



April 2014

Waterpipe Use in Ontario

As waterpipe (hookah) use has increased around the world, particularly among young people, it has become a growing public health concern. The smoke inhaled through waterpipe contains many of the same toxic constituents found in cigarette smoke, posing potential health risks to users and those who are exposed to secondhand smoke.^{1,2}

Key Finding: 30% of Ontario's young adults aged 20-24 have smoked waterpipe tobacco

This update examines the latest population survey data about the prevalence of waterpipe use in Ontario, patterns of use, the relationship of waterpipe smoking to use of other tobacco products, beliefs about potential harms, and attitudes about regulation.

Waterpipe Use among Youth

2013 Ontario Student Drug Use and Health Survey

- According to the 2013 Ontario Student Drug Use and Health Survey (students in grades 7-12), the prevalence of ever use of hookah was 11.2% (95% CI: 9.5, 13.1) with 9.7% (95% CI: 8.2, 11.5) of students reporting hookah use within the past year (see Table 1 and 2).
- 4.3% (95% CI: 3.3, 5.5) of students reported using hookah at least 6 times in the past 12 months. There were significant differences in past year use by sex and grade.
- For daily smokers 43.3% used hookah in the past year compared to 42.8% of occasional smokers and 6.3% of nonsmokers. Cigarette users, marijuana users, and alcohol users were more likely to have used hookah.
- Use of hookah was lowest in the Erie St Clair and South West LHIN and the Waterloo Wellington LHIN with 7.5% past year use. Use was highest in the Hamilton LHIN with 15.3% past year use.
- Among all students including both waterpipe users and nonusers, only 18.2% (95% CI: 16.7, 19.9) thought there was a "great risk" of using hookah regularly compared to 30% of students who perceived great risk from using 1 to 2 cigarettes daily.

2010 Youth Smoking Survey

- Using the Youth Smoking Survey data, the estimate of ever use in 2010 in Ontario youth grades 7-12 was 6.2% (95% CI: 5.3, 7.2) compared to 5.7% (95% CI: 4, 7.5) in 2006 (see Table 3 and 4). This is lower than the national average of 7.3% (95% CI: 6.4, 8.3) in 2010.
- The prevalence of hookah use increased 6% using among all Canadian students.³ Boys and students in older grades were more likely to have ever used hookah.
- Over forty per cent of current cigarette smokers had tried hookah (40.7%; 95% CI: 29.6, 51.9). Cigarette smokers, marijuana users, occasional and frequent alcohol drinkers and binge drinkers were more likely to have used hookah.
- Nondrinkers and nonmarijuana users were less likely to have used hookah compared to nonsmokers. There was no reportable difference by ethnicity. Marijuana users and males were more likely to use hookah.

Waterpipe Use among Young Adults

- The Canadian Tobacco Use Monitoring Survey captures young adult use. In 2012 in Ontario, 29.7% (95% CI: 23.3, 36.1) of young adults 20-24 had reported using waterpipe, compared to 12.9 (95% CI: 12.9, 9.5) of youth 15-19 years old.
- Young adult ever use but not youth ever use was significantly higher in 2012 than in 2011. There was no statistical difference in use by education or occupation for the Ontario data.
- While the Ontario data was not reportable, 82.9% of Canadian waterpipe users who reported use in the past 30 days said that they smoked flavoured tobacco in the waterpipe (see Table 5 for additional data).

Public Opinion about Waterpipe Use

- The CAMH Monitor, 2012 (n=3030) asks adults older than 18 about public support for waterpipe regulations. Of those who expressed an opinion, 23% supported allowing waterpipe smoking indoors and outdoors while over three quarter (77%) supported additional regulations.
- Banning use on patios and indoors was supported by 41%, while banning indoor use only was supported by an additional 36%.

