



Cannabis Use Among Students in the Haliburton, Kawartha, Pine Ridge District Health Unit 2017 Ontario Student Drug Use and Health Survey (OSDUHS)

Cannabis (also known as, marijuana or weed) is currently an illicit drug with psychoactive properties, which can be consumed by smoking, drinking, eating, or vaporization ("vaping"). In 2015, cannabis use in the previous 12 months<sup>2</sup> was reported by an estimated 12% of the Canadian population, 15 years of age or older. During the 2016/2017 school year, nearly 20% of grade 7 – 12 students in Ontario reported using cannabis in the previous 12-months, and nearly 10% reported using cannabis on six or more occasions in the previous 12-months.<sup>3</sup>

Between 1999 and 2017, in Ontario, the per cent of grade 7 – 12 students who reported using cannabis in the previous 12-months declined by about 10%, from 28.0 to 19.0%.<sup>3</sup> Although cannabis historically has been a controlled substance in Canada, cannabis is set to become decriminalized in the summer of 2018. Similar to tobacco and alcohol laws, only individuals aged 19 and older would be legally permitted to buy, sell, and use non-medical cannabis in Ontario.<sup>4</sup> Despite the pending legalization, cannabis has been shown to have various short-term health effects, including fatigue, impaired cognitive function, and anxiety, as well as long-term effects, such as detriment to concentration, intelligence, and decision-making.<sup>5</sup> These are in addition to the effects of smoking, including chronic cough, bronchitis, and lung infections. Additionally, there is an increased risk of mental health issues with cannabis use, such as a psychotic episode, psychosis, schizophrenia, and depression, especially for those youth who start using cannabis at a young age, use cannabis frequently (daily or almost every day) and have a personal or family history of psychosis and/or schizophrenia.<sup>5</sup> Youth are at a greater risk for these effects, as their brains are still developing, some of these effects may be irreversible.<sup>5</sup>

The purpose of this *inFORM* is to highlight selected findings on cannabis use from the 2017 Ontario Student Drug Use and Health Survey (OSDUHS) within the Haliburton, Kawartha, Pine Ridge (HKPR) District.

## Methods & Data Notes

The OSDUHS is a population survey of Ontario students from grade 7 through grade 12, conducted every two-years, that is distributed within publicly-funded schools within Ontario.<sup>4</sup> The survey is self-administered, anonymous, and considered representative of all Ontario students in both English and French language schools, within the Public and Catholic School Boards.<sup>1</sup> In 2016/17, the HKPR District Health Unit purchased an over-sample of the OSDUHS in order to obtain estimates for youth residing within the HKPR District. In total, there were 1215 surveys completed for the 2016/2017 OSDUHS survey by students within the HKPR District; 585 by elementary-school students and 630 by high-school students. Males accounted for 43.4% and females accounted for 55.6% of the respondents. Surveys





were completed for students in grade 7 (n=232), grade 8 (352), and grades 9 - 12 (629)<sup>†</sup>. The median age of respondent was 14 years of age (mean: 14.0; standard deviation (SD): 1.72).

## Results

- 22.2% (95% confidence interval (CI): 16.8, 28.9) of grade 7 12 students reported smoking cannabis at least once in the previous 12-months. The estimate for HKPRDHU students is not significantly different than the rest of Ontario students (p > 0.05).
- 14.4% (95% CI: 9.8, 20.7) of grade 7 12 students reported smoking cannabis at least once in the previous 4-weeks. The estimate for HKPRDHU students is not significantly different than the rest of Ontario students (p > 0.05).
- By grade, 13.1% (95% CI: 8.6, 19.5) of students first reported using cannabis in grades 9-10 and 11.6% (95% CI: 7.1, 18.6) in grades 11-12. The estimate for students who first reported using cannabis in grades 7-8 has been suppressed\*\*. The estimates for HKPRDHU students are not significantly different than the rest of Ontario students (p > 0.05).
- Two-in-five (40.6% (95% CI: 34.8, 46.8)) grade 7 12 students report that it is "fairly easy" or "very easy" to obtain cannabis. The estimate for HKPRDHU students is not significantly different than the rest of Ontario students (p > 0.05).
- 8.86% (95% CI: 6.0, 13.0) of grade 7 12 students reported first using cannabis the previous 12-months. The estimate for HKPRDHU students is not significantly different than the rest of Ontario students (p > 0.05).
- 16.8%\* (95% CI: 11.2, 24.6) of grade 7 12 students reported consuming alcohol and cannabis on the same occasion in the previous 12-months. The estimate for HKPRDHU students is not significantly different than the rest of Ontario students (p > 0.05).
- Approximately 11% of grade 7-12 students used cannabis less than six times in the previous 12-months, while another 11% reported used cannabis on six or more occasions in the previous 12-months. These estimates for HKPRDHU students are not significantly different than the rest of Ontario students (p > 0.05).
- 7.4%\* (95% CI: 3.9, 13.4) of students reported driving a vehicle within one-hour of using cannabis. The estimate for HKPRDHU students is not significantly different from the rest of Ontario students (p > 0.05).
- The most frequent modes for using cannabis were pipe/bong, joint, and edibles. Among grade 9

