



Region of Waterloo
PUBLIC HEALTH

A horizontal row of four diverse children's faces, including a girl and three boys of various ethnicities, all smiling. The image is semi-transparent and serves as a background for the title.

Child Health Report Series

Tobacco Use in Youth

Technical Data Summary

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1.0 Technical Summary

Local public health units in Ontario are mandated to work on reducing the burden of preventable diseases of public health importance, including chronic disease.

One of the ways Region of Waterloo Public Health (ROWPH) fulfills this mandate is through regular population health status assessment and surveillance. By measuring, monitoring, and reporting on the status of a population's health, particularly for priority populations, public health programs and services can be tailored to meet local needs and then evaluated for their health impact.

This technical data summary is one chapter in a series of brief health status reports that examine a specific sub-population of interest: children. The Tobacco Use in Youth technical data summary provides information on indicators related to tobacco use among youth and young adults in Waterloo Region.

The technical data summaries are intended for audiences interested in knowing more about the data and evidence presented. To compliment this technical summary, an accompanying public product is available that highlights key findings and provides information on activities undertaken by Region of Waterloo Public Health in response to trends identified in this report. The accompanying public product is available at: <http://chd.region.waterloo.on.ca>.

2.0 Data Sources, Notes and Limitations

2.1 Analysis Software

Data analysis and visualization for this report were completed using SAS version 9.3 and Microsoft Excel 2010.

2.2 Data Sources

Canadian Community Health Survey (CCHS)

Data on smoking prevalence, smoking cessation, and second-hand smoke exposure were obtained from the Canadian Community Health Survey (CCHS).

The CCHS is a national, largely telephone-based survey conducted by Statistics Canada. It provides estimates of health determinants, health status and health system utilization at the national, provincial, regional, and health unit levels. The survey is conducted over a two-year repeating cycle.

The CCHS target population includes household residents 12 years and older in all provinces and territories, and excludes those living on Indian Reserves, Canadian Forces Bases, institutions, some remote areas, and individuals or households without a telephone. CCHS data are self-reported and may be subject to recall bias and social desirability bias, which may result in an under or overestimate of the true prevalence in the population. Proxy responses were also excluded from analysis.

'Don't know', refused and not stated responses were removed from analysis when they represented less than five per cent of the sample. In removing these responses from the denominator, the assumption is that the missing values are random, which is not always the case.

The 'Townships' category combines responses from North Dumfries, Wellesley, Wilmot, and Woolwich townships. Estimates provided at the municipal level may not be representative of the given population, as the CCHS sampling frame was not designed for analysis below the health region level.

Statistical significance is denoted using non-overlapping 95 per cent confidence intervals (CI). The terms 'significant' or 'significance' indicate a statistically significant difference. The superscript 'E' denotes high sampling variability, and estimates must be interpreted with caution. The 'F' denotes estimates which were suppressed due to unacceptably high sampling variability.

For Waterloo Region and Ontario analyses, data from CCHS cycle 4.1 (2007/2008), cycle 5.1 (2009/2010), and cycle 6.1 (2011/2012) were analyzed using SAS™ and the Statistics Canada bootstrap method (BOOTVAR program version 3.2).

Canadian Tobacco Use Monitoring Survey

Data on alternative tobacco use were obtained from the Canadian Tobacco Use Monitoring Survey (CTUMS).

The Canadian Tobacco Use Monitoring Survey (CTUMS) was conducted by Statistics Canada with the cooperation and support of Health Canada. CTUMS was developed to provide Health Canada and its partners with timely, reliable, and continual data on tobacco use and related issues. The survey's primary objective is to track changes in smoking status and amount smoked, especially for 15-24 year olds, who are most at risk for taking up smoking.

From 1999 to 2012, data was collected from February to December of each year, using computer-assisted random-digit-dialed telephone interviews. The samples for CTUMS were selected using a stratified random sampling procedure. The samples included the population of Canada aged 15 years and over, excluding residents of Yukon, Northwest Territories and Nunavut, as well as full-time residents of institutions and residents without telephones or with cell phones only. Beginning in 2013, the biennial Canadian Tobacco, Alcohol and Drug Survey (CTADS) replaces CTUMS.

Tobacco Information System

Data on minor's access to tobacco were obtained from the Tobacco Information System.

The Tobacco Information System is a provincial database managed by the Ministry of Health and Long-Term Care. It includes data entered by local Tobacco Enforcement Officers (TEO) relating to all vendor inspections, school inspections and any charges or convictions which result. Waterloo Region did not start entering vendor inspection data into the Tobacco Information System on a consistent basis until 2013. Therefore, data presented from 2012 may not be complete, and data from 2013 may be inconsistent due to the transition to electronic records. Due to these inconsistencies, it is best not to make comparisons between the years of data provided.

The total number of vendors that sell tobacco products and are inspected for compliance with youth access legislation vary each year as some vendors close and others open. As of 2014, there were 329 vendors being inspected for compliance with youth access legislation. Inspections happen on an on-going basis throughout the year, but each vendor will be inspected at least twice a year to ensure they are compliant with youth access legislation. Data is entered electronically by the TEO after the inspection and this data is then linked to the provincial database. The data is extracted by Public Health Planners as needed using ministry provided reports.

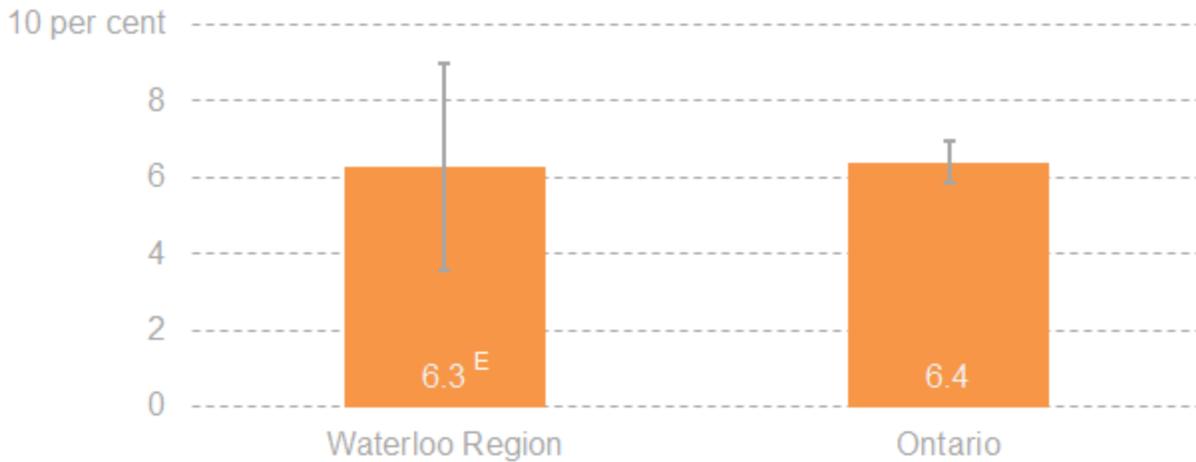
3.0 Indicators

3.1 Smoking Prevalence

Most young people who smoke regularly continue to smoke into adulthood, leading to many well-established long-term health effects from smoking, such as reduced lung function, lung cancer, heart disease and stroke (1, 2).