| Categories | Weighted Population Estimates | Weighted Estimates (%) | Lower 95% Cl | Upper 95% Cl | Coefficient of Variation | Reportability ^b |
|----------------------|-------------------------------------|------------------------------|-----------------|-----------------|-----------------------------|----------------------------|
| Grade 7-12, All sex | 88,400 | 9.7 | 8.2 | 11.5 | 8.7 | Reportable |
| Grade 7-12, Female | 34,800 | 7.9 | 6.4 | 9.6 | 10.0 | Reportable |
| Grade 7-12, Male | 53,500 | 11.5 | 9.1 | 14.4 | 11.6 | Reportable |
| Grade 7-9, All sex | 9,100 | 2.4 | 1.7 | 3.5 | 17.9 | Reportable |
| Grade 7-9, Female | 3,700 | 2.0 | 1.2 | 3.3 | 26.1 | Reportable |
| Grade 7-9, Male | 5,300 | 2.9 | 1.8 | 4.6 | 23.5 | Reportable |
| Grade 10-12, All sex | 79,300 | 14.7 | 12.5 | 17.4 | 8.4 | Reportable |
| Grade 10-12, Female | 31,100 | 12.1 | 9.8 | 14.7 | 10.2 | Reportable |
| Grade 10-12, Male | 48,100 | 17.2 | 13.9 | 21.2 | 10.8 | Reportable |
| Grade 7-8, All sex | 2,800 | 1.3 | 0.7 | 2.4 | 32.8 | Reportable |
| Grade 7-8, Female | | | | | | Data not reportable |
| Grade 7-8, Male | 2,100 | 2.0 | 1.0 | 3.7 | 31.9 | Reportable |
| Grade 9, All sex | 6,200 | 4.3 | 2.9 | 6.3 | 19.8 | Reportable |
| Grade 9, Female | 3,000 | 4.4 | 2.6 | 7.4 | 26.9 | Reportable |
| Grade 9, Male | 3,200 | 4.2 | 2.2 | 7.9 | 32.2 | Reportable |
| Grade 10, All sex | 12,900 | 8.5 | 5.8 | 12.3 | 18.9 | Reportable |
| Grade 10, Female | 6,500 | 8.8 | 4.8 | 15.6 | 29.8 | Reportable |
| Grade 10, Male | 6,400 | 8.2 | 4.9 | 13.3 | 25.3 | Reportable |
| Grade 11, All sex | 24,800 | 15.1 | 11.4 | 19.7 | 13.9 | Reportable |
| Grade 11, Female | 8,400 | 10.6 | 7.1 | 15.5 | 19.7 | Reportable |
| Grade 11, Male | 16,300 | 19.2 | 12.7 | 27.9 | 20.0 | Reportable |
| Grade 12, All sex | 41,500 | 18.8 | 14.6 | 23.9 | 12.6 | Reportable |
| Grade 12, Female | 16,200 | 15.4 | 11.1 | 21.0 | 16.2 | Reportable |
| Grade 12, Male | 25,300 | 21.8 | 16.0 | 29.0 | 15.1 | Reportable |

Table 1: Percentage of Students Reporting Waterpipe Use in the Last 12 Months, Ontario^a

