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Smoke-Free Ontario Strategy Monitoring Report

Ontario Tobacco Research Unit

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List of Acronyms and Abbreviations

AHAC	Aboriginal Health Access Centre
ATP	Aboriginal Tobacco Program
CAMH	Centre for Addiction and Mental Health
CCHS	Canadian Community Health Survey
CHC	Community Health Centre
CTADS	Canadian Tobacco, Alcohol and Drugs Survey
CTUMS	Canadian Tobacco Use Monitoring Survey
ECA	*Electronic Cigarettes Act*
FHT	Family Health Team
FNIM	First Nations, Inuit and Métis
FTI-PSP	Freeze the Industry-Plain and Standardized Packaging
FWCC	First Week Challenge Contest
LML	Love My Life
LTPB	Leave The Pack Behind
NGO	Non-Governmental Organization
MPOWER	Six indicators that include monitoring (prevalence data; M), smoke-free policies (P), cessation programs (O), health warnings on cigarette packages and anti-tobacco mass media campaigns (W), advertising bans (E), and taxation (R).
MOHLTC	Ministry of Health and Long-Term Care
NPLC	Nurse Practitioner-Led Clinic
NRT	Nicotine Replacement Therapy
ODB	Ontario Drug Benefit
OMSC	Ottawa Model for Smoking Cessation
OSDUHS	Ontario Student Drug Use and Health Survey
OTRU	Ontario Tobacco Research Unit
PHU	Public Health Unit
PTCC	Program Training and Consultation Centre
RNAO	Registered Nurses' Association of Ontario
SAC	Scientific Advisory Committee
SFO	Smoke-Free Ontario
SFOA	*Smoke-Free Ontario Act*
SHAF	Smoking and Health Action Foundation
SHL	Smokers' Helpline
SHL TXT	Smokers' Helpline Text Messaging
SHO	Smokers' Helpline Online
SHS	Secondhand Smoke
STOP	Smoking Treatment for Ontario Patients
TCAN	Tobacco Control Area Network
TEACH	Training Enhancement in Applied Cessation Counselling and Health
TIMS	Tobacco Informatics Monitoring System
YATI	Youth Advocacy Training Institute
YCMIH	You Can Make It Happen

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Smoke-Free Ontario Strategy Monitoring Report:

Introduction

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Introduction

The Smoke-Free Ontario Strategy (the Strategy) is a comprehensive tobacco-control program involving a broad coalition of partners including provincial and local governments, boards of health, voluntary-health organizations, hospitals and universities. Primary funding for the Strategy comes from the Ontario Ministry of Health and Long-Term Care, with direct and in-kind funding from other Strategy partners.

The Scientific Advisory Committee and Tobacco Strategy Advisory Group reports from 2010 have informed Smoke-Free Ontario Strategy development in recent years. In the assessment of Strategy progress, reference is made to the Smoke-Free Ontario Scientific Advisory Committee (SAC). During 2009 and 2010, the then Ministry of Health Promotion and Sport initiated processes to renew Ontario's Tobacco Control Strategy. The Ministry commissioned SAC to provide evidence-informed scientific and technical advice to support the renewal of the Smoke-Free Ontario Strategy for 2010-15. SAC was comprised of leading tobacco control scientists, researchers and practitioners from across Ontario and sought input from international tobacco control experts and key informants. SAC was tasked with reviewing the latest scientific and practice-based evidence in comprehensive tobacco control. In 2010, SAC delivered its report, Evidence to Guide Action: Comprehensive Tobacco Control in Ontario. Drawing on the SAC report, the Tobacco Strategy Advisory Group (TSAG) produced Building on Our Gains, Taking Action Now: Ontario's Tobacco Control Strategy for 2011-2016.

The Ontario Government has established structures to guide Strategy implementation and continues to take significant steps to strengthen tobacco control. Over the reporting period, the Tobacco Control System Committee, three Task Forces (Protection and Enforcement, Cessation and Youth Prevention) and the Communications and Marketing Advisory Committee helped to guide and coordinate implementation.

Report Structure

This report is organized around the three major goals of the Smoke-Free Ontario Strategy. These goals are based on the strategic direction set by the Steering Committee of the Ontario Tobacco Strategy in 2003 and are consistent with earlier formulations of the Strategy.[1] The ultimate objective of the Strategy is to eliminate tobacco-related illness and death in Ontario.

The three Strategy goals are:

- Prevention: To prevent smoking initiation and regular use among children, youth and young adults
- Cessation: To motivate and support quit attempts by smokers
- Protection: To eliminate Ontarians' exposure to secondhand tobacco smoke

Chapters for each goal area (prevention, cessation and protection) are organized around intervention path logic models. These models provide a simplified visual illustration of how infrastructure and interventions work through paths—identified from the literature—to affect short-, medium- and long-term outcomes. These outcomes have been monitored by OTRU since 1994 and are consistent with the indicators documented in the Ontario Tobacco Strategy Steering Committee's 2005 report,[2] the then Ministry of Health Promotion's 2010 Comprehensive Tobacco Control Guidance Document for boards of health,[3] with the core outcomes identified by the National Advisory Group on Monitoring Tobacco Control[4] and with the Centers for Disease Control and Prevention's Key Outcome Indicators for Evaluating Comprehensive Tobacco Control Programs.[5] Measurement challenges and space constraints in this report do not allow for full analysis of the relationships among all of these components. For a more detailed analysis of these relationships for the cessation goal area, see *Evidence to Inform Smoking Cessation Policymaking in Ontario*.[6]

This report is organized as follows:

- Chapter 1: Introduction
- Chapter 2: Tobacco and Alternative Products
- Chapter 3: Youth Prevention
- Chapter 4: Smoking Cessation
- Chapter 5: Protection
- Chapter 6: Concluding Note
- Appendices

Methodological Approach

This report presents information about Strategy activities and tobacco-control advances using 2015/16 Strategy partner reports (ending March 2016), select policy and program updates to December 2016, and the latest population survey data available including the 2015 CAMH Monitor, 2015 OSDUHS and 2014 CCHS. Note: The 2015 Canadian Community Health Survey was unexpectedly delayed and was not available when this report was released. The 2015 Canadian Tobacco Alcohol and Drug Survey data was also not available for this report.

For each goal area, we describe Strategy infrastructure and interventions (policies, programs and social marketing campaigns), explore the reach and evaluative information about interventions and analyze population-level changes. To further understanding of tobacco-control progress, we include assessments of changes in the social climate and public support for tobacco control measures. The report endeavours to bring evidence to bear on the continued development of comprehensive tobacco control in Ontario.

This report addresses Strategy interventions funded directly, but not exclusively by the Ministry of Health and Long-Term Care. It draws on information from program evaluations, performance reports and administrative data. Evaluative information about policy and program interventions is drawn from evaluation work conducted directly by the Ontario Tobacco Research Unit and by others on behalf of organizations that receive Smoke-Free Ontario Strategy funding. Further information has been gleaned from administrative documents and discussions with service providers and managers. OTRU's Tobacco Informatics Monitoring System (TIMS) provides much of the population-level data analysis.

