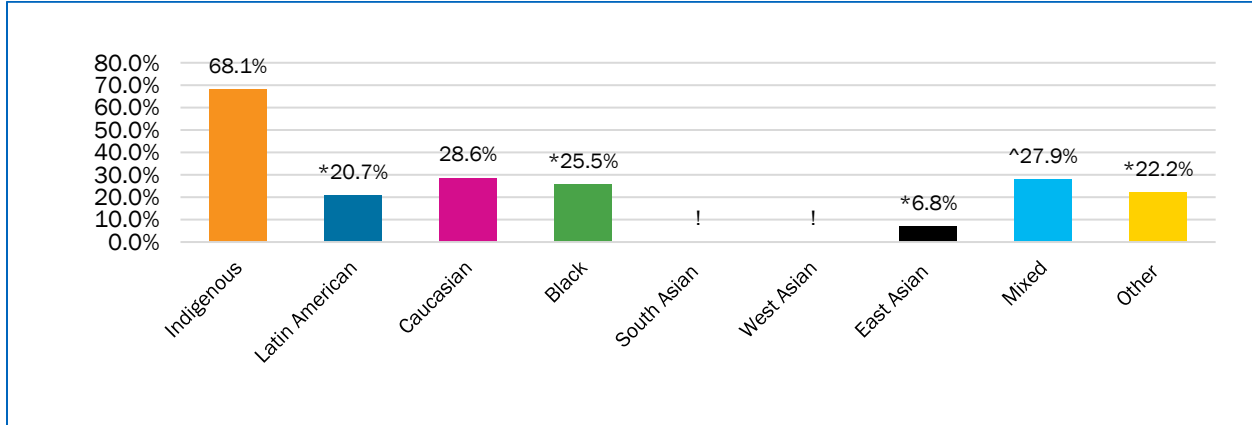
\*Motor vehicles include a broad range: cars, motorcycles, off-road vehicles (including agricultural machinery), light trucks and regular trucks.

- Before legalization, over 40% of students reported that they shared cannabis among friends; almost a quarter received or purchased it from someone else.
- The majority of students feel that using cannabis on a regular basis is a great or moderate risk.
- The majority of students reported they had not driven a motor vehicle within two hours of using cannabis or been a passenger in a motor vehicle driven by someone who had used cannabis within the last two hours.



## Dimensions of Risk for Cannabis Use among Alberta Youth

Past 12-month cannabis use among grade 10–12 students, by ethnic group (2017)



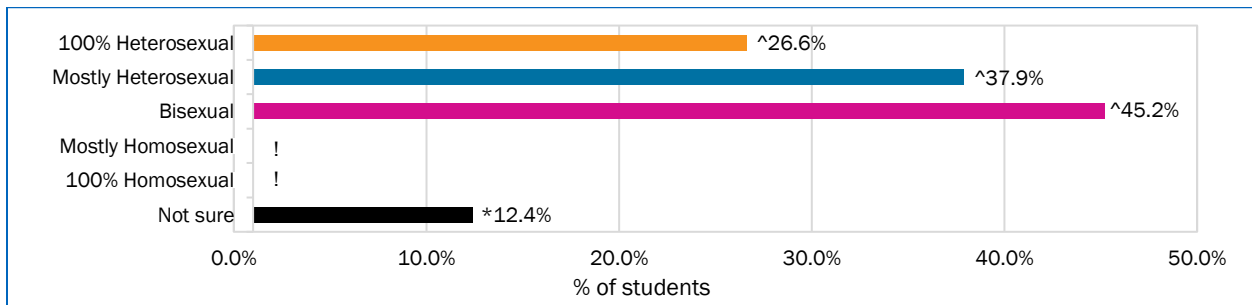
^ Moderate sampling variability, interpret with caution.

\* Due to low sample size and/or large coefficients of variation, the quality of these estimates is low. Interpret with extreme caution.

! Due to low sample size and/or large coefficients of variation, the quality of these estimates is low.

Source: CRAYS 2017

Past 12-month cannabis use among grade 10–12 students, by sexual orientation† (2017)



^ Moderate sampling variability, interpret with caution.

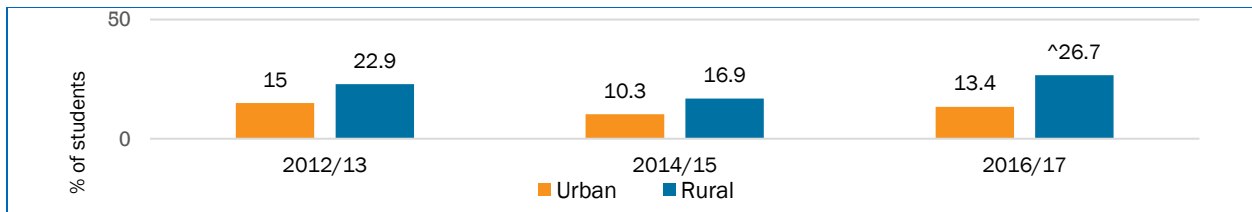
\* Due to low sample size and/or large coefficients of variation, the quality of these estimates is low. Interpret with extreme caution.