| Ethnic: White (Grade 7-12) | 52,400 | 9.9 | 8.0 | 12.2 | 10.8 | Reportable |
|---|--------|------|------|------|------|---------------------|
| Ethnic: Black and Latin/Central/South American (Grade 7-12) | 7,300 | 7.4 | 4.6 | 11.7 | 23.6 | Reportable |
| Ethnic: Asian (Grade 7-12) | 23,300 | 10.0 | 7.6 | 13.1 | 13.9 | Reportable |
| Ethnic: Aboriginal (Grade 7-12) | | | | | | Data not reportable |
| Cigarette use in last 12 months: Non-smoker (Grade 7-12) | 52,100 | 6.3 | 5.0 | 7.9 | 11.4 | Reportable |
| Cigarette use in last 12 months: Occasional smoker (Grade 7-12) | 20,900 | 42.8 | 32.7 | 53.4 | 12.4 | Reportable |
| Cigarette use in last 12 months: daily smoker (Grade 7-12) | 12,800 | 43.3 | 31.7 | 55.6 | 14.2 | Reportable |
| Cannabis use in last 12 months: non-users (Grade 7-12) | 14,300 | 2.0 | 1.4 | 3.0 | 20.0 | Reportable |
| Cannabis use in last 12 months: 1-5 times (Grade 7-12) | 15,300 | 17.0 | 11.5 | 24.6 | 19.4 | Reportable |
| Cannabis use in last 12 months: 6-19 times (Grade 7-12) | 18,200 | 39.7 | 30.8 | 49.4 | 12.0 | Reportable |
| Cannabis use in last 12 months: 20 times or more (Grade 7-12) | 40,000 | 56.3 | 47.3 | 65.0 | 8.1 | Reportable |
| Binge Drinking in last 4 weeks: Non-binge drinker (Grade 7-12) | 39,000 | 5.3 | 4.1 | 7.0 | 13.8 | Reportable |
| Binge Drinking in last 4 weeks: 1-3 times (Grade 7-12) | 35,300 | 24.7 | 20.3 | 29.8 | 9.7 | Reportable |
| Binge Drinking in last 4 weeks: 4 + times (Grade 7-12) | 13,500 | 45.5 | 27.2 | 65.1 | 22.2 | Reportable |
| LHIN: Erie St Clair & South West (Grade 9-12) | 4,000 | 7.5 | 4.5 | 12.4 | 25.8 | Reportable |
| LHIN: Waterloo Wellington (Grade 9-12) | 5,100 | 7.5 | 4.1 | 13.3 | 29.6 | Reportable |
| LHIN: Hamilton Niag-Hald-Brant (Grade 9-12) | 12,400 | 15.3 | 9.0 | 24.8 | 25.6 | Reportable |
| LHIN: Central West (Grade 9-12) | 8,500 | 14.2 | 8.6 | 22.6 | 24.6 | Reportable |
| LHIN: Mississauga Halton (Grade 9-12) | 7,000 | 14.3 | 11.1 | 18.2 | 12.6 | Reportable |
| LHIN: Toronto Central & Central (Grade 9-12) | 20,100 | 14.8 | 9.6 | 22.0 | 21.0 | Reportable |
| LHIN: Central East & North Simcoe Muskoka (Grade 9-12) | 15,300 | 12.1 | 9.1 | 16.0 | 14.3 | Reportable |
| LHIN: South East (Grade 9-12) | 800 | 11.1 | 6.5 | 18.2 | 26.0 | Reportable |
| LHIN: Champlain (Grade 9-12) | 8,300 | 12.2 | 8.4 | 17.6 | 18.7 | Reportable |
| LHIN: North East & North West (Grade 9-12) | 3,700 | 11.6 | 6.4 | 20.2 | 29.2 | Reportable |

Source: Ontario Student Drug Use and Health Survey (OSDUHS) 2013

^a OSDUHS collected date among grade 7-12 students in Ontario between November 2012 and June 2013. Total survey sample size is 10,272 students. Waterpipe use was asked in half of the sample N=4794

^b Marginal estimates should be interpreted with caution: subject to moderate sampling variability

| Categories | Weighted Population Estimates | Weighted Estimates (%) | Lower 95% Cl | Upper 95% Cl | Coefficient of Variation | Reportability ^b |
|----------------------|-------------------------------------|------------------------------|-----------------|-----------------|-----------------------------|----------------------------|
| Grade 7-12, All sex | 101,600 | 11.2 | 9.5 | 13.1 | 8.1 | Reportable |
| Grade 7-12, Female | 40,600 | 9.1 | 7.5 | 11.2 | 10.2 | Reportable |
| Grade 7-12, Male | 61,000 | 13.1 | 10.6 | 16.0 | 10.5 | Reportable |
| Grade 7-9, All sex | 10,700 | 2.9 | 2.1 | 4.0 | 17.1 | Reportable |
| Grade 7-9, Female | 4,700 | 2.6 | 1.6 | 4.1 | 24.1 | Reportable |
| Grade 7-9, Male | 5,900 | 3.2 | 2.1 | 4.9 | 22.0 | Reportable |
| Grade 10-12, All sex | 90,800 | 16.9 | 14.4 | 19.6 | 7.8 | Reportable |
| Grade 10-12, Female | 35,800 | 13.9 | 11.3 | 17.0 | 10.4 | Reportable |
| Grade 10-12, Male | 55,000 | 19.7 | 16.1 | 23.7 | 9.8 | Reportable |
| Grade 7-8, All sex | 3,500 | 1.6 | 0.9 | 2.8 | 29.9 | Reportable |
| Grade 7-8, Female | | | | | | Data not reportable |
| Grade 7-8, Male | 2,500 | 2.3 | 1.3 | 4.2 | 30.0 | Reportable |
| Grade 9, All sex | 7,200 | 5.0 | 3.4 | 7.2 | 18.9 | Reportable |
| Grade 9, Female | 3,800 | 5.5 | 3.4 | 8.8 | 24.2 | Reportable |
| Grade 9, Male | 3,400 | 4.5 | 2.4 | 8.1 | 30.8 | Reportable |
| Grade 10, All sex | 16,300 | 10.7 | 7.6 | 14.9 | 17.2 | Reportable |
| Grade 10, Female | 7,900 | 10.7 | 6.5 | 17.3 | 24.8 | Reportable |
| Grade 10, Male | 8,300 | 10.7 | 6.5 | 17.1 | 24.7 | Reportable |
| Grade 11, All sex | 27,300 | 16.6 | 12.8 | 21.2 | 12.8 | Reportable |
| Grade 11, Female | 8,900 | 11.2 | 7.6 | 16.3 | 19.5 | Reportable |
| Grade 11, Male | 18,300 | 21.5 | 14.9 | 30.0 | 17.7 | Reportable |
| Grade 12, All sex | 47,200 | 21.4 | 16.9 | 26.6 | 11.5 | Reportable |
| Grade 12, Female | 18,900 | 18.1 | 13.3 | 24.1 | 15.1 | Reportable |
| Grade 12, Male | 28,200 | 24.3 | 18.2 | 31.7 | 14.1 | Reportable |