   12 students who used cannabis in the previous 12-months, 27.8% (95%CI 19.6, 37.9) used it in a pipe or a bong, 23.9% (95% CI: 16.0, 34.2) used it in a joint, and 14.4% (95% CI: 10.0, 20.4) used it in food. These estimates for HKPRDHU students are not significantly different from the rest of Ontario students (p > 0.05).

<sup>&</sup>lt;sup>†</sup> Two surveys did not report the grade of the student; summing the number of students by grade will not match the total sample size.





- 37.3% (95% CI: 31.6, 43.3) of grade 7 12 students surveyed between January and June recalled having at least one class or presentation about cannabis or another drug since the start of the school year. The estimate for HKPRDHU students is significantly lower than the rest of Ontario students (p < 0.05).
- 8.9% (95% CI: 6.0, 13.0) of grade 7 12 students reported trying cannabis for the first time in the previous 12-months. The estimate for HKPRDHU students is not significantly different than the rest of Ontario students (p > 0.05).
- By grade, 13.1% (95% CI: 8.6, 19.5) of students in grades 9 10 reported consuming cannabis for the first time in the previous 12-months, compared to 11.6% (95% CI: 7.1, 18.6) of students in grades 11 12. The estimate for students in grades 7 8 has been suppressed. The estimates for HKPRDHU students are not significantly different compared to the rest of Ontario students (p < 0.05).</li>
- For grade 7 12 students who used cannabis in the previous 12 months, the most common source of cannabis was "given to me by a friend" (32.9% (95% CI: 23.9, 43.4)), followed by "shared around a group of friends" (30.1% (95% CI: 22.0, 39.7)), and "bought it from a friend" (17.3% (95% CI: 9.8, 28.9). The estimates for HKPRDHU students are not significantly different than the rest of Ontario students (p > 0.05).
- 6.8% (95% CI: 5.3, 8.8) of grade 7 12 students perceive a 'great risk' of harm associated with trying marijuana once or twice. The estimate for HKPRDHU students is significantly lower than the rest of Ontario students (p < 0.05).
- One-in-three (32.6% (95% CI: 28.3, 37.1)) grade 7 12 students perceive a 'great risk' of harm associated with using marijuana regularly. The estimate for HKPRDHU students is significantly lower than the rest of Ontario students (p < 0.05).
- 21.9% (95% CI: 17.4, 27.3) of grade 7 12 students strongly disapprove of individuals 18-years of age and older trying marijuana once or twice. The estimate for HKPRDHU students is not significantly different than the rest of Ontario students (p > 0.05).
- 38.9% (95% CI: 33.7, 44.4) of grade 7 12 students strongly disapprove of individuals 18-years and older smoking marijuana regularly. The estimate for HKPRDHU students is not significantly different than the rest of Ontario students (p > 0.05).
- Approximately 1 in 3 (36.9% (95% CI: 32.5, 41.4)) grade 7 − 12 students believe that cannabis should be legal for adults 19-years and older; about another third (32.3% (95% CI: 29.7, 35.0)) report that cannabis should not be legal; the remaining third (30.9% (95% CI: 25.5, 36.9)) report that they are unsure. The estimates for HKPRDHU students is not significantly different than the rest of Ontario students (p > 0.05),
- If cannabis use were to be made legal for adults tomorrow, 58.7% (95% CI: 52.4, 64.8%) of grade 7 12 students report that they would not use it in the next 12-months, 15.5% (95% CI: 10.7, 21.9) would use it about as often as they do now, and 15.8% (95% CI: 12.8, 19.4) are were not





sure what they would do. These estimates for HKPRDHU students are not significantly different than the rest of Ontario students (p > 0.05).