This report does not draw direct relationships between tobacco control activities and outcomes. The relationship between Strategy interventions and changes in prevention, cessation and protection outcomes is complex. There is substantial evidence that tobacco control interventions affect these outcomes, and there is an expectation of synergistic effects from a comprehensive approach. However, several forces confound these relationships:

- Variations in implementation including reach and dose of interventions
- Unknown time lags between implementation and population-level changes

- Economic and social perturbations and immigration
- Environmental variation—including pro-tobacco influences and contraband activity

Existing indicators for measuring long-term population-level outcomes—such as current smoking or successful quitting—do not always offer sufficient precision to identify small year-over-year changes, which is why we include multi-year data, as well as short- and intermediate-level outcomes. Statements of "significance" between two estimates (such as between years or between groups), including any directional statement (e.g., increase, decrease, higher, lower, etc.), are based on non-overlapping 95% confidence intervals or, in some cases, a formal significance test of two proportions when confidence intervals are overlapping. A comparison of two estimates that appear to differ in absolute magnitude from each other but are not reported as significant should be interpreted with caution. In general, to protect against misclassification of significance due to examining too many comparisons, we only compare the current year with: a) the previous year, b) a 5-year benchmark of 2010 if using 2014 data and 2011 if using 2015 data, and c) a pre-SFO benchmark year of 2005.

To place the current Ontario results in a larger context, we draw on the World Health Organization MPOWER Report and on the report of Ontario's Scientific Advisory Committee. The MPOWER report[7] has defined a set of policies that are consistent with the Framework Convention for Tobacco Control (FCTC) and include:

- Monitor tobacco use and prevention policies
- Protect people from tobacco smoke
- Offer help to quit tobacco use
- Warn about the dangers of tobacco
- Enforce bans on tobacco advertising, promotion and sponsorship
- Raise taxes on tobacco

Specific indicators for MPOWER include monitoring (prevalence data), age-standardized adult daily smoking prevalence, smoke-free policies, compliance with smoke-free policies, cessation programs, health warning on cigarette packages, anti-tobacco mass media campaigns, advertising bans, compliance with advertising bans and taxation. MPOWER indicators reflect the agreement that parties to the Framework Convention for Tobacco Control were able to reach (the

FCTC includes recommendations on many more measures). In this report, MPOWER indicator categories are used as reference points for monitoring progress in Ontario. However, they should be considered with some reservation in that they are meant for a global audience and may be less suited for countries with well-developed tobacco-control strategies.

We also use the 2010 Scientific Advisory Committee (SAC) report as a contextually specific reference point.[8] The SAC report assessed gaps in the Smoke-Free Ontario Strategy and recommended evidence-informed interventions to address these gaps. The report and recommendations underwent scientific review by an international panel of experts. In the Prevention, Cessation and Protection chapters of this report, we compare current Ontario efforts to SAC recommendations directly relevant to these areas. The SAC report also has a chapter on "Confronting the disease vector in tobacco control" that includes recommendations on tobacco industry denormalization, plain packaging, product regulation, retail distribution, marketing and distribution and tobacco industry accountability. Another chapter in the SAC report addressed key system enablers—including leadership, whole of government approach, strong sustained partnerships, comprehensive approach (integrating policy, programs and social marketing), intensity/dose-response, learning system and international action. These essential components for Strategy success are not addressed directly in this report.

In general, the purpose of this report is to support learning among partners that will enhance progress toward the achievement of the prevention, cessation and protection goals of the Smoke-Free Ontario Strategy.

References

[1] O'Connor SC, Cohen JE. *The Ontario Tobacco Strategy: Past, Present, and Future*. OTRU Special Report: Toronto, ON: Ontario Tobacco Research Unit, January 2002.

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[6] Schwartz R, O'Connor S, Minian N, Borland T, Babayan A, Ferrence R, Cohen J, Dubray J. *Evidence to Inform Smoking Cessation Policymaking in Ontario: A Special Report by the Ontario Tobacco Research Unit*. Toronto, ON: Ontario Tobacco Research Unit, July 2010.

[7] World Health Organization. *WHO Report on the Global Tobacco Epidemic, 2008: The MPOWER Package*. Geneva, SZ: WHO, 2008.

[8] Smoke-Free Ontario Scientific Advisory Committee. *Evidence to Guide Action: Comprehensive Tobacco Control in Ontario*. Toronto, ON: Ontario Agency for Health Protection and Promotion, 2010.

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Smoke-Free Ontario Strategy Monitoring Report:

Tobacco and Alternative Products

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Introduction

The long-term goal of the Smoke-Free Ontario (SFO) Strategy is to reduce the morbidity and mortality caused by tobacco use. The burden of tobacco is large. Each year, tobacco claims 13,224 lives in Ontario.[1] Based on 2009 dollars, direct costs to health care due to tobacco was $1.93 billion, with a further $5.8 billon attributed to indirect costs (productivity lost due to illness and premature death in Ontario).[2] Overall, tobacco costs represent 42.4% of total substance abuse costs.[1]

Reducing the overall use of tobacco is one of the main outcome objectives of the SFO Strategy. In recent years, Ontario has set a specific goal of having the lowest rate of smoking in Canada.[3] In addition to smoking cigarettes, Ontarians use a variety of other tobacco products—including cigars, pipes, snuff and chewing tobacco—as well as e-cigarettes and waterpipe shisha, both of which may contain nicotine. With recent announcements at the federal level that cannabis could soon be legalised, the prevalence of this product is of growing interest. This chapter reports on each of these substances.

Overall Tobacco Use

- According to the 2014[i] Canadian Community Health Survey (CCHS), 19.6% of Ontario respondents aged 12 years or over reported current use of tobacco in the previous 30 days (the measure of tobacco includes cigarettes, cigars, pipes, snuff or chewing tobacco; it excludes e-cigarettes and waterpipes because these were not measured in CCHS 2014). This represents 2,268,300 tobacco users (CCHS 2014). This rate is significantly lower than that reported in 2010, when the rate was 22.1% (or 2,465,400 users).
- Among Ontarians 19 years of age or older, 20.9% (or 2,186,400) used some form of tobacco in the previous 30 days (CCHS 2014, data not shown), significantly lower than that reported in 2010 (23.6%, or 2,354,300 users).
- In 2014, 17% of Ontarians aged 12 years or over smoked cigarettes,[ii] 3.8% smoked cigars, 0.8% smoked pipes, 0.6% used chewing tobacco and 0.1% (marginal estimate, interpret with caution) used snuff (CCHS 2014; Note: these estimates include co-use and so do not sum to total tobacco use, or 19.6%; to facilitate comparison, use is restricted to only past 30 days, which is different from the way that current smoking is reported in other sections of this report).