Table 2: Percentage of Students Reporting Ever Use of Waterpipe, Ontario^a

| Ethnic: White (Grade 7-12) | 59,900 | 11.4 | 9.3 | 13.8 | 10.1 | Reportable |
|---|--------|------|------|------|------|---------------------|
| Ethnic: Black and Latin/Central/South American (Grade 7-12) | 8,000 | 8.2 | 5.3 | 12.4 | 21.5 | Reportable |
| Ethnic: Asian (Grade 7-12) | 27,000 | 11.6 | 8.9 | 14.9 | 13.1 | Reportable |
| Ethnic: Aboriginal (Grade 7-12) | | | | | | Data not reportable |
| Cigarette use in last 12 months: Non-smoker (Grade 7-12) | 60,800 | 7.3 | 6.0 | 9.0 | 10.2 | Reportable |
| Cigarette use in last 12 months: Occasional smoker (Grade 7-12) | 22,900 | 46.9 | 36.9 | 57.2 | 11.1 | Reportable |
| Cigarette use in last 12 months: daily smoker (Grade 7-12) | 15,300 | 51.5 | 36.9 | 65.8 | 14.6 | Reportable |
| Cannabis use in last 12 months: non-users (Grade 7-12) | 19,800 | 2.8 | 2.1 | 3.8 | 15.7 | Reportable |
| Cannabis use in last 12 months: 1-5 times (Grade 7-12) | 17,600 | 19.6 | 13.9 | 27.0 | 16.9 | Reportable |
| Cannabis use in last 12 months: 6-19 times (Grade 7-12) | 19,400 | 42.3 | 32.9 | 52.3 | 11.7 | Reportable |
| Cannabis use in last 12 months: 20 times or more (Grade 7-12) | 43,600 | 61.5 | 52.0 | 70.2 | 7.6 | Reportable |
| Binge Drinking in last 4 weeks: Non-binge drinker (Grade 7-12) | 45,700 | 6.3 | 4.9 | 8.0 | 12.5 | Reportable |
| Binge Drinking in last 4 weeks: 1-3 times (Grade 7-12) | 41,500 | 29.0 | 24.4 | 34.2 | 8.6 | Reportable |
| Binge Drinking in last 4 weeks: 4 + times (Grade 7-12) | 13,800 | 46.5 | 27.2 | 66.9 | 22.9 | Reportable |
| LHIN: Erie St Clair & South West (Grade 9-12) | 4,900 | 9.3 | 6.2 | 13.5 | 19.5 | Reportable |
| LHIN: Waterloo Wellington (Grade 9-12) | 5,100 | 7.5 | 4.1 | 13.3 | 29.6 | Reportable |
| LHIN: Hamilton Niag-Hald-Brant (Grade 9-12) | 15,200 | 18.9 | 12.0 | 28.5 | 22.0 | Reportable |
| LHIN: Central West (Grade 9-12) | 10,100 | 16.9 | 11.8 | 23.5 | 17.4 | Reportable |
| LHIN: Mississauga Halton (Grade 9-12) | 8,400 | 17.2 | 14.5 | 20.4 | 8.6 | Reportable |
| LHIN: Toronto Central & Central (Grade 9-12) | 21,400 | 15.7 | 10.5 | 22.9 | 19.8 | Reportable |
| LHIN: Central East & North Simcoe Muskoka (Grade 9-12) | 17,300 | 13.6 | 10.0 | 18.2 | 15.1 | Reportable |
| LHIN: South East (Grade 9-12) | 900 | 12.6 | 6.8 | 22.2 | 30.0 | Reportable |
| LHIN: Champlain (Grade 9-12) | 10,200 | 15.0 | 11.3 | 19.8 | 14.1 | Reportable |
| LHIN: North East & North West (Grade 9-12) | 4,100 | 12.7 | 7.5 | 20.8 | 25.9 | Reportable |