! Due to low sample size and/or large coefficients of variation, the quality of these estimates is low.

† Measuring sexual identity and orientation is difficult and changing. According to Statistics Canada, in 2016 4% to 10% of Canadian youth considered themselves either homosexual or bisexual.

Source: CRAYS 2017

Past 12-month use among grade 7–12 students attending urban and rural schools



^ Moderate sampling variability, interpret with caution.

Source: CSTADS 2012–2013, 2014–2015, 2016–2017

- Indigenous youth reported the highest prevalence of cannabis use in the past 12 months.
- Nearly half of bisexual youth reported using cannabis in the past 12 months.
- The prevalence of cannabis use among students attending rural schools has been higher than students attending urban schools since 2012–2013, and has increased, but not significantly from 2014–2015 to 2016–2017.



## Appendix: Data Table and Confidence Intervals

Series	Year	Percent- age	95% Confi- dence Limits
Cannabis use, past 12 months, grades 7-12, AB	2016-2017	16.0	[13.5-18.5]
Cannabis use, past 12 months, grades 7-12, AB	2014-2015	11.5	[10.0-13.1]
Cannabis use, past 12 months, grades 7-12, AB	2012-2013	16.5	[14.1-18.8]
Cannabis use, past 12 months, grades 7-12, AB	2010-2011	21.8	[19.5-24.2]
Cannabis use, past 12 months, grades 7-12, AB	2008-2009	19.3	[11.2-27.4]
Cannabis use, past 12 months, grades 7-12, Canada	2016-2017	16.7	[15.0-18.3]
Cannabis use, past 12 months, grades 7-12, Canada	2014-2015	16.5	[15.3-17.8]
Cannabis use, past 12 months, grades 7-12, Canada	2012-2013	19.3	[17.1-21.5]
Cannabis use, past 12 months, grades 7-12, Canada	2010-2011	21.2	[19.7-22.6]
Cannabis use, past 12 months, grades 7-12, Canada	2008-2009	27.3	[25.7-29.0]
Cannabis use, past 12 months, grades 7-9	2016-2017	4.5	[3.5-5.6]
Cannabis use, past 12 months, grades 7-9	2014-2015	4.8	[2.9-6.7]
Cannabis use, past 12 months, grades 7-9	2012-2013	6.4	[4.1-8.6]
Cannabis use, past 12 months, grades 7-9	2010-2011	8.9	[4.6-13.2]
Cannabis use, past 12 months, grades 7-9	2008-2009	9.3	[3.7-14.8]
Cannabis use, past 12 months, grades 10-12	2016-2017	27.7	[23.0-32.3]
Cannabis use, past 12 months, grades 10-12	2014-2015	18.1	[16.4-19.7]
Cannabis use, past 12 months, grades 10-12	2012-2013	26.0	[22.4-29.7]
Cannabis use, past 12 months, grades 10-12	2010-2011	33.8	[31.2-36.4]
Cannabis use, past 12 months, grades 10-12	2008-2009	28.4	[15.4-41.3]
Cannabis use, past 12 months, female	2016-2017	15.9	[13.5-18.2]
Cannabis use, past 12 months, female	2014-2015	10.5	[8.8-12.1]
Cannabis use, past 12 months, female	2012-2013	14.4	[11.6-17.1]
Cannabis use, past 12 months, female	2010-2011	20.9	[18.2-23.6]
Cannabis use, past 12 months, female	2008-2009	16.0	[9.3-22.7]
Cannabis use, past 12 months, male	2016-2017	16.1	[13.2-19.0]
Cannabis use, past 12 months, male	2014-2015	12.5	[10.4-14.6]
Cannabis use, past 12 months, male	2012-2013	18.5	[15.7-21.4]
Cannabis use, past 12 months, male	2010-2011	22.8	[19.8-25.8]
Cannabis use, past 12 months, male	2008-2009	22.4	[11.8-33.0]
Cannabis use, past 12 months, age 15-19	2017	15.2	[10.4-19.9]
Cannabis use, past 12 months, age 15-19	2015	17.9	[12.6-23.2]
Cannabis use, past 12 months, age 15-19	2013	17.9	[13.2-22.7]
Cannabis use, past 12 months, age 20-24	2017	33.9	[24.6-43.2]
Cannabis use, past 12 months, age 20-24	2015	29.5	[22.8-36.1]
Cannabis use, past 12 months, age 20-24	2013	24.2	[17.5-30.9]
Past 12-month, Frequency of use, <once/month, AB	2016-2017	43.2	[39.2-47.2]
Past 12-month, Frequency of use, 1-3 times/month, AB	2016-2017	22.9	[20.6-25.3]
Past 12-month, Frequency of use, once/week or more, AB	2016-2017	33.9	[28.8-39.0]
Past 12 month, Frequency of use, <once/month, Canada	2016-2017	40.3	[37.9-42.8]
Past 12-month, Frequency of use, 1-3 times/ month, Canada	2016-2017	26.0	[24.5-27.6]
Past 12-month, Frequency of use, once /week or more, Canada	2016-2017	33.6	[31.6-35.7]
Age at Initiation, Female	2017	17.2	[16.6-17.8]
Age at Initiation, Female	2015	16.6	[16.0-17.1]
Age at Initiation, Female	2013	16.5	[16.0-17.0]
Age at Initiation, Male	2017	16.8	[16.3-17.3]
Age at Initiation, Male	2015	15.9	[15.2-16.5]
Age at Initiation, Male	2013	16.5	[15.9-17.2]
Past 12 months mode of cannabis use, smoke	2016-2017	93.6	[90.8-96.3]
Past 12 months mode of cannabis use, eaten in food	2016-2017	40.3	[34.5-46.0]
Past 12 months mode of cannabis use, drank	2016-2017	17.4	[14.6-20.1]
Past 12 months mode of cannabis use, vaped	2016-2017	41.7	[36.5-46.9]
Past 12 months mode of cannabis use, dabbed	2016-2017	44.0	[37.9-50.1]
Past 12 months mode of cannabis use, other	2016-2017	32.1	[28.3-35.9]
Perceived ease of access, grade 10-12, very/fairly easy	2016-2017	58.9	[56.4-61.3]
Perceived ease of access, grade 10-12, very/fairly difficult	2016-2017	29.8	[27.4-32.2]
Perceived ease of access, grade 10-12, I do not know	2016-2017	11.3	[9.8-12.9]
Perceived ease of access, grade 10-12, very/fairly easy	2014-2015	48.1	[43.8-52.5]
Perceived ease of access, grade 10-12, very/fairly difficult	2014-2015	37.1	[35.1-39.0]
Perceived ease of access, grade 10-12, I do not know	2014-2015	14.8	[11.7-17.9]
Perceived ease of access, grade 10-12, very/fairly easy	2012-2013	59.6	[55.6-63.6]