The proportions of youth aged 12 to 18 years who were current smokers in Waterloo Region and Ontario from 2007 to 2012 are presented below (Figure 1). As well, the proportion of young adults aged 19 to 24 years who were current smokers during this same time period for Waterloo Region and Ontario is shown in Figure 2.

Figure 1: Proportion of youth aged 12 to 18 years who are current smokers, Waterloo Region and Ontario, 2007-2012 (combined)



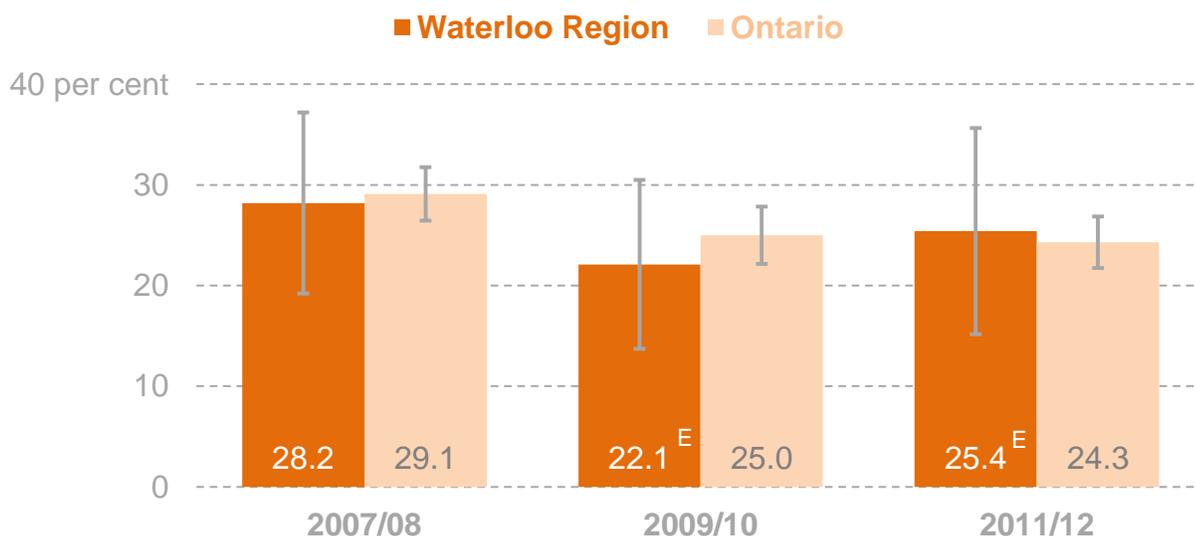
I = 95 per cent confidence interval.

The superscript "E" denotes high sampling variability, and estimates must be interpreted with caution.

Source: Canadian Community Health Survey (CCHS), 2007/2008, 2009/2010, 2011/2012 Statistics Canada, Share File, Ontario MOHLTC.

From 2007 to 2012, 6.3 per cent of youth aged 12 to 18 years in Waterloo Region were current cigarette smokers (Figure 1). This proportion is similar to all of Ontario for the same time period (6.4 per cent).

Figure 2: Proportion of young adults aged 19 to 24 years who are current smokers, Waterloo Region and Ontario, 2007/2008, 2009/2010, and 2011/2012



I = 95 per cent confidence interval.

The superscript "E" denotes high sampling variability, and estimates must be interpreted with caution.

Source: Canadian Community Health Survey (CCHS), 2007/2008, 2009/2010, 2011/2012 Statistics Canada, Share File, Ontario MOHLTC.

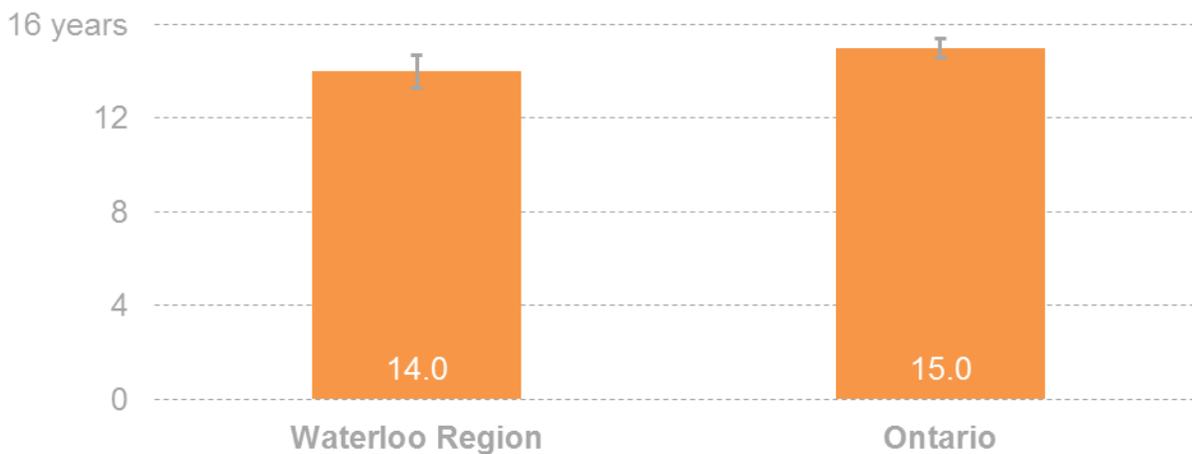
Cigarette smoking is more prevalent among young adults than youth, with about one quarter of those aged 19 to 24 years reporting that they currently smoke cigarettes in both Waterloo Region and Ontario. In 2011/2012, 25.4 per cent of young adults aged 19 to 24 years in Waterloo Region were current smokers. This proportion was similar to the proportion of young adult smokers in 2007/2008 and 2009/2010 (Figure 2). In Ontario, 24.3 per cent of young adults aged 19 to 24 years were current smokers in 2011/2012.

3.1.2 Age at Smoking Initiation

Most smokers begin to experiment with smoking between the ages of 10 and 18 years (3).

The median age that youth aged 12 to 18 years first smoked a whole cigarette is shown in Figure 3 for Waterloo Region and Ontario for 2007 to 2012. As well, the median age that youth aged 19 to 24 years first smoked a whole cigarette is presented for Waterloo Region and Ontario from 2007/2008 to 2011/2012 (Figure 4).