Source: Ontario Student Drug Use and Health Survey (OSDUHS) 2013

^a OSDUHS collected date among grade 7-12 students in Ontario between November 2012 and June 2013. Total survey sample size is 10,272 students. Waterpipe was asked in half of the sample: N=4794

^b Marginal estimates should be interpreted with caution: subject to moderate sampling variability

| Categories | Weighted Population Estimates | Weighted Estimates (%) | Lower 95% Cl ^ь | Upper 95% Cl ^b | Coefficient of Variation ^b | Reportability ^c |
|---|-------------------------------------|------------------------------|------------------------------|------------------------------|--|----------------------------|
| Grade 7-12, all sex | 63,400 | 6.2 | 5.3 | 7.2 | 7.56 | Reportable |
| Grade 7-12, girls | 24,300 | 4.9 | 3.6 | 6.3 | 13.6 | Reportable |
| Grade 7-12, boys | 39,100 | 7.5 | 6.4 | 8.5 | 7.05 | Reportable |
| Grade 7-9, all sex | 7,800 | 1.7 | 1.2 | 2.2 | 15.06 | Reportable |
| Grade 7-9, girls | 2,900 | 1.2 | 0.7 | 1.8 | 21.41 | Marginal |
| Grade 7-9, boys | 5,000 | 2.1 | 1.3 | 2.8 | 18.17 | Marginal |
| Grade 10-12, all sex | 55,600 | 10.2 | 8.5 | 11.9 | 8.49 | Reportable |
| Grade 10-12, girls | 21,400 | 8.2 | 5.7 | 10.6 | 15.24 | Reportable |
| Grade 10-12, boys | 34,100 | 12 | 10.3 | 13.8 | 7.46 | Reportable |
| Cigarette: Current smoker (Grade 7-12) ^d | 20,600 | 40.7 | 29.6 | 51.9 | 13.96 | Reportable |
| Cigarette: Non-current smoker (Grade 7-12) | 42,800 | 4.4 | 3.7 | 5.2 | 8.96 | Reportable |
| Ethnicity: White (Grade 7-12) | 36,600 | 6.3 | 5.3 | 7.2 | 7.6 | Reportable |
| Ethnicity: Black, Latin, other (Grade 7-12) | 16,100 | 8.1 | 5.1 | 11.1 | 19.02 | Marginal |
| Ethnicity: Asia (Grade 7-12) | | | | | | Data not reportable |
| Ethnicity: Aboriginal (Grade 7-12) | | | | | | Data not reportable |
| Marijuana last 12 months: Non-user (Grade 7-12) ^e | 14,900 | 1.9 | 1 | 2.7 | 22.48 | Marginal |
| Marijuana last 12 months: Occasional user (Grade 7-12) ^e | 16,300 | 16.2 | 13.7 | 18.8 | 8.05 | Reportable |
| Marijuana last 12 months: Frequent user (Grade 7-12) ^e | 29,300 | 40.1 | 32.8 | 47.5 | 9.31 | Reportable |
| Binge drinking last 12 months: Non-drinker (Grade 7-12) ^f | 13,300 | 1.9 | 1.1 | 2.8 | 22.92 | Marginal |
| Binge drinking last 12 months: Occasional drinker (Grade 7-12) ^f | 33,500 | 15.9 | 12.9 | 19 | 9.84 | Reportable |
| Binge drinking last 12 months: Frequent drinker (Grade 7-12) ^f | 13,000 | 34 | 29.5 | 38.6 | 6.85 | Reportable |

Table 3: Ever Waterpipe Use by Grade, Sex, Cigarette Smoking Status, Ethnicity, Marijuana Use Status and Binge Drinking Status, 2010/11ª

Source: Youth Smoking Survey (YSS) 2010/11. Public User Microdata file

^a YSS 2010/11 asked about waterpipe use in Grade 6-12 but there were only a few users among grade 6 students. Our analyses cover grades 7-12