Cigarette Use

Reducing the prevalence of cigarette smoking is central to the Smoke-Free Ontario Strategy. One indicator that underscores progress toward this goal is current smoking, which we define as having smoked in the past 30 days and having smoked 100 cigarettes in one's lifetime.

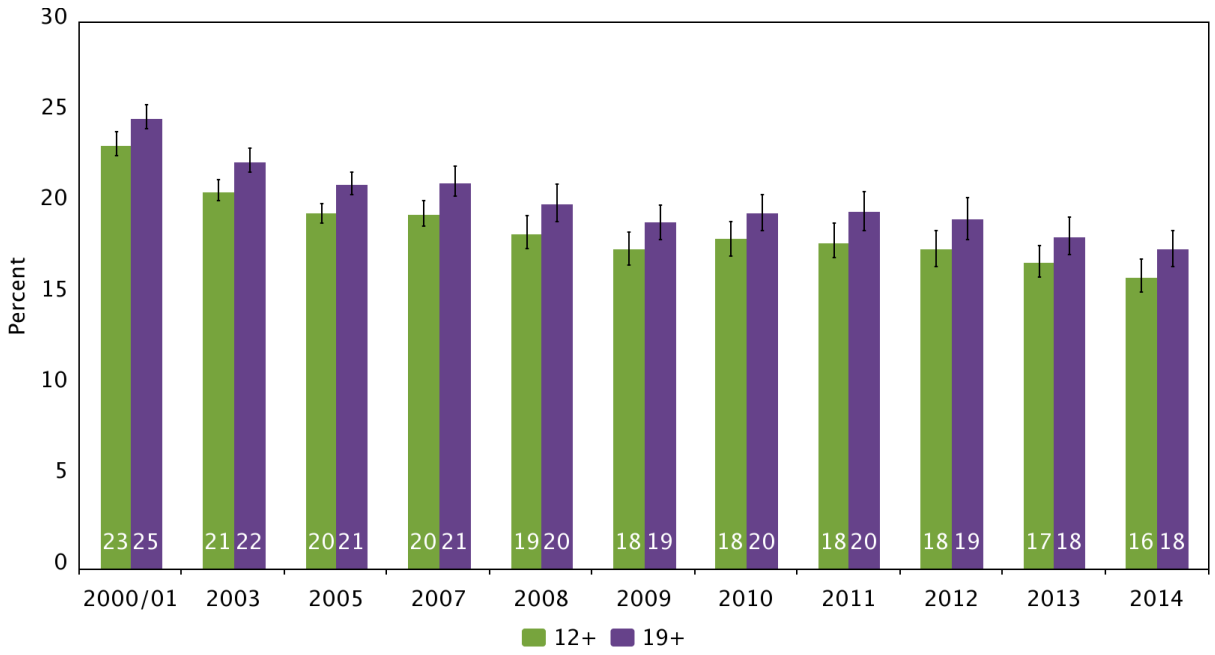
- In 2014, 16.1% of Ontarians aged 12 years or over were current smokers, representing 1,889,000 users. This is a 2.1 percentage point decrease (statistically significant) over the five-year period starting in 2010 (18.2% or 2,043,700 users) (CCHS 2014; Figure 2-1).

[i] The 2015 Canadian Community Health Survey was unexpectedly delayed and was not available when this report was released.

[ii] In the Overall Tobacco Use section, "cigarette use" includes having smoked in the past 30 days but does not include having smoked 100 cigarettes in one's lifetime because lifetime quantity is not measured for the other forms of tobacco listed. In other sections of this report, we report current smoking as 16% (from CCHS 2014), which reflects past 30-day use and having smoked 100 cigarettes in one's lifetime.

- In 2014, 17.6% of Ontarians (1,859,000 users) 19 years of age (the legal age to be sold cigarettes) or older were current smokers, a significant reduction over that reported in 2010 (19.6% or 1,979,700 users) (CCHS 2014; Figure 2-1).
- In 2014, among Ontarians 12 years and older, 20% of males (or 1,167,800) and 12% of females (or 721,200) were current smokers. Among those 19 years of age or older, 22% of males (or 1,147,100) and 13% of females (or 711,900) smoked regularly (data not shown).
- In 2015, 10,380,708,260 cigarettes were sold in Ontario (wholesale sales data) compared to 10,939,627,031 cigarettes sold in the previous five-year benchmark year of 2011,[4] a relative decline of 5.1%. (Note: Annual sales data may be influenced by wholesale shipment dates).
- In 2015, menthol cigarettes comprised 4.2% of all cigarette wholesale sales.

Figure 2-1: Current Smoking (Past 30 Days), Ages 12+ and 19+, Ontario, 2000/01 to 2014



Note: Vertical lines represent 95% confidence intervals. X-axis scale (Year) is not uniform—interpret with caution. Full data table for this graph provided in the Appendix (Table 2A-1)
Source: Canadian Community Health Survey 2000/01, 2003, 2005, 2007-2014.