Figure 3: Median age of first whole cigarette smoked for youth aged 12 to 18 years who have ever smoked a whole cigarette, Waterloo Region and Ontario, 2007-2012 (combined)

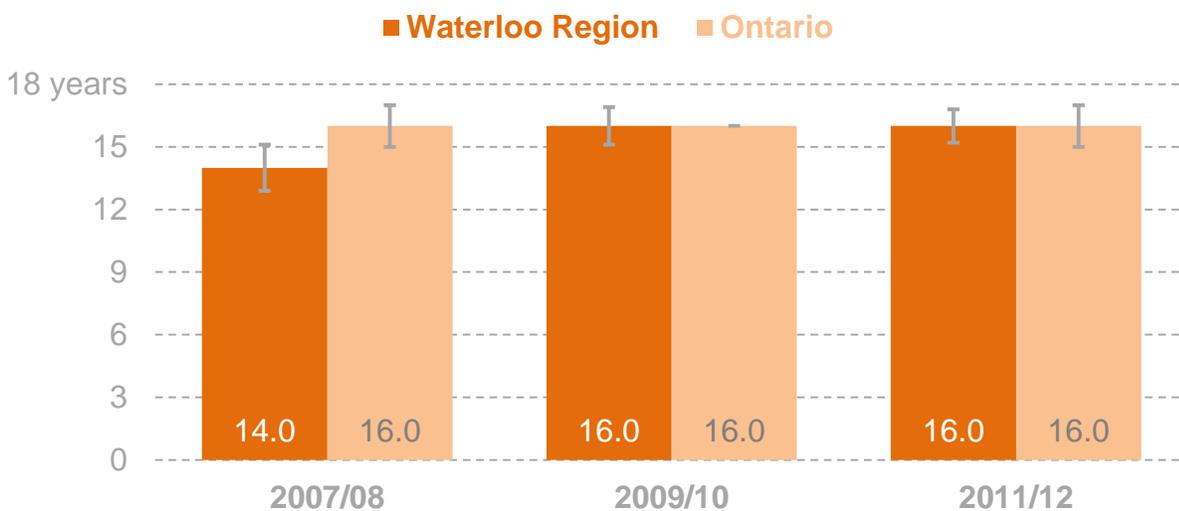


I = 95 per cent confidence interval.

Source: Canadian Community Health Survey (CCHS), 2007/2008, 2009/2010, 2011/2012 Statistics Canada, Share File, Ontario MOHLTC.

Between 2007 and 2012, the median age that youth aged 12 to 18 years first smoked a whole cigarette was 14.0 years in Waterloo Region. This was similar to Ontario youth aged 12 to 18 years during the same time period, with a median age of 15.0 years for first smoking a whole cigarette (Figure 3).

Figure 4: Median age of first whole cigarette smoked for young adults aged 19 to 24 years who have ever smoked a whole cigarette, Waterloo Region and Ontario, 2007/2008, 2009/2010, and 2011/2012



I = 95 per cent confidence interval.

Source: Canadian Community Health Survey (CCHS), 2007/2008, 2009/2010, 2011/2012 Statistics Canada, Share File, Ontario MOHLTC.

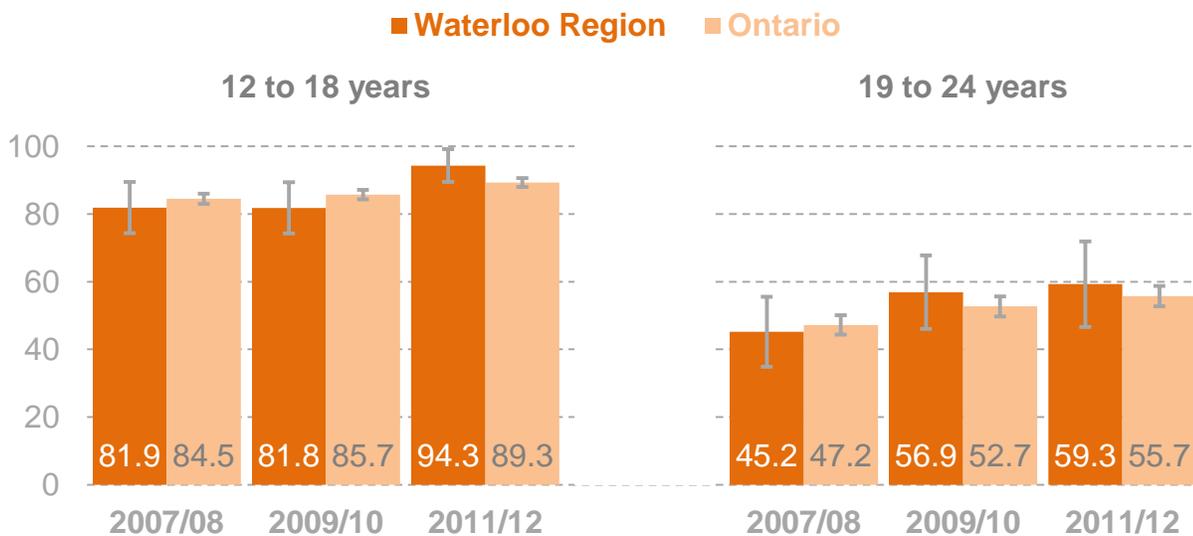
In Waterloo Region, the median age that young adults aged 19 to 24 years first smoked a whole cigarette was 16.0 years in 2011/2012 (Figure 4). The median age in 2007/2008 was lower (14.0 years) compared to 2011/2012. In Ontario, the median age that young adults first smoked a whole cigarette in 2011/2012 was similar to Waterloo Region (16.0 years), and has not varied since 2007/2008.

3.1.3 Youth who have Never Smoked a Whole Cigarette

Measuring the proportion of youth who have never smoked a whole cigarette is an important indicator of youth smoking habits because even just a couple of puffs on a cigarette can lead to signs of nicotine dependency such as having cravings, leading more youth to try smoking a second, third or fourth time.

The proportion of youth aged 12 to 24 years who have never smoked a whole cigarette is shown below for Waterloo Region and Ontario from 2007/008 to 2011/2012 (Figure 5).

Figure 5: Proportion of youth aged 12 to 24 years who have never smoked a whole cigarette, Waterloo Region and Ontario, 2007/2008, 2009/2010, and 2011/2012



I = 95 per cent confidence interval.

Source: Canadian Community Health Survey (CCHS), 2007/2008, 2009/2010, 2011/2012 Statistics Canada, Share File, Ontario MOHLTC.

In 2011/2012, 94.3 per cent of Waterloo Region youth aged 12 to 18 years had never smoked a whole cigarette, which shows a significant improvement in the proportion of non-smoking youth since 2007/2008 (81.9 per cent) and 2009/2010 (81.8 per cent). In Ontario, the proportion of youth aged 12 to 18 years who had never smoked a whole cigarette was similar to Waterloo Region (89.3 per cent), and has also significantly increased since 2007/2008 (84.5 per cent) and 2009/2010 (85.7 per cent).

