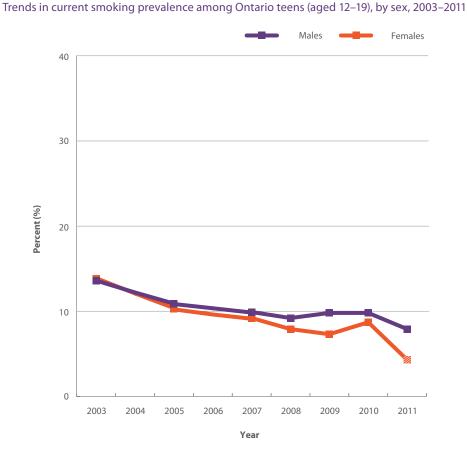


# **Cancer Risk Factors in Ontario Youth**



# 3.1 CURRENT SMOKING

FIGURE 18.



Notes: Interpret estimates denoted with diagonal lines with caution due to high sampling variability. Source: Canadian Community Health Survey, 2003, 2005, 2007–2011 (Statistics Canada)

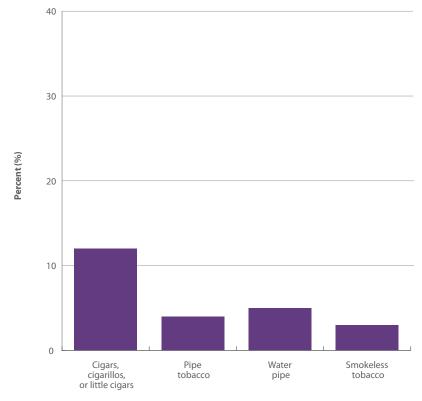
- The prevalence of current smoking (daily or occasional) among Ontario teens ages 12-19 declined significantly between 2003 and 2011 (see supplementary table \$18).
- Significant declines in current smoking prevalence occurred in both males and females, with the prevalence in males declining from 13.6% in 2003 to 7.9% in 2011 and in females from 13.8% to 4.3% over that time period, although the 2011 estimate for females should be interpreted with caution due to high sampling variability (Figure 18).
- Unlike the sex-specific estimates seen in adults, current smoking prevalence in male and female teens has been similar since at least as far back as 2003.

- Based on the 2011 Canadian Community Health Survey (CCHS), current smoking prevalence was significantly higher in older teens aged 16-19, with 10.0% reporting daily or occasional smoking, than in teens aged 12–15 (roughly 2%) (see supplementary table S19). This pattern is consistent with data from the Canadian Tobacco Use Monitoring Survey (CTUMS) showing increasing prevalence of current smoking for every year of age from 15 through 19.17
- National data from the CTUMS and the Youth Smoking Survey show that youth in grades 6-9 are more likely to be non-daily than daily smokers, while in youth aged 15-19 the proportion of daily smokers is equal to the proportion of non-daily smokers.<sup>17</sup>

# 3.2 SUSCEPTIBILITY TO SMOKING AND USE OF OTHER TOBACCO PRODUCTS

• According to data from the 2010/2011 Youth Smoking Survey as analyzed by the Propel Centre for Population Health Impact, 20% of Ontario students in grades 6-12 had ever-tried a cigarette and 30% of students who had never-smoked were considered susceptible to smoking based on their lack of confidence in remaining smoke-free. <sup>26</sup>

FIGURE 19. Prevalence of other tobacco product ever-use among Ontario students grade 6-12, 2010/2011

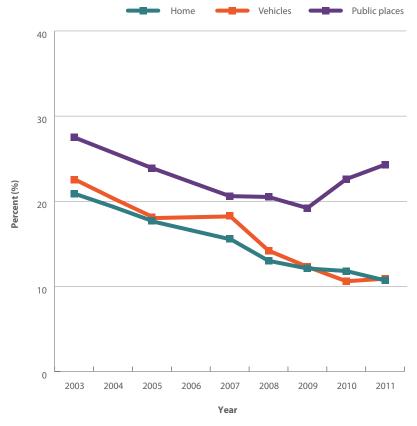


Source: Propel Centre for Population Health Impact (Youth Smoking Survey, 2010/2011)

- Cigars, cigarillos and little cigars were the most common alternate tobacco products Ontario students reported trying, with 12% of students in grade 6–12 having ever-tried one of these products in 2010/2011. A much smaller proportion of students in these grades reported having ever-tried a water pipe (5%), a pipe (4%) or smokeless tobacco (3%) (Figure 19).
- Ever-use of other tobacco products, particularly cigarillos, was much more common among older teens aged 15–19 than in youth in grades 6–9.17
- Although not as common as cigarette use, the use of cigars, cigarillos and little cigars
  among Ontario youth is higher than desirable. Use of these products among youth is of
  particular concern because a large proportion of current users of cigars and cigarillos/
  little cigars are not current cigarette users<sup>27</sup> and it has been suggested that youth may
  incorrectly perceive these alternate tobacco products to be less harmful than cigarettes.<sup>26</sup>