## Provincial Patterns and Trends of Cannabis Use among Youth: Alberta

Perceived ease of access, grade 10–12, very/fairly difficult	2012–2013	20.6	[18.6-22.7]
Perceived ease of access, grade 10–12, I do not know	2012–2013	19.7	[16.9-22.6]
Usual source of cannabis, last 12 months, shared among friends	2016–2017	42.0	[38.4-45.6]
Usual source of cannabis, last 12 months, got/bought from friend/family	2016–2017	11.7	[10.0-13.5]
Usual source of cannabis, last 12 months, got/bought from someone else	2016–2017	23.6	[19.9-27.3]
Usual source of cannabis, last 12 months, took it from family member/ friend without permission	2016–2017	!	!
Usual source of cannabis, last 12 months, took it from someone else, without permission	2016–2017	!	!
Usual source of cannabis, last 12 months, grow my own	2016–2017	2.3	[1.5-3.0]
Usual source of cannabis, last 12 months, other	2016–2017	7.0	[5.5-8.6]
Smoke cannabis on a regular basis: No risk	2016–2017	10.3	[8.8-11.9]
Smoke cannabis on a regular basis: slight risk	2016–2017	11.2	[10.2-12.3]
Smoke cannabis on a regular basis: moderate risk	2016–2017	21.1	[19.7-22.5]
Smoke cannabis on a regular basis: great risk	2016–2017	51.0	[48.4-53.6]
Smoke cannabis on a regular basis: I do not know	2016–2017	6.3	[5.5-7.1]
Smoke cannabis once in a while: No risk	2016–2017	18.7	[16.8-20.7]
Smoke cannabis once in a while: slight risk	2016–2017	25.7	[24.4-27.0]
Smoke cannabis once in a while: moderate risk	2016–2017	29.0	[27.0-30.9]
Smoke cannabis once in a while: great risk	2016–2017	20.5	[19.1-21.9]
Smoke cannabis once in a while: I do not know	2016–2017	6.1	[5.2-7.0]
Other than smoke, use on a regular basis: no risk	2016–2017	10.1	[8.6-11.6]
Other than smoke, use on a regular basis: slight risk	2016–2017	10.6	[9.4-11.8]
Other than smoke, use on a regular basis: moderate	2016–2017	22.4	[20.6-24.1]
Other than smoke, use on a regular basis: great risk	2016–2017	46.5	[44.1-48.9]
Other than smoke, use on a regular basis: I do not know	2016–2017	10.4	[9.5-11.3]
Other than smoke, use once in a while: no risk	2016–2017	15.8	[14.0-17.7]
Other than smoke, use once in a while: slight risk	2016–2017	23.8	[22.4-25.2]
Other than smoke, use once in a while: moderate	2016–2017	27.8	[26.3-29.4]
Other than smoke, use once in a while: great risk	2016–2017	21.7	[20.1-23.3]
Other than smoke, use once in a while: I do not know	2016–2017	10.8	[9.8-11.8]
Driven a vehicle within 2 hours of using cannabis, yes	2016–2017	12.4	[9.7-15.2]
Passenger within 2 hours of driver using cannabis, yes	2016–2017	15.7	[13.0-18.3]
Passenger within 2 hours of driver using cannabis, no	2016–2017	78.5	[75.7-81.4]
Passenger within 2 hours of driver using cannabis, I don't know	2016–2017	5.8	[5.2-6.4]
Used cannabis in past 12 months, among Indigenous	2017	68.1	[58.0-78.3]
Used cannabis in past 12 months, among Latin American	2017	20.7	[12.8-28.6]
Used cannabis in past 12 months, among Caucasian	2017	28.6	[21.9-35.4]