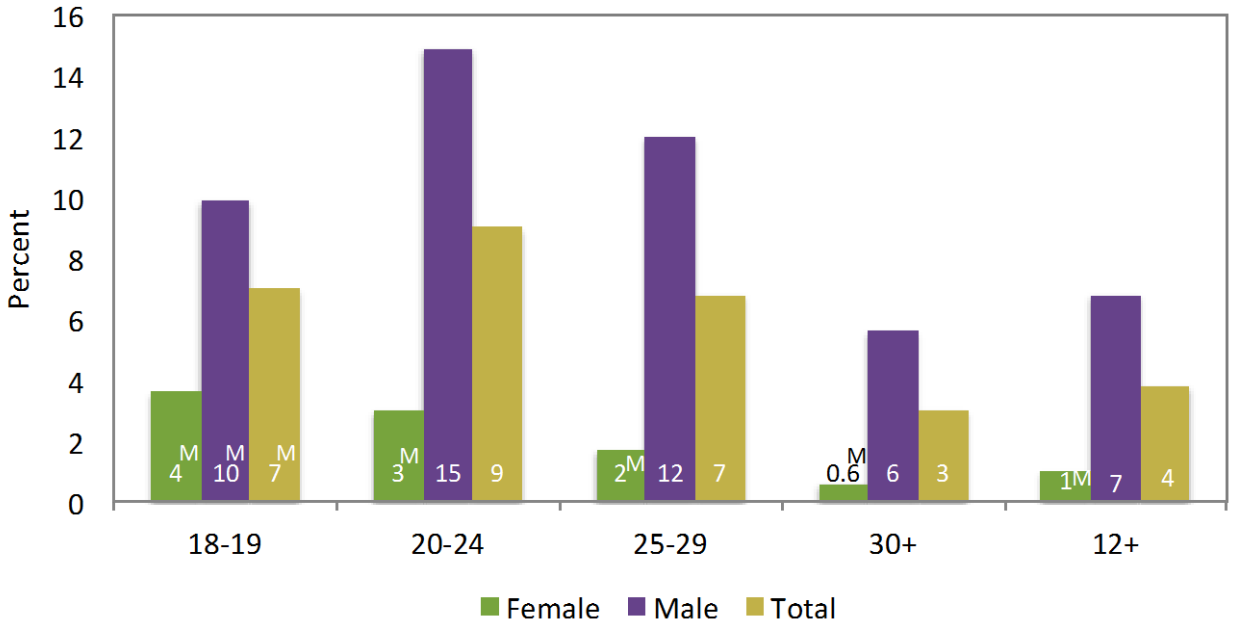
Cigar Use

- In 2014, 3.8% of Ontarians aged 12 years and over (or 444,200 people) had smoked cigars[iii] in the past 30 days, making cigars the second-most prevalent form of tobacco use after cigarettes, not including e-cigarettes and waterpipes (CCHS 2014). The 2014 rate of 3.8% was significantly lower than that observed in 2010 at 5.2% (data not shown).
- In 2014, past 30-day cigar use was significantly higher among males compared to females: 6.8% (or 385,500) of all males aged 12 years and over had smoked cigars in the past 30 days compared to 1% (or 58,800) of females (CCHS 2014; Figure 2-2).
- Young adult males had a significantly higher rate of past 30-day cigar use compared to females (CCHS 2014; Figure 2-2).
- In 2015, Ontario wholesale sales of the total cigar category (little cigars/cigarillos and cigars) relatively fell 4.6% from 2011 sales (146,853,259 in 2011 vs. 140,090,699 in 2015).[iv] (Note: Annual sales data may be influenced by wholesale shipment dates). In 2015, little cigars/cigarillos comprised 8.7% of all cigar sales.[iv]
- In 2015, 82.6% of the Ontario cigar market was flavoured cigars, with menthol comprising 4.15% of all cigar sales.[iv]
- On May 28, 2015, Bill 45 (the Making Healthier Choices Act) received Royal Assent. This Bill prohibits the sale of flavoured tobacco at retail stores in the province, with exceptions. Specifically, regulations consolidated on November 13, 2015 (and in effect as of January 2016) mandated that the Act does not apply to flavouring agents in cigars that impart a flavour or aroma of wine, port, whiskey or rum; nor does it apply to the flavour or aroma of menthol, a regulation that will be revoked in January 1, 2017 thus prohibiting menthol as a flavouring agent.[5]

[iii] These data are from the 2014 Canadian Community Health Survey and are from a question that asks about past 30-day cigar smoking (cigarillo use was not explicitly asked). It is not known whether respondents who smoked cigarillos responded to this question by answering "Yes" or "No". The reported prevalence estimates of cigar use might be an underestimate of all cigar/cigarillo use.

[iv] Health Canada, Personal Communication, December 7, 2016.

Figure 2-2: Cigar Use (Past 30 Days), by Age and Sex, Ontario, 2014



M = Marginal. Interpret with caution: subject to moderate sampling variability.
Source: Canadian Community Health Survey 2014.
Note: Full data table for this graph provided in the Appendix (Table 2A-2).

Smokeless Tobacco Use

- According to CCHS 2014, less than one per cent (0.6%) of Ontarians aged 12 years and over (or 73,800) used chewing tobacco in the past month. This included 0.5% of adults 19 years and older (or 54,000) and 1.8% of youth aged 12 to 18 years old (or 19,800) (Note: both these age estimates are marginal data quality, interpret with caution). Use of snuff results were suppressed due to high sampling variability.
- The overall volume of wholesale sales in smokeless tobacco is low (Table 2-1), with 51,621 kg of sales in 2015.[iv] In 2015, there was a 3% relative decrease in sales compared to 2014 (51,621 vs. 53,244, respectively). The 2015 sales were 12% relatively lower than the five-year benchmark of 2011 (51,621 in 2015 vs. 58,777 in 2011). (Note: Annual sales data may be influenced by wholesale shipment dates)
- In Ontario, recent legislation received Royal Assent on May 28, 2015 (Bill 45 the Making Healthier Choices Act, 2015) that banned the sale of flavoured smokeless products as of January 1, 2016, with a delayed implementation date for menthol-flavoured tobacco products of January 1, 2017.

Table 2-1: Smokeless Tobacco Sales (kg), Ontario 2007 to 2015

Year	Smokeless Tobacco Sales (kgs)
2007	52,253
2008	46,198
2009	52,328
2010	57,439
2011	58,777
2012	64,255
2013	61,826
2014	53,244
2015	51,621

Source: Health Canada.

Use of Other Alternative Products

Electronic Cigarettes

Electronic cigarettes or e-cigarettes—also known as vape pipes, hookah pens and e-hookahs—create an inhaled mist, simulating the act of smoking.

Adults

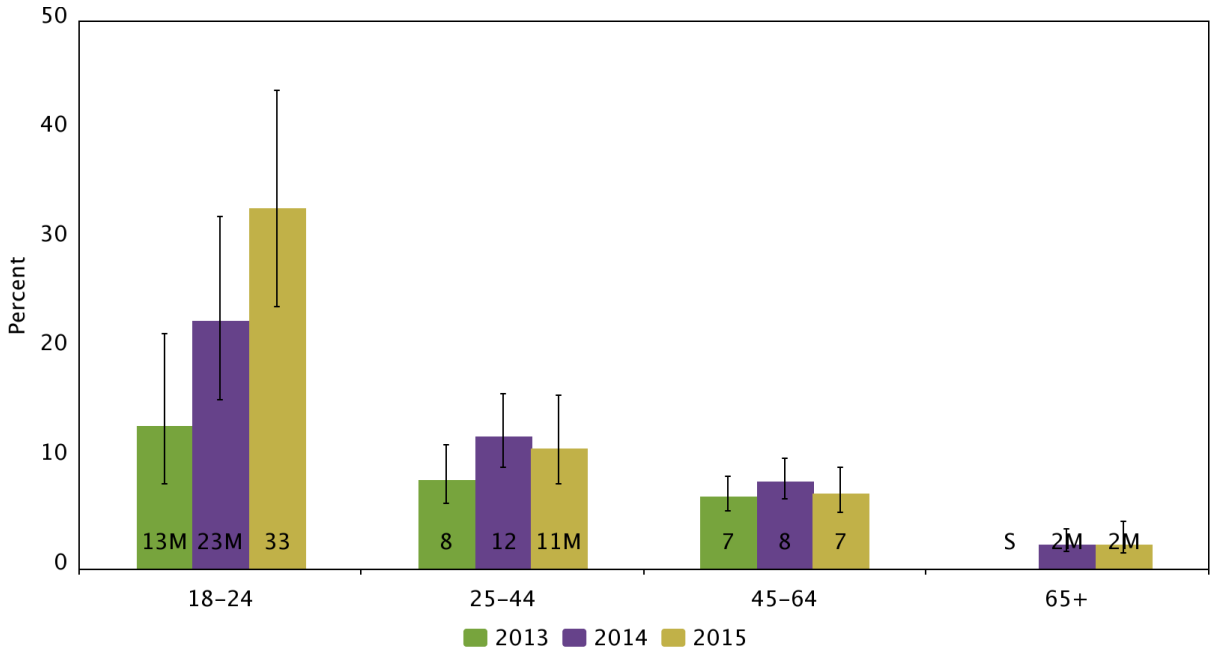
- Among adults 18 years and older, past 30-day use of e-cigarettes was 3%[v] in 2015, unchanged from 2014 (CAMH Monitor 2014, 2015; data not shown).
- In 2015, past-year use of e-cigarettes among adults 18 years and over was 11%, a significant increase over that reported in 2013 (7%; CAMH Monitor, data not shown). This difference was particularly pronounced among 18 to 24 year olds (13% in 2013 vs. 33% in 2015; see Figure 2-3). At 33%, young adults aged 18 to 24 had a significantly higher rate of past-year use of e-cigarettes than all other age groups (Figure 2-3).
- In 2015, lifetime use of e-cigarettes by adults aged 18 and over was 15%, which is not statistically different from that reported in 2014 (12.7%) but is higher than that reported for 2013 (8.7%; CAMH Monitor 2013-2015; data not shown).[vi]
- In 2015, lifetime use of e-cigarettes differed by age: 18 to 24 year olds (38%), 25 to 44 (19%), 45 to 64 (9%) and 65 and over (4%, see Figure 2-4).
- Among 18 to 24 year olds, lifetime use in 2015 (38%) significantly differed from 2013 (15%); among 25 to 44 year olds, lifetime use likewise differed over this period (11% in 2013 and 19% in 2015; see Figure 2-4).
- In Canada, e-cigarettes are not permitted to contain nicotine, yet available evidence suggests that a number of users obtain nicotine liquid for their e-cigarettes. In Ontario, 46% of past year adult users aged 18 and over vaped nicotine in their last e-cigarette (CAMH Monitor 2015, data not shown).

