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

Tobacco is a drug[†] that can be legally purchased by persons who have reached the age of 19-years (in Ontario). Second to alcohol, tobacco was one of the most commonly used drugs in Canada, 2015, with an estimated 15% of respondents 15 years of age or older indicating they had used a tobacco product in the past 30-days.¹ Among grade 7 – 12 students in Ontario, during the 2016/2017 school year, 7% reported smoking tobacco cigarettes in the previous 12-months.²

Despite the successes of tobacco prevention and control efforts, which have resulted in an estimated 20% decline in the per cent of student (grade 7 – 12) smokers since 1999², new tobacco products and alternatives—believed to be targeted at younger age-groups³— have emerged. These emerging products and trends, including candy and other flavoured tobacco products⁴, electronic cigarettes, vaporizers⁵, and Hookahs⁶ and Hookah Lounges, are a concern to public health.

Smoking tobacco is associated with diseases and conditions, including heart disease, stroke, and cancer, and negatively impacts the health of individuals of all ages, including adolescents.⁷ Tobacco contains nicotine, which is similarly addictive as heroin and cocaine.⁸ While electronic smoking products containing nicotine are not approved for sale in Canada⁹, approximately half of users reported that the last e-cigarette they used contained nicotine.¹⁰ As potential health risks of electronic cigarette use continue to be evaluated, Health Canada has advised against their use.¹¹

The purpose of this *inFORM* is to highlight findings on tobacco 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.³ 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.¹ 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 1,215 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

[†] A “substance other than food intended to affect the structure or function of the body.”¹¹

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were completed for students in grade 7 (n=232), grade 8 (352), and grades 9 – 12 (629)[‡]. The median age of respondent was 14 years of age (mean: 14.0; standard deviation (SD): 1.72).

Results

- 12.3% (95% confidence interval (CI): 8.4, 17.6) of grade 7 – 12 students reported smoking at least one whole cigarette in the previous 12-months. The estimate for HKPRDHU students is significantly higher than the rest of Ontario students ($p < 0.05$).
- Among grade 7 – 12 students, the per cent of daily smokers is in the HKPRDHU is 6.5%* (95% CI: 3.7, 11.3), which is significantly higher than Ontario; however, this estimate has a high degree of variability.
- One-quarter (25.4% (95% CI: 21.1, 30.2)) of grade 7 – 12 students reported ever trying a cigarette. The estimate for HKPRDHU students is significantly higher than for the rest of Ontario.
- 10.6% (95% CI: 6.0, 18.1) of grade 7 – 12 students reported using smokeless tobacco in the previous 12-months. The estimate for HKPRDHU students is not significantly different than the rest of Ontario students ($p > 0.05$).
- 5.5% (95% CI: 3.0, 10.0) of HKPR District grade 7 – 12 students reported using a water-pipe in the previous 12-months. The estimate for HKPRDHU students is not significantly different than the rest of Ontario students ($p > 0.05$).
- 13.2% (95% CI: 9.6, 17.8) of grade 7 – 12 students reported using an electronic cigarette for more than just a few puffs in the previous 12-months. The estimate for HKPRDHU students is not significantly different than the rest of Ontario students ($p > 0.05$).
- More than 1-in-10 (12.0% (95% CI: 8.8, 16.1)) grade 7 – 12 students reported using an electronic cigarette for the first time in the previous 12-months. The estimate for HKPRDHU students is not significantly different than the rest of Ontario students ($p > 0.05$).
- Almost 1-in-5 students (18.0% (95% CI: 15.1, 21.5)) report that they perceived a great risk of harm with smoking one or two cigarettes daily. The estimate for HKPRDHU students is significantly lower than the rest of Ontario students ($p < 0.05$).
- 6.5% (95% CI: 4.5, 9.3) of grade 7 – 12 students report that they perceived a ‘great risk’ of harm with regularly using electronic cigarettes. The estimate for HKPRDHU students is significantly lower than the rest of Ontario students ($p < 0.05$).
- More than 1-in-10 (11.6% (95% CI: 8.4, 15.8)) grade 7 – 12 students report that they perceive a great risk of harm with regularly using waterpipes. The estimate for HKPRDHU students is not significantly different than the rest of Ontario students ($p > 0.05$).
- Half of grade 7 – 12 students (50.9% (95% CI: 43.0, 58.8)) reported that it is ‘fairly easy’ or ‘very easy’ to obtain cigarettes. The estimate for HKPRDHU students is not significantly different than the rest of Ontario students ($p > 0.05$).

[‡] Two surveys did not report the grade of the student; summing the number of students by grade will not match the total sample size.

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- Approximately half (52.6% (95% CI: 35.2, 69.4)) of smokers under 19-years of age get their cigarettes from a friend or family member. The estimate for HKPRDHU students is not significantly different than the rest of Ontario students ($p > 0.05$).
- Almost half (46.0% (95% CI: 34.4, 58.1)) of grade 7 – 12 students under 19-years of age who had smoked an electronic cigarette in the previous 12-months obtained it from a friend or borrowed one. The estimate for HKPRDHU students is 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”.

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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.

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