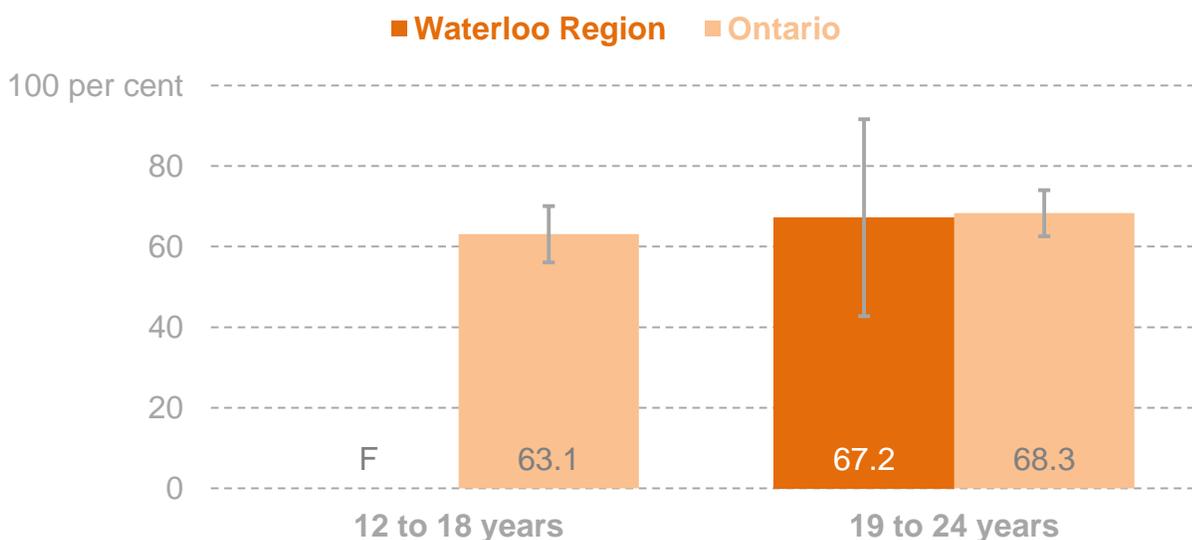
In Waterloo Region, 59.3 per cent of young adults aged 19 to 24 years had never smoked a whole cigarette in 2011/2012; this proportion is slightly higher than previous years, but not significantly higher (Figure 5). In Ontario, 55.7 per cent of young adults aged 19 to 24 years had never smoked a whole cigarette in 2011/2012, which is similar to Waterloo Region for the same time period.

3.2 Smoking Cessation

Youth who become addicted to tobacco can find it very difficult to quit; therefore cessation efforts are important before youth become addicted (3, 4).

The proportion of youth aged 12 to 24 years who are current smokers and are thinking about quitting smoking in the next six months is shown below for Waterloo Region and Ontario for 2007/2008 (Figure 6). Another indicator of youth cessation efforts is the proportion of youth that have stopped smoking for 24 hours in an attempt to quit smoking. This is shown in Figure 7 for Waterloo Region and Ontario for 2007/2008.

Figure 6: Proportion of youth aged 12 to 24 years who are current smokers and are seriously thinking about quitting smoking in the next 6 months, Waterloo Region and Ontario, 2007/2008



I = 95 per cent confidence interval.

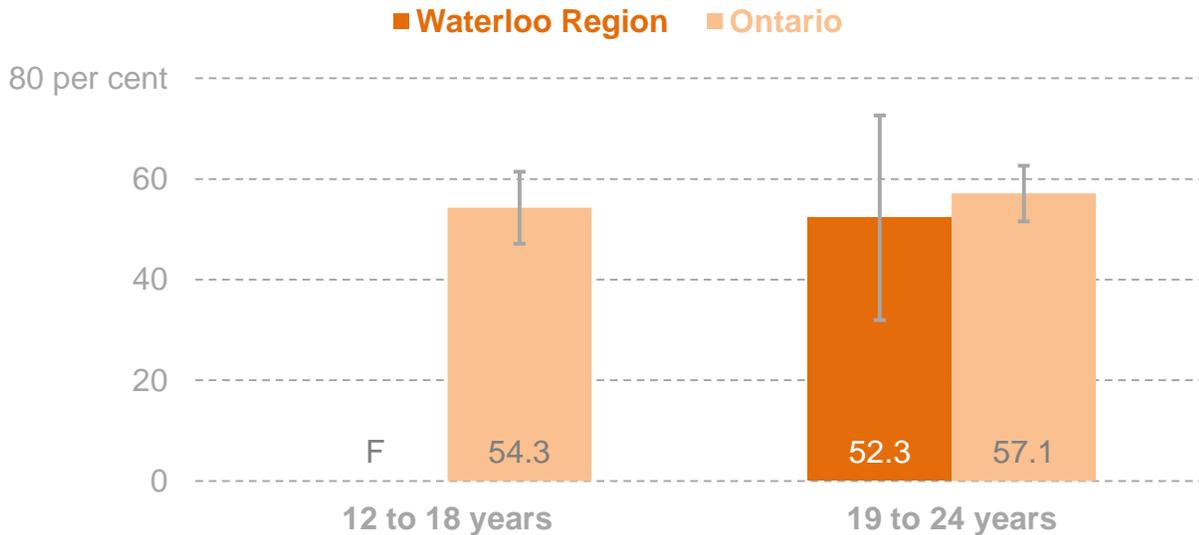
An “F” denotes unacceptable sampling variability, and estimates or conclusions based on these data will be unreliable and most likely invalid.

Source: Canadian Community Health Survey (CCHS), 2007/2008, Statistics Canada, Share File, Ontario MOHLTC.

In Waterloo Region in 2007/2008, 67.2 per cent of young adults aged 19 to 24 years were seriously thinking about quitting smoking in the next six months. This proportion was similar to Ontario young adults (68.3 per cent) (Figure 6). The proportion of youth aged 12 to 18 years who were seriously thinking about quitting smoking in the next six months had unacceptable

sampling variability due to a small number of survey respondents and could not be reported for Waterloo Region. However, for all of Ontario, 63.1 per cent of youth aged 12 to 18 years were seriously thinking about quitting smoking in the next six months (Figure 6).

Figure 7: Proportion of youth aged 12 to 24 years who are current smokers and stopped smoking for 24 hours in an attempt to quit smoking in the last 12 months, Waterloo Region and Ontario, 2007/2008



I = 95 per cent confidence interval.

An “F” denotes unacceptable sampling variability, and estimates or conclusions based on these data will be unreliable and most likely invalid.

Source: Canadian Community Health Survey (CCHS), 2007/2008, Statistics Canada, Share File, Ontario MOHLTC.

In Waterloo Region, 52.3 per cent of young adults aged 19 to 24 years had stopped smoking for 24 hours in an attempt to quit smoking in the last year (Figure 7). This proportion was similar to Ontario young adults aged 19 to 24 years (57.1 per cent). The proportion of youth aged 12 to 18 years in Waterloo Region who had stopped smoking for 24 hours in an attempt to quit smoking in the last year could not be reported due to a low number of survey respondents. However, in Ontario, 54.3 per cent of youth aged 12 to 18 years had stopped smoking for 24 hours in an attempt to quit smoking in the last year (Figure 8).

3.3 Alternative Tobacco Use (e-cigarettes, waterpipes, cigarillos, etc.)

While youth smoking rates remain low, there are other emerging tobacco products and smoking devices being used by youth. Some of these products include e-cigarettes, waterpipes, cigars and cigarillos.