[v] M = Marginal estimate in 2015. Interpret with caution: subject to moderate sampling variability.
[vi] E-cigarette use was not asked in our benchmark year of 2011.

Youth

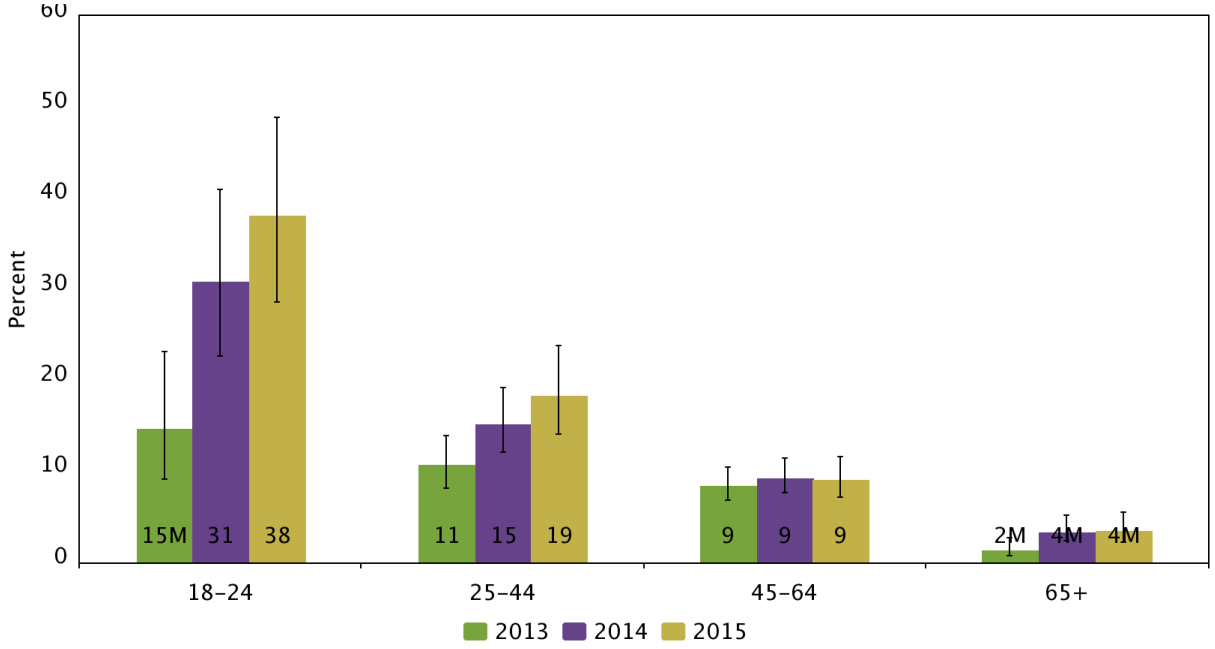
- In 2015, 19% of students in grades 7 to 12 had used e-cigarettes in the past year. Among all past-year users, 6% had used e-cigarettes every day, and 19% of past-year users had used e-cigarettes in the past month (OSDUHS, 2015; data not shown). In 2015, 23% had ever used e-cigarettes.
- Among students in grades 7 to 12, 14% of past-year users vaped e-cigarettes with nicotine, 50% vaped without nicotine, 9% vaped e-cigarettes both ways (i.e., with and without nicotine) and 26% of student were not sure what kind of e-cigarette they vaped.

Figure 2-3: Past-Year Use of an E-Cigarette, by Age, Ontario, 2013 to 2015



Note: M = Marginal. Interpret with caution: subject to moderate sampling variability. S=Suppressed. Results too unreliable to be published due to (unweighted) sample size less than 30 or coefficient of variation greater than 33.3% (extreme sampling variability). Full data table for this graph provided in the Appendix (Table 2A-3).
Source: Centre for Addiction and Mental Health Monitor 2013-2015.

Figure 2-4: Ever Use of an E-Cigarette, by Age, Ontario, 2013 to 2015



Note: M = Marginal. Interpret with caution: subject to moderate sampling variability. Full data table for this graph provided in the Appendix (Table 2A-4).
Source: Centre for Addiction and Mental Health Monitor 2013-2015.

Waterpipe Use

A waterpipe—also known as hookah, narghile, or waterpipe shisha—is a device used to smoke flavoured tobacco as well as nontobacco herbal shisha. The tobacco or herbal ingredients (with or without added nicotine liquid) is heated by charcoal and a water-filled chamber cools the resulting smoke before it is inhaled through a hose and mouthpiece.