### 3.3 EXPOSURE TO SECOND-HAND SMOKE

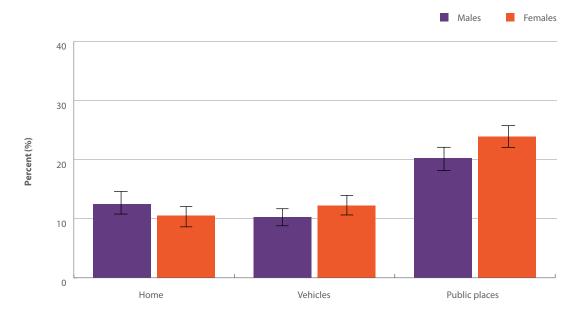
FIGURE 20.
Trends in second-hand smoke exposure among non-smoking teens (aged 12–19) in Ontario, 2003–2011



Source: Canadian Community Health Survey, 2003, 2005, 2007–2011 (Statistics Canada)

- The proportion of non-smoking teens regularly exposed to second-hand smoke generally declined between 2003 and 2011 (Figure 20; supplementary table S20).
- Similar to the patterns in adults, the prevalence of exposure to second-hand smoke among teens was highest in public places. The proportion of teens aged 12-19 regularly exposed in public places appeared to decline from 27.5% in 2003 to 24.3% in 2011, although neither this decline nor the apparent increase observed between 2009 and 2011 were statistically significant. Similar trends were observed among young adults aged 20-29 and to a lesser extent among adults aged 30-44 (data not shown). The latter increase in second-hand smoke exposure may reflect effective indoor smoking restrictions, which can cause smokers to smoke more in outdoor spaces and allow more non-smokers to be exposed (Scott Leatherdale, University of Waterloo, personal communication).
- Early implementation of smoke-free bylaws by many Ontario municipalities between 2000 and 2004 and the subsequent implementation of the provincial Smoke-Free Ontario Act in 2006 likely contributed to this overall downward trend.
- The prevalence of second-hand smoke exposure both at home and in vehicles among Ontario teens was roughly halved between 2003 and 2011, from 20.9% for home exposure and 22.5% for exposure in vehicles in 2003 to roughly 11% for each in 2011.
- Declines in teen exposure to second-hand smoke at home and in a vehicle likely reflect an increasing adoption of voluntary smoke-free homes, increasing awareness of the harms associated with second-hand smoke, and the 2009 implementation of the Smoke-Free Ontario Act amendment banning smoking in vehicles when children under age 16 are present.
- Despite promising declines observed since the early 2000s, a substantially higher proportion of teens than adults continue to be exposed to second-hand smoke at home and in vehicles. Higher prevalence of exposure among teens may be partly because they have less control in preventing their exposure to second-hand smoke than adults.<sup>28</sup> Teen second-hand smoke exposure is of particular concern because youth exposed to secondhand smoke are more likely to start smoking themselves<sup>29</sup> and face a number of health effects in the short and long term, including a potentially increased risk of lung cancer during adulthood.3

FIGURE 21. Prevalence of second-hand smoke exposure among non-smoking teens (aged 12-19) in Ontario, by sex, 2009-2011 combined

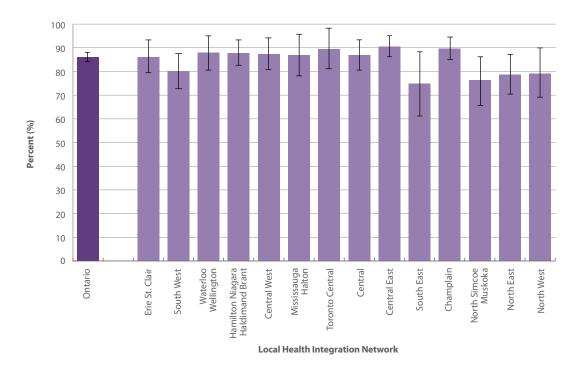


Notes: Data from CCHS cycles 2009, 2010 and 2011 combined to increase sample size for analyses of second-hand smoke exposure. I represent 95% confidence intervals.

Source: Canadian Community Health Survey, 2009–2011 (Statistics Canada)

- In 2009–2011, the prevalence of second-hand smoke exposure in public places was significantly higher for male and female Ontario teens than second-hand exposure at home and in a vehicle.
- Similar proportions of non-smoking males and female teens were regularly exposed to second-hand smoke at home (12.5% males vs. 10.5% females), in a vehicle (10.3% males vs. 12.2% females) and in public places (20.3% males vs. 23.9% females) during 2011 (Figure 21; supplementary table S21).

FIGURE 22. Smoking abstinence among Ontario teens (aged 12-19), by Local Health Integration Network, 2011



Notes: I represent 95% confidence intervals. **Source:** Canadian Community Health Survey, 2011 (Statistics Canada)

• Due to small sample sizes and the relatively small number of teen smokers included in the CCHS, the prevalence of current smoking among teens cannot be precisely estimated at the Local Health Integration Network (LHIN) level. Teen smoking abstinence (i.e., the proportion of teens who have never tried a cigarette) can instead be used to examine teen tobacco use across LHINs.

- In 2011, teen smoking abstinence was generally lower in the northern regions of the province.
- While none of the LHIN estimates differed significantly from the provincial estimate of 86.1%, the proportion of teens aged 12-19 who abstained from smoking ranged from a low of 74.8% in the South East LHIN to a high of 90.4% in the Central East LHIN (Figure 22; supplementary table S22).