^b 95% confidence interval and coefficient of variation are from bootstrap methods

^c Marginal estimates should be interpreted with caution: subject to moderate sampling variability

^d Current cigarette smokers are those who had smoked 100 cigarettes in their lifetime and had smoked in the previous 30 days; Non-current cigarette smokers include former smokers who had smoked 100 cigarettes in their lifetime but had not smoked in the previous 30 days and nonsmokers who had smoked fewer than 100 cigarettes in their lifetime ^e Marijuana use in the past 12 months was assessed by asking respondents, "In the last 12 months, how often did you use marijuana or cannabis? (a joint, pot, weed, hash . . .)". Those who reported never or not in the last 12 months were considered nonusers, those who reported using marijuana in the last year but not weekly were categorized as occasional users, and those who reported using marijuana weekly were considered frequent users

^f Binge drinking in the past 12 months was assessed by asking respondents, "In the last 12 months, how often did you have 5 drinks of alcohol or more on 1 occasion?" Those who reported never or not in the last 12 months were nonusers, those who reported binge drinking in the last year but not weekly were categorized as occasional drinkers, and those who reported binge drinking weekly were considered frequent drinkers

| Categories | Weighted Population Estimates | Weighted Estimates (%) | Lower 95% Cl ^ь | Upper 95% Cl ^ь | Coefficient of Variation ^b | Reportability ^c |
|---|-------------------------------------|------------------------------|------------------------------|------------------------------|--|----------------------------|
| Grade 7-12, all sex | 63,400 | 6.2 | 5.3 | 7.2 | 7.56 | Reportable |
| Grade 7-12, girls | 24,300 | 4.9 | 3.6 | 6.3 | 13.6 | Reportable |
| Grade 7-12, boys | 39,100 | 7.5 | 6.4 | 8.5 | 7.05 | Reportable |
| Grade 7-9, all sex | 7,800 | 1.7 | 1.2 | 2.2 | 15.06 | Reportable |
| Grade 7-9, girls | 2,900 | 1.2 | 0.7 | 1.8 | 21.41 | Marginal |
| Grade 7-9, boys | 5,000 | 2.1 | 1.3 | 2.8 | 18.17 | Marginal |
| Grade 10-12, all sex | 55,600 | 10.2 | 8.5 | 11.9 | 8.49 | Reportable |
| Grade 10-12, girls | 21,400 | 8.2 | 5.7 | 10.6 | 15.24 | Reportable |
| Grade 10-12, boys | 34,100 | 12 | 10.3 | 13.8 | 7.46 | Reportable |
| Cigarette: Current smoker (Grade 7-12) ^d | 20,600 | 40.7 | 29.6 | 51.9 | 13.96 | Reportable |
| Cigarette: Non-current smoker (Grade 7-12) | 42,800 | 4.4 | 3.7 | 5.2 | 8.96 | Reportable |
| Ethnicity: White (Grade 7-12) | 36,600 | 6.3 | 5.3 | 7.2 | 7.6 | Reportable |
| Ethnicity: Black, Latin, other (Grade 7-12) | 16,100 | 8.1 | 5.1 | 11.1 | 19.02 | Marginal |
| Ethnicity: Asia (Grade 7-12) | | | | | | Data not reportable |
| Ethnicity: Aboriginal (Grade 7-12) | | | | | | Data not reportable |
| Marijuana last 12 months: Non-user (Grade 7-12) ^e | 14,900 | 1.9 | 1 | 2.7 | 22.48 | Marginal |
| Marijuana last 12 months: Occasional user (Grade 7-12) ^e | 16,300 | 16.2 | 13.7 | 18.8 | 8.05 | Reportable |
| Marijuana last 12 months: Frequent user (Grade 7-12) ^e | 29,300 | 40.1 | 32.8 | 47.5 | 9.31 | Reportable |
| Binge drinking last 12 months: Non-drinker (Grade 7-12) ^f | 13,300 | 1.9 | 1.1 | 2.8 | 22.92 | Marginal |
| Binge drinking last 12 months: Occasional drinker (Grade 7-12) ^f | 33,500 | 15.9 | 12.9 | 19 | 9.84 | Reportable |
| Binge drinking last 12 months: Frequent drinker (Grade 7-12) ^f | 13,000 | 34 | 29.5 | 38.6 | 6.85 | Reportable |