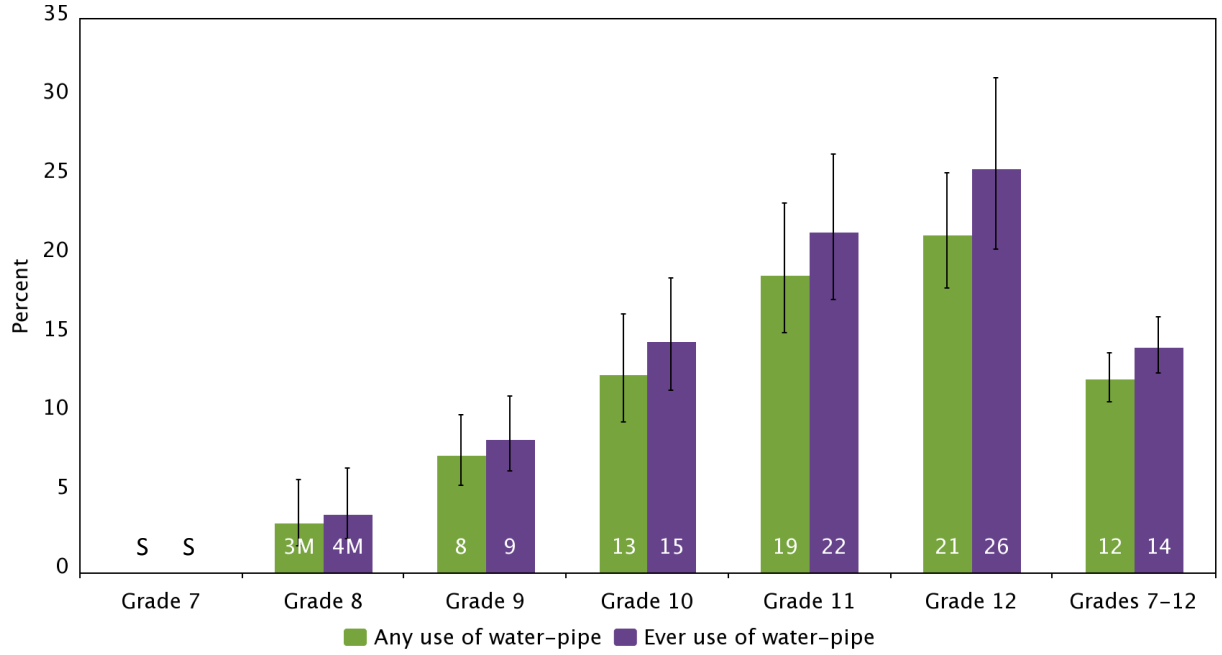
Adults

- In Ontario, 8% of respondents 15 years and older have ever tried a waterpipe to smoke tobacco (Canadian Tobacco, Alcohol and Drugs Survey [CTADS], 2013; data not shown).

Youth

- Among students in Grades 7 to 12 in 2015, 14% (132,400 students) had ever used a waterpipe. Prevalence of ever use varied by grade (Figure 2-5), with rates in Grades 8 and 9 significantly lower than that reported in Grades 10, 11 and 12.
- Among students in Grades 7 to 12, 12% (113,100 students) had used a waterpipe in the past year (including only a few puffs; Figure 2-5), with rates in Grades 8 and 9 significantly lower than that reported in Grades 11 and 12; and Grade 10 lower than that reported for Grade 12.
- Past-year use of waterpipe among students did not differ between 2013 and 2015 (12% vs. 12%).

Figure 2-5: Waterpipe Use, Past Year and Ever Use, by Grade, Ontario, 2015



S = data suppressed due to small sample sizes.
Note: Full data table for this graph provided in the Appendix (Table 2A-5).
Source: Ontario Student Drug Use and Health Survey 2015.

Cannabis Use

Cannabis is also known as marijuana, weed, pot, grass, hashish, hash and hash oil.

Adults

- Among adults aged 18 years or older, 45% have ever used cannabis (CAMH Monitor 2015, data not shown). Ever use of cannabis significantly differed by sex, with 39% of females and 52% of males having used cannabis. Ever use did not statistically differ among 18 to 24 year olds by sex (49% for females vs. 61% for males) but did differ for all other age groups: 25 to 44 (44% for females vs. 60% for males), 45 to 64 (44% for females vs. 53% for males) and 65 and older (18% for females vs. 28% for males).
- Among adults aged 18 years or older, 32% used cannabis in the past year (CAMH Monitor 2015, data not shown). Past-year use of cannabis significantly differed by sex, with 26% of females and 37% of males using cannabis.
- Among adults aged 18 years or older who were past year cannabis users, 31% used cannabis mixed with tobacco at the same time.
- Among adults aged 18 years or older, 1 in 4 (or 25%) used cannabis to manage pain in the past year; 3.5% of adults engaged in medically approved use of cannabis in the past year (CAMH Monitor 2015).

Youth

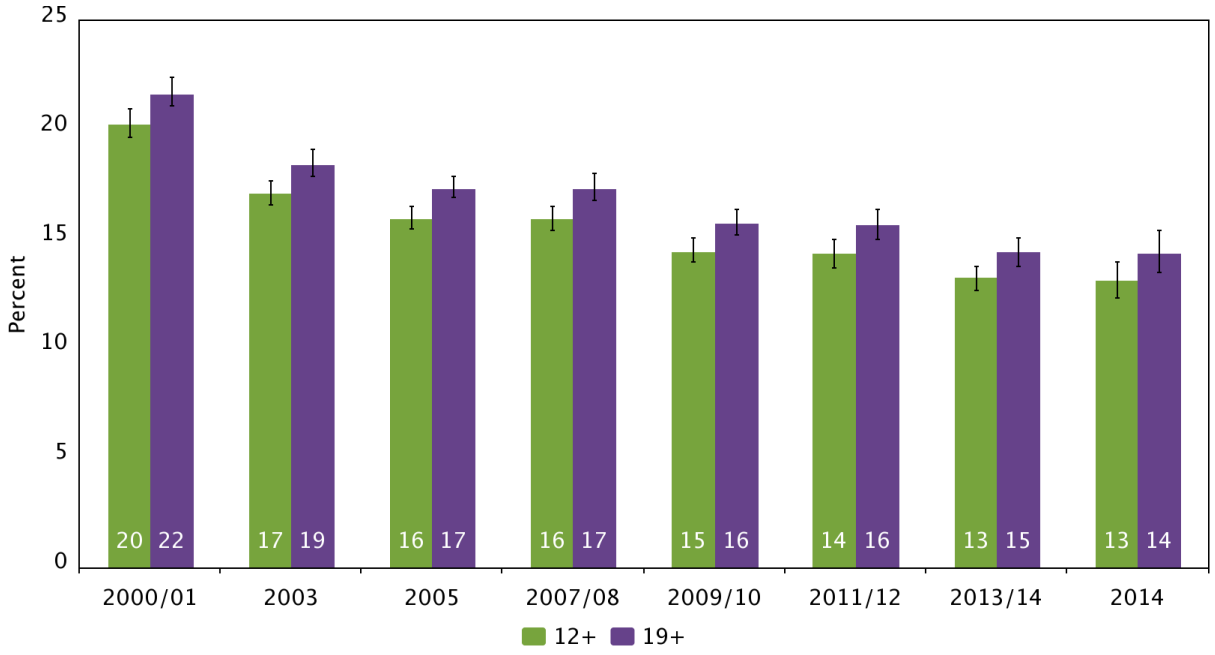
- Among students in grades 7 to 12, lifetime abstinence from cannabis was 76% in 2015 (among students in grades 9 to 12, it was 68%). Abstinence differed by grade: 99% in grade 7, 95% in grade 8, 88% in grade 9, 73% in grade 10, 61% in grade 11 and 58% in grade 12 (OSDUHS 2015). Only 15.5% of past-year cigarette smokers had a lifetime abstinence from cannabis compared to 86% of non-cigarette smokers.
- Among students in grades 7 to 12, 21% used cannabis in the past year (among students in grades 9 to 12, it was 28%; OSDUHS 2015). Reportable levels by grade include: 10% in grade 9, 25% in grade 10, 35% in grade 11 and 37% in grade 12.
- Among students in grades 7 to 12, 14% used cannabis during the past month (among grades 9 to 12, 18% used cannabis). Specifically, past month use of cannabis was 7% in grade 9, 15% in grade 10, 24% in grade 11 and 24% in grade 12 (OSDUHS 2015).