In 2013, the Ontario Student Drug Use and Health Survey asked students about their use of waterpipes (hookah) and electronic cigarettes (e-cigarettes) for the first time (5). The survey found:

- 8.9 per cent of Ontario students in grades 7 to 12 (an estimated 51,800 students) reported using smokeless tobacco (chew tobacco, dipping tobacco, snuff) in the past year.
- 9.7 per cent of Ontario students in grades 7 to 12 (an estimated 88,400 students) reported using a waterpipe in the past year.
- 15.0 per cent of Ontario students in grades 9 to 12 (an estimated 99,800 students) reported using an e-cigarette, with or without nicotine, at least once in their lifetime.
 - 4.0 per cent used an e-cigarette with nicotine, and 11.0 per cent used an e-cigarette without nicotine.

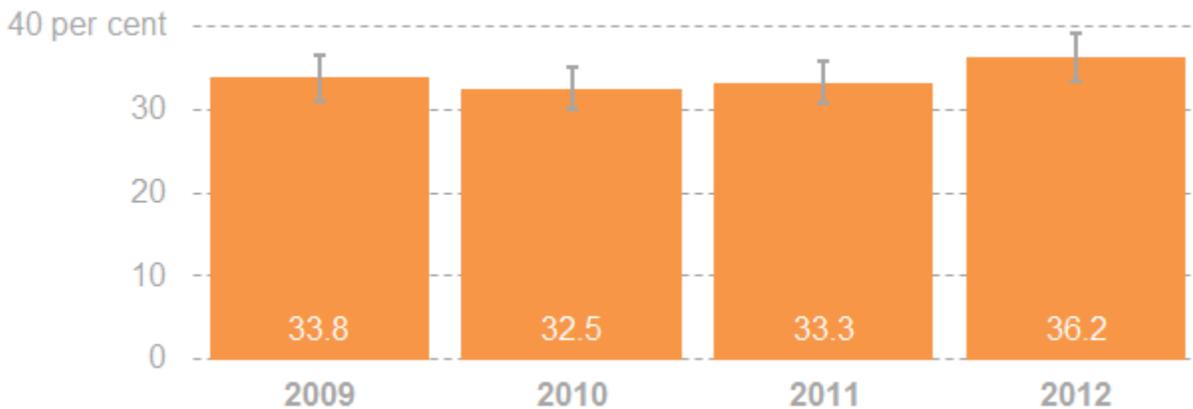
Locally, the survey found:¹

- There was no significant difference in the proportion of smokeless tobacco use by students in grades 9 to 12 in the past year for the Waterloo Wellington Local Health Integration Network (8.9 per cent) compared to Ontario (7.3 per cent).
- While waterpipe usage for students in grades 9 to 12 in the past year for the Waterloo Wellington Local Health Integration Network (7.5 per cent) was lower than the Ontario rate (12.5 per cent), the difference is not statistically significant.
- Data on e-cigarette use for students in grades 9 to 12 for the Waterloo Wellington Local Health Integration Network was not reported due to insufficient numbers leading to unreliability.

The Canadian Tobacco Use Monitoring survey provides information on the use of little cigars or cigarillos in Ontario. The proportion of the population aged 15 years and older who have ever used a little cigar or cigarillo in Ontario is shown in Figure 8 for 2009, 2010, 2011 and 2012.

¹ The Waterloo Wellington Local Health Integration Network includes Waterloo Region, as well as Wellington-Dufferin-Guelph and a small portion of southern Grey County. Therefore, data may not be representative of students in Waterloo Region alone.

Figure 8: Proportion of the population aged 15 years and older who have ever used a little cigar or cigarillo, Ontario, 2009, 2010, 2011, and 2012



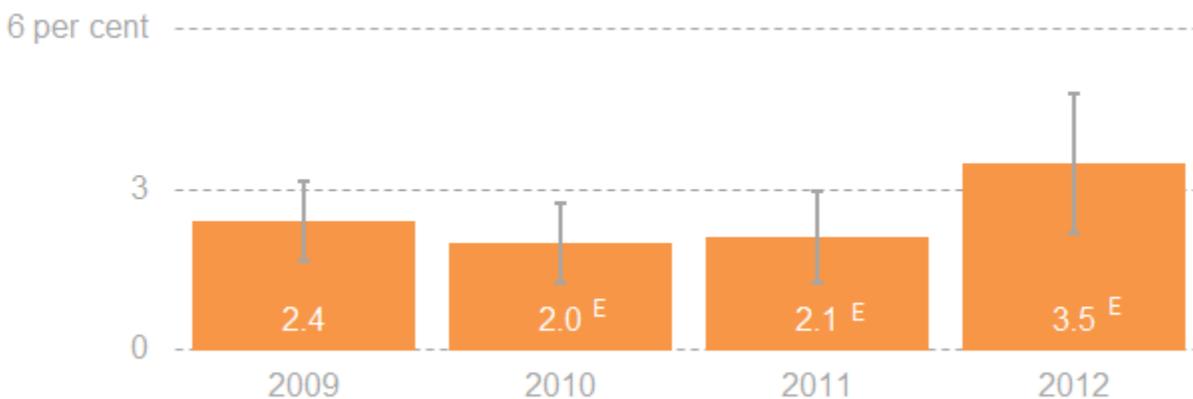
I = 95 per cent confidence interval.

Source: Canadian Tobacco Use Monitoring Survey, 2009, 2010, 2011, 2012. Extracted from Tobacco Informatics Monitoring System (TIMS) October 30, 2014.

Approximately one-third of adolescents and adults in Ontario have ever smoked a little cigar or cigarillo. In 2012, 36.2 per cent of Ontarians had reported ever smoking a little cigar or cigarillo, and this proportion has not changed significantly since 2009 (Figure 8).

The proportion of the population aged 15 years and older who used a little cigar or cigarillo in the past 30 days in Ontario is shown below for 2009, 2010, 2011 and 2012 (Figure 9).

Figure 9: Proportion of the population aged 15 years and older who used a little cigar or cigarillo in the past 30 days, Ontario, 2009, 2010, 2011, and 2012



I = 95 per cent confidence interval.

The superscript "E" denotes high sampling variability, and estimates must be interpreted with caution.

Source: Canadian Tobacco Use Monitoring Survey, 2009, 2010, 2011, 2012. Extracted from Tobacco Informatics Monitoring System (TIMS) October 30, 2014.

The proportion of the Ontario population who smoked a little cigar or cigarillo in the past 30 days was 3.5 per cent. This proportion was similar to that reported during the preceding three years (Figure 9).

Of those aged 15 years and older who had used a little cigar or cigarillo in the past 30 days, the proportion that used a flavoured little cigar or cigarillo is shown below for 2009, 2010, 2011 and 2012 for Ontario (Table 1).

Table 1: Proportion of the population who used a little cigar or cigarillo in the past 30 days that used a flavoured little cigar or cigarillo, Ontario, 2009, 2010, 2011, and 2012

Year	Use of flavoured little cigars or cigarillos in the past month
	% (95% CI)
2009	65.7 (49.4-82.1)
2010	59.2 (38.1-80.3) ^E
2011	70.7 (51.9-89.6)
2012	47.9 (38.1-80.3) ^E

CI = 95 per cent confidence interval.

The superscript "E" denotes high sampling variability, and estimates must be interpreted with caution.