Used cannabis in past 12 months, among Black	2017	25.5	[10.6-40.5]
Used cannabis in past 12 months, among South Asian	2017	!	!
Used cannabis in past 12 months, among East Asian	2017	6.8	[0.6-13.0]
Used cannabis in past 12 months, among West Asian	2017	!	!
Used cannabis in past 12 months, among Mixed	2017	27.9	[11.6-44.2]
Used cannabis in past 12 months, among Other	2017	22.2	[10.6-33.9]
Used cannabis last 12 months, 100% heterosexual	2017	26.6	[15.7-37.5]
Used cannabis last 12 months, mostly heterosexual	2017	37.9	[20.3-55.4]
Used cannabis last 12 months, bisexual	2017	45.2	[18.6-71.8]
Used cannabis last 12 months, mostly homosexual	2017	!	!
Used cannabis last 12 months, 100% homosexual	2017	!	!
Used cannabis last 12 months, not sure	2017	12.4	[2.6-22.3]
Cannabis use, past 30 days, Saskatchewan	2016–2017	14.9	[10.5-19.4]
Cannabis use, past 30 days, Ontario	2016–2017	9.9	[7.4-12.4]
Cannabis use, past 30 days, British Columbia	2016–2017	12.6	[9.5-15.7]
Cannabis use, past 30 days, Alberta	2016–2017	10.2	[8.4-12.0]
Cannabis use, past 30 days, Manitoba	2016–2017	12.5	[10.1-14.8]
Cannabis use, past 30 days, Prince Edward Island	2016–2017	12.6	[10.1-15.0]
Cannabis use, past 30 days, Nova Scotia	2016–2017	19.7	[17.6-21.8]
Cannabis use, past 30 days, Quebec	2016–2017	10.0	[9.0-10.9]
Cannabis use, past 30 days, Newfoundland and Labrador	2016–2017	15.0	[13.4-16.7]
Past 12-month cannabis use in urban youth, grades 7–12	2016–2017	13.4	[11.0-15.9]
Past 12-month Cannabis use in rural youth, grades 7–12	2016–2017	26.7	[16.4-37.1]
Past 12-month Cannabis use in urban youth, grades 7–12	2014–2015	10.3	[8.6-12.0]
Past 12-month Cannabis use in rural youth, grades 7–12	2014–2015	16.9	[12.8-21.1]
Past 12-month Cannabis use in urban youth, grades 7–12	2012–2013	15.0	[11.5-18.5]
Past 12-month Cannabis use in rural youth, grades 7–12	2012–2013	22.9	[17.3-28.5]





Suggested citation: Cooke, M., Milicic, S., MacDonald, J.A., Asbridge, M., Guindon, E., Muhajarine, N., MacDonald, M., Wild, C., Elton-Marshall, T., Mancuso, M., Montreuil, A., Hammond, D., Grootendorst, P., Porath, A., Konefal, S., Douglas, O., Tariq, U., Burkhalter, R. Propel Centre for Population Health Impact. *Provincial patterns and trends in cannabis use: Alberta*. (2020). Waterloo, Ont.: University of Waterloo and Canadian Centre for Substance Use and Addiction.

ISBN 978-1-77178-619-5

© Canadian Centre on Substance Use and Addiction 2020



Canadian Centre  
on Substance Use  
and Addiction

CCSA was created by Parliament to provide national leadership to address substance use in Canada. A trusted counsel, we provide national guidance to decision makers by harnessing the power of research, curating knowledge and bringing together diverse perspectives.

CCSA activities and products are made possible through a financial contribution from Health Canada. The views of CCSA do not necessarily represent the views of Health Canada.