Patterns of Cigarette Use

Daily and Occasional Smoking (Past 30 Days)

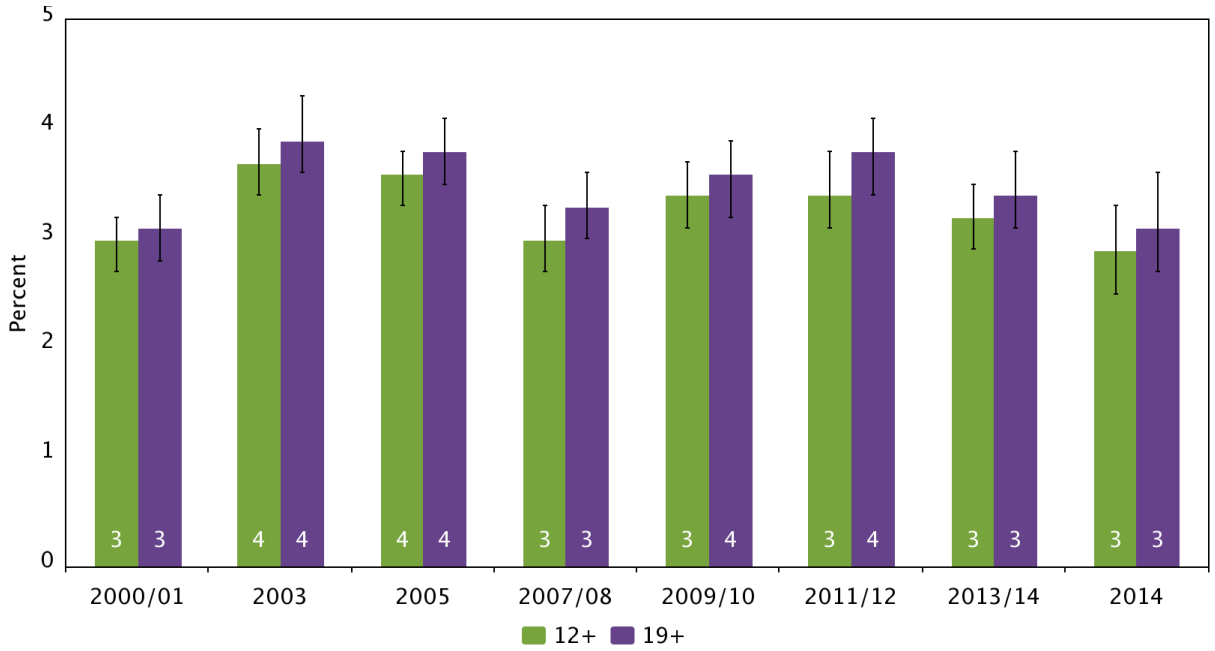
- In 2014, the prevalence of current smoking was 16% among Ontarians 12 years or older and 18% for those 19 years or older (CCHS 2014, Figure 2-1, above). Daily smoking was 13% and 14% respectively for these age groups (Figure 2-6), and past-month occasional smoking was 3% for both age groups (Figure 2-7).
- Over a 10-year period, the rate of daily smoking has significantly declined, but only by three percentage points (among 12+, 16% in 2005 vs. 13% in 2014, respectively; among 19+, 17% in 2005 vs. 14% in 2014, respectively; Figure 2-6). The rate of occasional smoking has remained unchanged in recent years (Figure 2-7).
- In 2014, 82% of all current smokers aged 12 years or older (and 19 years and older) were daily smokers (CCHS data; Figure 2-8), unchanged in recent years.

Figure 2-6: Daily Smoking, Ages 12+ and 19+, Ontario, 2000/01 to 2014



Note: Vertical lines represent 95% confidence intervals. X-axis scale (Year) is not uniform—interpret with caution. Full data table for this graph provided in the Appendix (Table 2A-6).
Source: Canadian Community Health Survey 2000/01, 2003, 2005, 2007-2014.

Figure 2-7: Occasional Smoking (Past 30 Days), Ages 12+ and 19+, Ontario, 2000/01 to 2014



Note: Vertical lines represent 95% confidence intervals. X-axis scale (Year) is not uniform—interpret with caution. Full data table for this graph provided in the Appendix (Table 2A-7).
Source: Canadian Community Health Survey 2000/01, 2003, 2005, 2007-2014.

Figure 2-8: Daily Smoking as a Proportion of Current Smoking, Ages 12+ and 19+, Ontario, 2000/01 to 2014