Table 4: Past 30-day Waterpipe Use by Grade, Sex, Cigarette Smoking Status, Ethnicity, Marijuana Use Status and Binge Drinking Status, 2010/11ª

Source: Youth Smoking Survey (YSS) 2010/11. Public User Microdata file

^a YSS 2010/11 asked about waterpipe use in Grade 6-12 but there were only a few users among grade 6 students. Our analyses cover grades 7-12

^b 95% confidence interval and coefficient of variation are from bootstrap methods

^c Marginal estimates should be interpreted with caution: subject to moderate sampling variability

^d Current cigarette smokers are those who had smoked 100 cigarettes in their lifetime and had smoked in the previous 30 days; Non-current cigarette smokers include former smokers who had smoked 100 cigarettes in their lifetime but had not smoked in the previous 30 days and nonsmokers who had smoked fewer than 100 cigarettes in their lifetime ^e Marijuana use in the past 12 months was assessed by asking respondents, "In the last 12 months, how often did you use marijuana or cannabis? (a joint, pot, weed, hash . . .)". Those who reported never or not in the last 12 months were considered nonusers, those who reported using marijuana in the last year but not weekly were categorized as occasional users, and those who reported using marijuana weekly were considered frequent users

^f Binge drinking in the past 12 months was assessed by asking respondents, "In the last 12 months, how often did you have 5 drinks of alcohol or more on 1 occasion?" Those who reported never or not in the last 12 months were nonusers, those who reported binge drinking in the last year but not weekly were categorized as occasional drinkers, and those who reported binge drinking weekly were considered frequent drinkers

Table 5: Waterpipe Use by Age, Sex, Education, Occupation, Marital Status, Cigarette Smoking Status, Marijuana Use Status, and Student's Weekly Spending, for Ontario, 2012^a

| Categories | Weighted Population Estimates | Weighted Estimates (%) | Lower 95% Cl ^b | Upper 95% Cl ^b | Coefficient of Variation ^c | Reportability |
|--|-------------------------------------|------------------------------|------------------------------|------------------------------|--|---------------------|
| Age 15+, all sex | 1,093,800 | 9.8 | 8 | 11.7 | 9.74 | Reportable |
| Age 15+, female | 365,800 | 6.5 | 4.3 | 8.6 | 16.75 | Marginal |
| Age 15+, male | 728,000 | 13.4 | 10.2 | 16.5 | 11.97 | Reportable |
| Age 18+, all sex | 1,059,700 | 10 | 8 | 11.9 | 9.96 | Reportable |
| Age 18+, female | 345,800 | 6.4 | 4.2 | 8.5 | 17.37 | Marginal |
| Age 18+, male | 713,900 | 13.8 | 10.5 | 17.1 | 12.15 | Reportable |
| Age 19+, all sex | 1,015,000 | 9.7 | 7.8 | 11.7 | 10.26 | Reportable |
| Age 19+, female | 323,700 | 6.1 | 3.9 | 8.3 | 18.34 | Marginal |
| Age 19+, male | 691,300 | 13.6 | 10.2 | 16.9 | 12.54 | Reportable |
| Age 15-24, all sex | 389,900 | 21.8 | 18 | 25.6 | 8.92 | Reportable |
| Age 15-24, female | 186,100 | 21.2 | 14.9 | 27.5 | 15.11 | Reportable |
| Age 15-24, male | 203,800 | 22.3 | 17.7 | 26.9 | 10.57 | Reportable |
| Age 15-19, all sex | 109,300 | 12.9 | 9.5 | 16.3 | 13.31 | Reportable |
| Age 15-19, female | | | | | | Data not reportable |
| Age 15-19, male | 59,600 | 13.7 | 9.1 | 18.4 | 17.38 | Marginal |
| Age 20-24, all sex | 280,600 | 29.7 | 23.3 | 36.1 | 10.96 | Reportable |
| Age 20-24, female | 136,400 | 29.4 | 18.5 | 40.2 | 18.87 | Marginal |
| Age 20-24, male | 144,200 | 30 | 22.8 | 37.3 | 12.32 | Reportable |
| Education: Less than secondary (Age 15+) ^d | | | | | | Data not reportable |
| Education: Completed secondary (Age 15+) ^d | 459,100 | 12.6 | 8.8 | 16.5 | 15.51 | Reportable |
| Education: Completed community, technical college, CEGEP or nurse's college (Age 15+) ^d | | | | | | Data not reportable |
| Education: Completed University or teacher's college (Age 15+) ^d | 406,800 | 11.3 | 7.6 | 15 | 16.71 | Marginal |
| Occupation: White collars (Age 15+) ^e | 450,400 | 10.6 | 7.4 | 13.8 | 15.59 | Reportable |