Source: Canadian Tobacco Use Monitoring Survey, 2009, 2010, 2011, 2012. Extracted from Tobacco Informatics Monitoring System (TIMS) October 30, 2014.

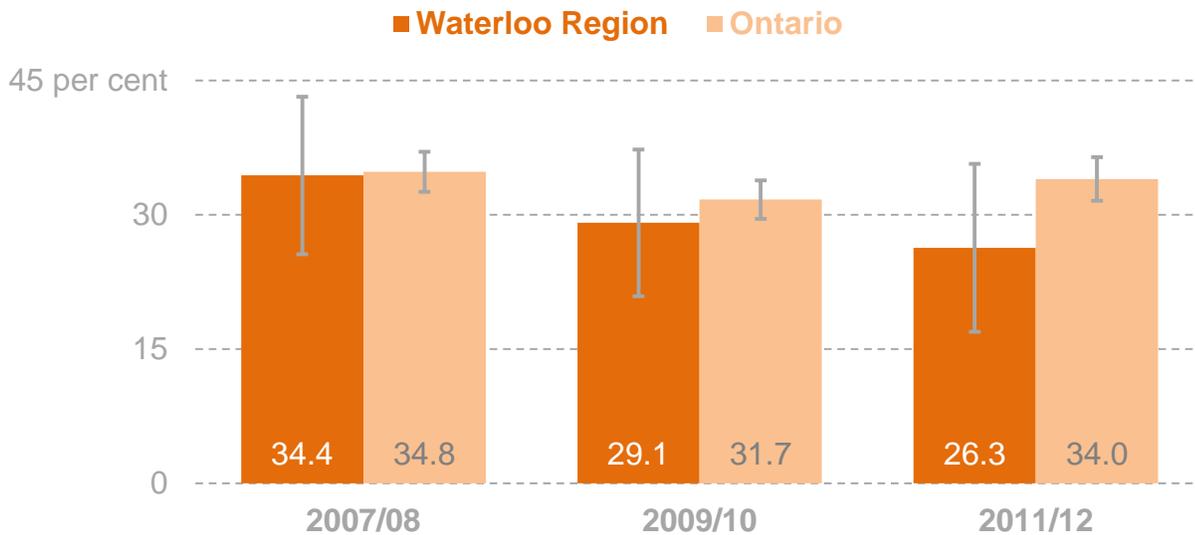
In Ontario in 2012, of those who had used a little cigar or cigarillo in the past 30 days, 47.9 per cent used a flavoured little cigar or cigarillo. This proportion was lower than the previous three years, although due to high sampling variability this difference was not significant (65.7 per cent in 2009, 59.2 per cent in 2010, and 70.7 per cent in 2011) (Table 1).

3.4 Second-hand Smoke Exposure

Exposure to second-hand smoke indoors has been well studied and is associated with cancer, heart disease, asthma, ulcers and middle ear infections in both children and adults (6).

The proportion of youth aged 12 to 18 years that are non-smokers exposed to second-hand smoke is provided for Waterloo Region and Ontario from 2007/2008 to 2011/2012 in Figures 10 and 11, and Table 2.

Figure 10: Proportion of non-smoking youth aged 12 to 18 years who are exposed to second-hand smoke in the home, in a vehicle, or in a public place, Waterloo Region and Ontario, 2007/2008, 2009/2010, and 2011/2012



I = 95 per cent confidence interval.

Source: Canadian Community Health Survey (CCHS), 2007/2008, 2009/2010, 2011/2012 Statistics Canada, Share File, Ontario MOHLTC.

The proportion of Waterloo Region non-smoking youth aged 12 to 18 years who were exposed to second-hand smoke in the home, a vehicle, or a public place in 2011/2012 was 26.3 per cent (Figure 10). This proportion was lower than in previous years, but not significantly lower. In Ontario, about one-third of non-smoking youth aged 12 to 18 years were exposed to second-hand smoke in the home, a vehicle or a public place between 2007/2008 and 2011/2012, and was similar to Waterloo Region for the same time period.

Table 2: Proportion of non-smoking youth aged 12 to 18 years who are exposed to second-hand smoke in the home, in a vehicle, or in a public place, by place of exposure, Waterloo Region and Ontario, 2007/2008, 2009/2010, and 2011/2012

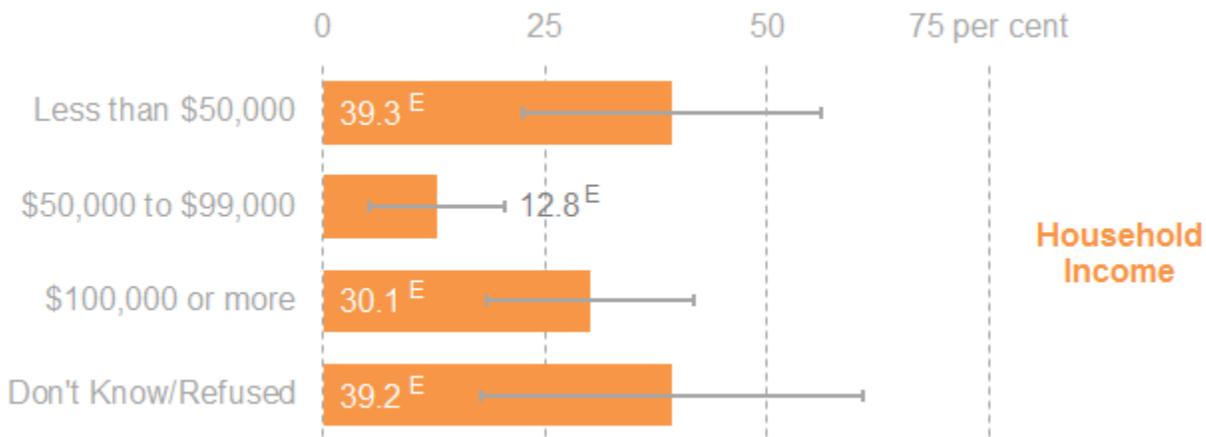
Place of Residence	Second-hand smoke exposure setting	2007/2008	2009/2010	2011/2012
		% (95% CI)	% (95% CI)	% (95% CI)
Waterloo Region	In a home	20.5 (12.8-28.1) ^E	12.2 (6.4-18.0) ^E	F
	In a vehicle	19.2 (11.0-27.3) ^E	8.1 (2.8-13.3) ^E	F
	In public places	11.4 (5.8-17.0) ^E	18.3 (10.8-25.8) ^E	17.3 (9.3-25.4) ^E
Ontario	In a home	14.1 (12.6-15.7)	12.3 (10.7-13.9)	9.6 (8.2-11.0)
	In a vehicle	15.9 (14.2-17.6)	10.7 (9.5-12.0)	10.4 (8.9-11.9)
	In public places	20.6 (18.8-22.4)	20.3 (18.5-22.1)	24.2 (21.9-26.4)

CI = 95 per cent confidence interval. The superscript "E" denotes high sampling variability, and estimates must be interpreted with caution. An "F" denotes unacceptable sampling variability, and estimates or conclusions based on these data will be unreliable and most likely invalid.