"The data used in this publication came from the Ontario Student Drug Use and Health Survey conducted by the Centre for Addiction and Mental Health and administered by the Institute for Social Research, York University. Its contents and interpretation are solely the responsibility of the author and do not necessarily represent the official view of the Centre for Addiction and Mental Health".

## **Definition of Terms**

**Estimate** – The estimate is the per cent or value observed/reported in the sample that is generalized to the broader population with similar characteristics (e.g., grade 7 - 12 students).

**95% confidence interval (95% CI)** – Confidence intervals (CIs) are the range of variability around an estimate. The 95% CI displays the range surrounding an estimate in which there is a 95% probability that the population value occurs.

**Significantly different** (p < 0.05) – When estimates are said to be significantly different (or statistically significant; p < 0.05), this indicates that the differences observed are not likely due to chance alone. Additional factors may be present (or absent) to a greater degree in one or more of the groups being compared.

**Mean** – The mean (or average) is calculated by adding the observed values together and dividing by the number of observations.

**Standard Deviation (SD)** – The standard deviation (SD) indicates how much the observed values vary from the mean. A lower SD indicates that more of the observed values are closer to the mean (higher precision), whereas a higher SD would indicate that the observed values are spread out more widely around the mean (lower precision).

**Coefficient of Variation (CV)** – The coefficient of variation is the ratio of the standard deviation to the estimate, displayed as a percentage. The CV indicates the size of the standard deviation compared to the estimate. As the variability around an estimate increases so too does the CV. For example, a CV of 33% indicates that the SD is 33% or one-third the size of the estimate.

**Sample-size** – The sample-size is the number of responses or individuals observed. As the size of a sample increases the SD decreases, and the ability to detect differences (power) increases.

\* – A single asterisk (\*) indicates that the reported estimate has a higher degree of variability and should be interpreted with caution. When a single asterisk (\*) is used, the CV for the estimate is within the range of 16.6% - 33.3%.





\*\* – A double asterisk (\*\*) indicates that an estimate has been suppressed. Data are suppressed when the CV or an estimate is equal to or greater than 33.3%. Additionally, values have been suppressed when the reported sample-size (the number of people responding to a question) is less than 30.

## References

- 1) Government of Canada. About cannabis [Internet]. 2017 [updated 2017 Jun 19; cited 2018 Jan 18]. Available from: <a href="https://www.canada.ca/en/health-canada/services/substance-abuse/controlled-illegal-drugs/about-marijuana.html">https://www.canada.ca/en/health-canada/services/substance-abuse/controlled-illegal-drugs/about-marijuana.html</a>
- 2) Health Canada. Canadian Alcohol and Drug Use Monitoring Survey (CADUMS) 2015 [Internet]. 2015 [updated 2017 Jun 27; cited 2018 Jan 05] Available from: <a href="https://www.canada.ca/en/health-canada/services/canadian-tobacco-alcohol-drugs-survey/2015-summary.html">https://www.canada.ca/en/health-canada/services/canadian-tobacco-alcohol-drugs-survey/2015-summary.html</a>
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- 4) Government of Ontario. Cannabis legalization [Internet]. 2018 [updated 2018 Jan 12; cited 2018 Jan 18]. Available from: <a href="https://www.ontario.ca/page/cannabis-legalization">https://www.ontario.ca/page/cannabis-legalization</a>
- 5) Government of Canada. Health effects of cannabis [Internet]. 2017 [updated 2017 Jun 19; cited 2018 Jan 18]. Available from: <a href="https://www.canada.ca/en/health-canada/services/substance-abuse/controlled-illegal-drugs/health-risks-of-marijuana-use.html">https://www.canada.ca/en/health-canada/services/substance-abuse/controlled-illegal-drugs/health-risks-of-marijuana-use.html</a>