| Occupation: Sales and Services (Age 15+) ^e | 244,900 | 13.3 | 8.7 | 17.8 | 17.44 | Marginal |
|---|---------|------|------|------|-------|---------------------|
| Occupation: Blue collars (Age 15+) ^e | 188,400 | 14.6 | 6 | 23.2 | 30.06 | Marginal |
| Marital: Common-law/Married (Age 15+) ^f | 447,100 | 6.5 | 4.3 | 8.7 | 17.22 | Marginal |
| Marital: Widowed/Divorced/Separated (Age 15+) ^f | | | | | | Data not reportable |
| Marital: Single, never married (Age 15+) ^f | 633,500 | 21 | 16 | 26 | 12.05 | Reportable |
| Cigarette: Current smoker (Age 15+) ^g | 320,000 | 18.7 | 11.7 | 25.7 | 19.07 | Marginal |
| Cigarette: Former smoker (Age 15+) ^g | 244,800 | 8.3 | 4.5 | 12.1 | 23.14 | Marginal |
| Cigarette: Never smoker (Age 15+) ^g | 529,000 | 8.2 | 6.1 | 10.3 | 13.01 | Reportable |
| Ever tried Marijuana, cannabis or hashish:Yes (Age 15+) ^h | 786,100 | 19.9 | 15.4 | 24.5 | 11.55 | Reportable |
| Ever tried Marijuana, cannabis or hashish:No (Age 15+) ^h | 295,700 | 4.3 | 2.5 | 6.1 | 21.36 | Marginal |
| Use Marijuana in the past 12 months:Yes (Age 15+) ⁱ | 476,800 | 38.9 | 28.6 | 49.2 | 13.57 | Reportable |
| Use Marijuana in the past 12 months:No (Age 15+) ⁱ | 605,000 | 6.3 | 4.7 | 7.9 | 13.1 | Reportable |
| Marijuana users past 12 months: use less than weekly (Age 15+) ^j | 340,300 | 39.2 | 25.9 | 52.6 | 17.36 | Marginal |
| Marijuana users past 12 months: use more than weekly but less than daily (Age 15+) ^j | | | | | | Data not reportable |
| Marijuana users past 12 months: use daily (Age 15+) ^j | | | | | | Data not reportable |
| Weekly spending money, Age 15-24 attending school/college/university: \$0-99 ^k | 121,800 | 18 | 12.9 | 23.1 | 14.37 | Reportable |
| Weekly spending money, Age 15-24 attending school/college/university: \$100+ ^k | 97,400 | 23.4 | 16 | 30.8 | 16.13 | Reportable |

^a Canadian Tobacco Use Monitoring Survey (CTUMS), Annual (2012)

^b 95% confidence intervals and coefficient of variation are from bootstrap methods

^c Marginal estimates should be interpreted with caution: subject to moderate sampling variability

^d Education is based on the derived variable for highest level of education attained (DVEDUC)

^e Occupation is based on the main job of those who worked in a job (include seasonal, contract work, self-employment, and any other paid work) in the past 12 months (DVNOCS10) ^f Marital status of respondent is based on the variable (DVMARST)

^g Cigarette smoking: current smokers are those smoked 100 cigarette lifetime and smoked in the past 30 days, former smokers are those smoked 100 cigarettes lifetime but did not smoked in the past 30 days, and never smokers are those have not smoked 100 cigarettes in their lifetime (SS_Q10,SS_Q2-,SS_Q40)

^h Marijuana ever tried are those who have tried just once or more than once (MU_Q10)

ⁱ Marijuana used in the past 12 months are those have used it in the past 12 month (MU_Q20)

^j Marijuana use in the past 12 months: Less than weekly are those used "Less than once a month" or "1-3 times a month"; more than weekly but less than daily are those used "Once a week" or "More than once a week"; used daily are those used "Every day" (MU_Q30)

 $^{
m k}$ Student's weekly spending money among age 15-24 who are in schooling is based on variable SI_G20

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References

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