Source: Canadian Community Health Survey (CCHS), 2007/2008, 2009/2010, 2011/2012 Statistics Canada, Share File, Ontario MOHLTC.

The proportion of Waterloo Region non-smoking youth aged 12 to 18 years who were exposed to second-hand smoke in a public place in 2011/2012 was 17.3 per cent (Table 2). This proportion was similar to 2009/2010. In Ontario, about one-quarter (24.2 per cent) of non-smoking youth aged 12 to 18 years were exposed to second-hand smoke in a public place in 2011/2012; this proportion was similar to Waterloo Region. Approximately 10 to 15 per cent of non-smoking youth were also exposed to second-hand smoke in a home or vehicle in Ontario between 2007/2008 and 2011/2012.

Figure 11: Proportion of non-smoking youth aged 12 to 18 years who are exposed to second-hand smoke in the home, a vehicle, or a public place, by household income, Waterloo Region, 2009-2012 (combined)



I = 95 per cent confidence interval.

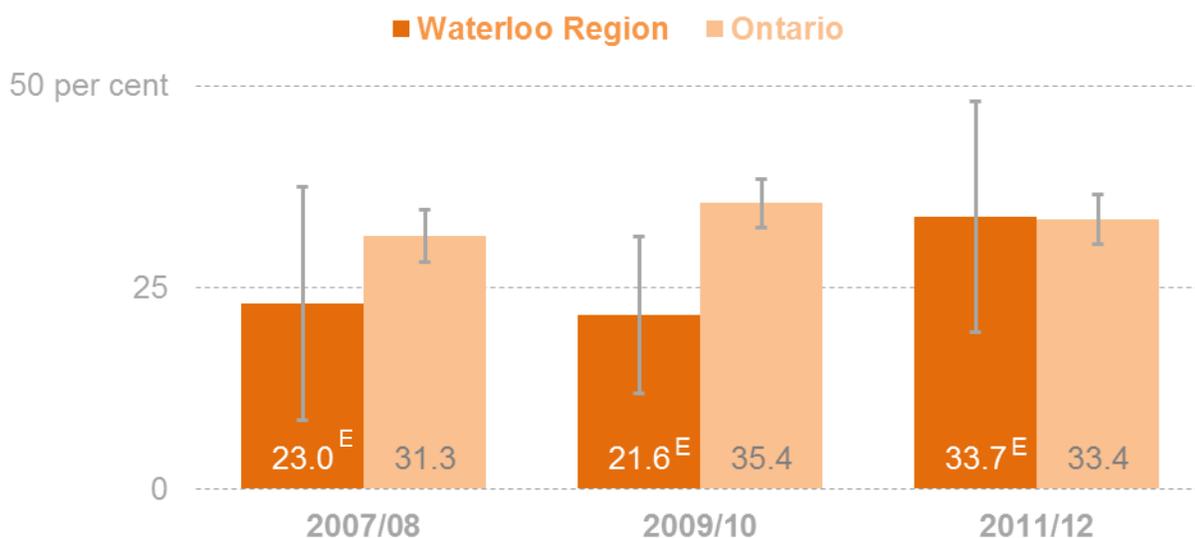
The superscript "E" denotes high sampling variability, and estimates must be interpreted with caution.

Source: Canadian Community Health Survey (CCHS), 2009/2010, 2011/2012 Statistics Canada, Share File, Ontario MOHLTC.

From 2009 to 2012, the proportion of Waterloo Region youth aged 12 to 18 years who are non-smokers exposed to second-hand smoke in a home, a vehicle or a public place was significantly higher for youth living in a household with an income less than \$50,000 compared to youth living in a household with an income between \$50,000 and \$99,999 (39.3 per cent vs. 12.8 per cent) (Figure 11).

The proportion of non-smoking young adults aged 19 to 24 years exposed to second-hand smoke is shown for Waterloo Region and Ontario from 2007/2008 to 2011/2012 in Figures 12 and 13, and Table 3.

Figure 12: Proportion of non-smoking young adults aged 19 to 24 years who were exposed to second-hand smoke in the home, in a vehicle, or in a public place, Waterloo Region and Ontario, 2007/2008, 2009/2010, and 2011/2012



I = 95 per cent confidence interval.

The superscript "E" denotes high sampling variability, and estimates must be interpreted with caution.

Source: Canadian Community Health Survey (CCHS), 2007/2008, 2009/2010, 2011/2012 Statistics Canada, Share File, Ontario MOHLTC.

In 2011/2012, 33.7 per cent of Waterloo Region non-smoking young adults aged 19 to 24 years were exposed to second-hand smoke in a home, a vehicle or a public place (Figure 12). This proportion was higher than in previous years, but not significantly higher. Similar to Waterloo Region, approximately one-third of non-smoking young adults aged 19 to 24 years in Ontario were exposed to second-hand smoke, and this proportion has remained relatively stable since 2007/2008 (Figure 12).

Table 3: Proportion of non-smoking young adults aged 19 to 24 years who were exposed to second-hand smoke in the home, in a vehicle, or in a public place, by place of exposure, Waterloo Region and Ontario, 2007/2008, 2009/2010, and 2011/2012

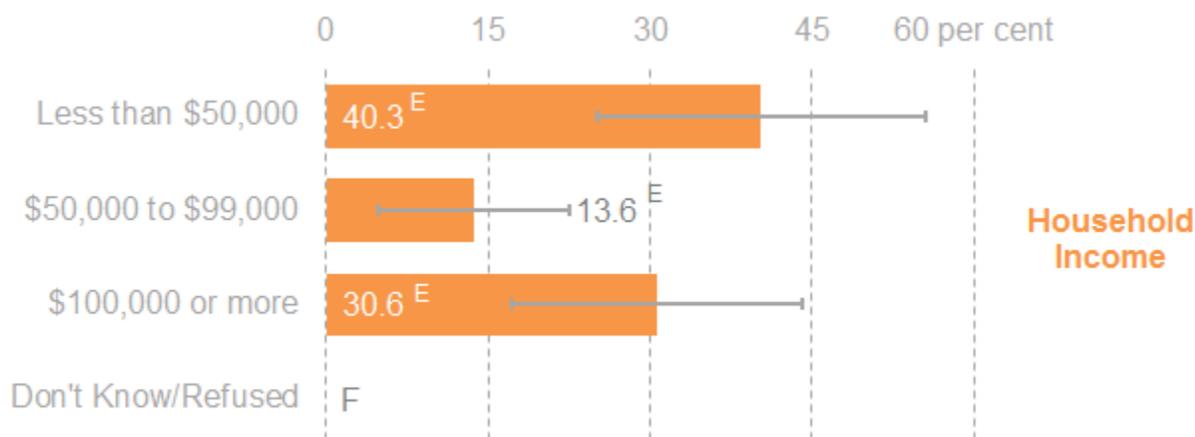
Place of Residence	Second-hand smoke exposure setting	2007/2008	2009/2010	2011/2012
		% (95% CI)	% (95% CI)	% (95% CI)
Waterloo Region	In a home	F	F	F
	In a vehicle	F	9.1 (3.8-14.3) ^E	F
	In public places	18.9 (7.2-30.6) ^E	F	20.4 (8.1-32.6) ^E
Ontario	In a home	9.9 (8.10-11.7)	10.2 (8.2-12.2)	8.1 (6.2-10.0)
	In a vehicle	15.2 (12.8-17.7)	14.6 (12.4-16.8)	11.0 (9.0-13.0)
	In public places	19.4 (16.6-22.1)	23.5 (20.6-26.4)	25.0 (22.2-27.8)

CI = 95 per cent confidence interval. The superscript "E" denotes high sampling variability, and estimates must be interpreted with caution. An "F" denotes unacceptable sampling variability, and estimates or conclusions based on these data will be unreliable and most likely invalid.

Source: Canadian Community Health Survey (CCHS), 2007/2008, 2009/2010, 2011/2012 Statistics Canada, Share File, Ontario MOHLTC.

In 2011/2012, 20.4 per cent of Waterloo Region non-smoking young adults aged 19 to 24 years were exposed to second-hand smoke in a public place (Table 3). In Ontario, one-quarter (25.0 per cent) of non-smoking young adults aged 19 to 24 years were exposed to second-hand smoke in a public place, which has significantly increased since 2007/2008 (Table 3). Approximately 10 to 15 per cent of non-smoking young adults were also exposed to second-hand smoke in a home or vehicle in Ontario between 2007/2008 and 2011/2012.

Figure 13: Proportion of non-smoking young adults aged 19 to 24 years who were exposed to second-hand smoke in the home, a vehicle, or a public place, by household income, Waterloo Region, 2007-2012 (combined)



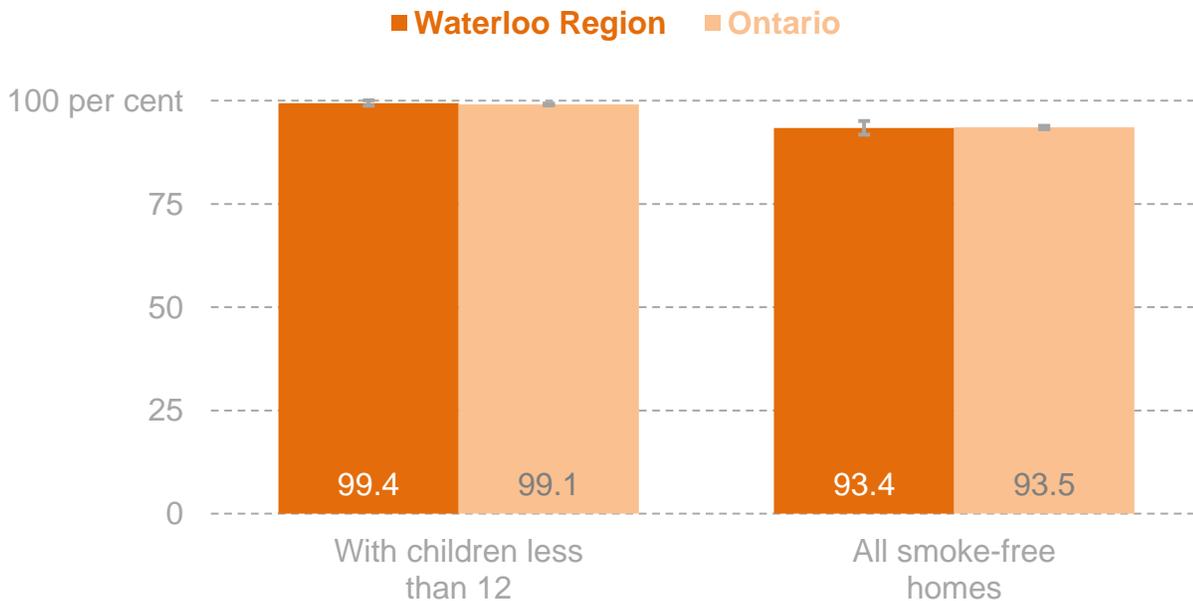
I = 95 per cent confidence interval. The superscript "E" denotes high sampling variability, and estimates must be interpreted with caution. An "F" denotes unacceptable sampling variability, and estimates or conclusions based on these data will be unreliable and most likely invalid. Source: Canadian Community Health Survey (CCHS), 2007/2008, 2009/2010, 2011/2012 Statistics Canada, Share File, Ontario MOHLTC.

The proportion of non-smoking young adults aged 19 to 24 years that were exposed to second-hand smoke in a home, a vehicle, or a public place between 2007 to 2012 in Waterloo Region was significantly greater for young adults living in a household with an income less than \$50,000 compared to those living in a household with an income between \$50,000 and \$99,999 (40.3 per cent vs. 13.6 per cent) (Figure 13).

3.4.1 Smoke-free Homes

Another indicator of second-hand smoke exposure is the number of households where individuals are asked to refrain from smoking. This is measured by the presence of children within the home (Figure 14).

Figure 14: Proportion households that were smoke-free, by presence of children in the household, Waterloo Region and Ontario, 2011/2012



I = 95 per cent confidence interval.

Source: Canadian Community Health Survey (CCHS), 2007/2008, 2009/2010, 2011/2012 Statistics Canada, Share File, Ontario MOHLTC.

In 2011/2012, 99.4 per cent of households with children aged 11 years or younger were smoke-free in Waterloo Region, which is similar to all of Ontario (99.1 per cent) (Figure 14). When all smoke-free households are considered (those with and without children), the proportion of smoke-free homes is significantly lower for both Waterloo Region and Ontario (93.4 per cent and 93.5 per cent, respectively).

3.5 Minor's Access to Tobacco

Since young people are more susceptible to start smoking, restrictions on access to tobacco products are an important part of comprehensive tobacco control strategies. A ban on the sale or supply of tobacco to minors is one way to decrease access (7). In Ontario, tobacco cannot be sold or supplied to anyone under the age of 19 years (7).

The proportion of tobacco vendor compliance and enforcement checks that resulted in the sale of tobacco to a minor is shown below for Waterloo Region for 2012, 2013 and 2014 (Table 4).

Table 4: Proportion of tobacco vendor compliance and enforcement checks that resulted in a sale of tobacco to a minor, Waterloo Region, 2012, 2013, and 2014

Measure	2012	2013	2014 YTD*
Number of vendors inspected at last inspection	319	336	329
% who sold to minors at last inspection	4.4	0.9	2.7

*YTD = Year-to-Date. Data includes January 1, 2014 to June 15, 2014.

Source: Tobacco Information System (2012, 2013, 2014), Ontario Ministry of Health and Long-Term Care.

In 2014, 2.7 per cent of the 329 vendors inspected in Waterloo Region sold tobacco to minors at the last inspection. In 2013, only 0.9 per cent of 336 vendors inspected at the last inspection sold tobacco to minors, and in 2012, 4.4 per cent of 319 vendors inspected at the last inspection sold tobacco to minors (Table 4). Due to changes in data reporting and possible data quality issues, comparisons of 2014 data to previous years may not be valid. These data quality issues have been addressed, and time trends or comparisons of data from 2014 onwards will be possible.

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