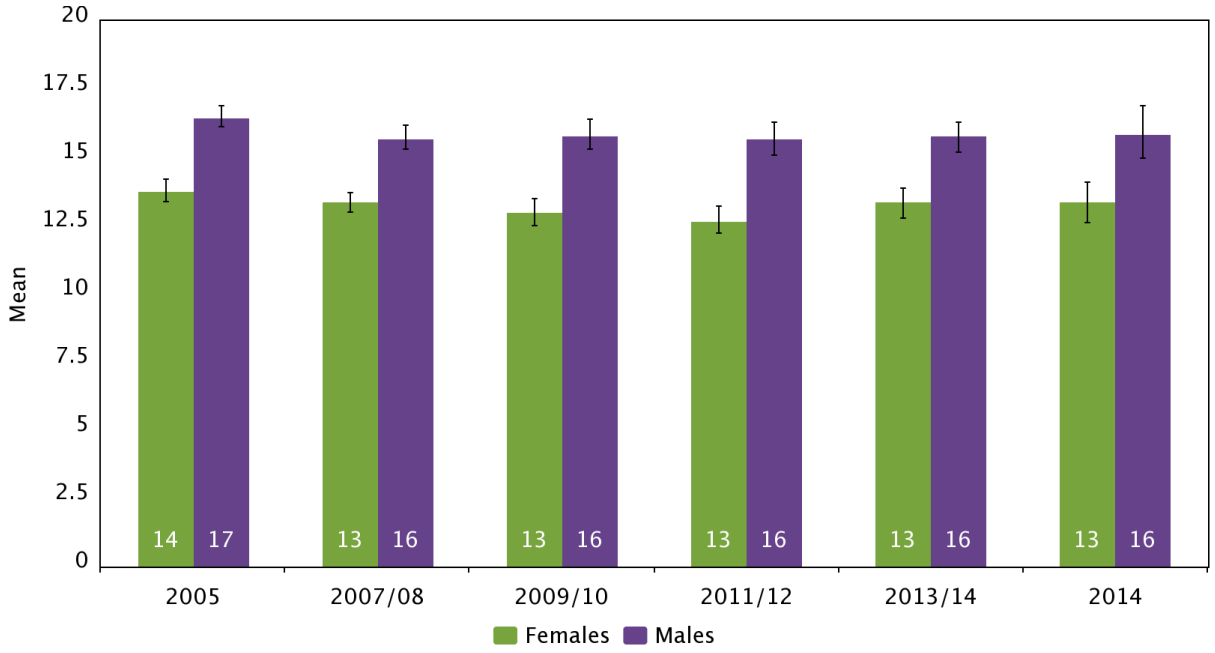
Note: X-axis scale (Year) is not uniform—interpret with caution. Full data table for this graph provided in the Appendix (Table 2A-8).
Source: Canadian Community Health Survey 2000/01, 2003, 2005, 2007-2014.

Level of Use: Cigarettes per Day

Change in the average number of cigarettes smoked (consumption) among current smokers is a commonly used indicator in tobacco control.

- In 2014, the mean number of cigarettes smoked per day by male daily smokers was 16 for those aged 12 years and over (and 19 years and over), a level that has remained unchanged in recent years (Figure 2-9, Note: Aged 12 and over). In contrast, female daily smokers of the same age used 13 cigarettes per day (for both age groups), also unchanged in recent years.
- Over the period 2005 to 2014, males consistently smoked significantly more cigarettes per day than females (Figure 2-9).

Figure 2-9: Mean Number of Cigarettes Smoked Daily (Daily Smokers), by Sex, Ages 12+, Ontario, Select Years, 2005 to 2014



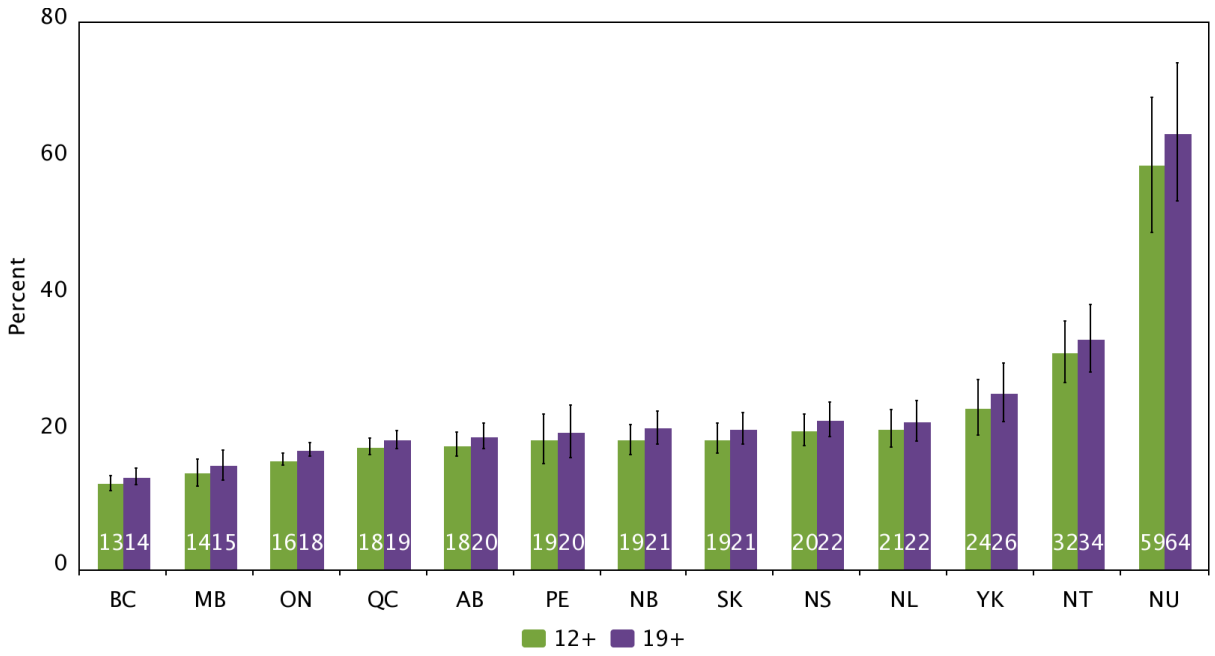
Note: Full data table for this graph provided in the Appendix (Table 2A-9).
Source: Canadian Community Health Survey 2005, 2007/08-2013/14, 2014.

Current Smoking (Past 30 Days), by Location

Federal, Provincial, Territorial

- Across Canada in 2014, past 30-day current smoking among respondents aged 12 and over ranged from 13% in British Columbia to 59% in Nunavut (Territory; Figure 2-10). Current smoking was slightly higher among respondents 19 years of age or older (Figure 2-10).
- The prevalence of current smoking in Ontario was not significantly different from the national average (for 12+, 16% vs. 17% and for 19+, 18% vs. 18%, respectively; Figure 2-10).
- In recent years, Ontario's goal has been to have the lowest rate of smoking in Canada. As shown in Figure 2-10, the rate of current smoking in British Columbia is significantly lower than many areas of Canada including Ontario (for residents aged 12 years and older, as well as 19 years or older).

Figure 2-10: Current Smoking (Past 30 Days), by Jurisdiction, Ages 12+ and 19+, 2014



Note: Vertical lines represent 95% confidence intervals. Ordered lowest to highest, by region. Full data table for this graph provided in the Appendix (Table 2A-10).
Source: Canadian Community Health Survey 2014.

- In 2013/14 combined years, the rate of current smoking among those 12 years and older in Ontario was 16.5% (representing 1,924,900 smokers), significantly lower than that reported in 2009/10 (17.9%). Among health regions, past 30-day current smoking ranged from 10.9% in Peel to 29.1% in Timiskaming (Table 2-2).
- The prevalence of current smoking was 25% or more in three of Ontario's 36 health regions (Brant, Peterborough, Timiskaming; Table 2-2).
- In 2013/14, past-30 day current smoking was significantly lower in Durham, Haldimand-Norfolk and Peel public health regions compared to our SFO baseline year of 2005 (Table 2-2). (Note: Small sample sizes within health regions make it unlikely that modest differences will be found to be statistically significant between any given time period.)

Table 2-2: Current Smoking (Past 30 days), by Public Health Unit, Ages 12+, Ontario, 2005 to 2013/14

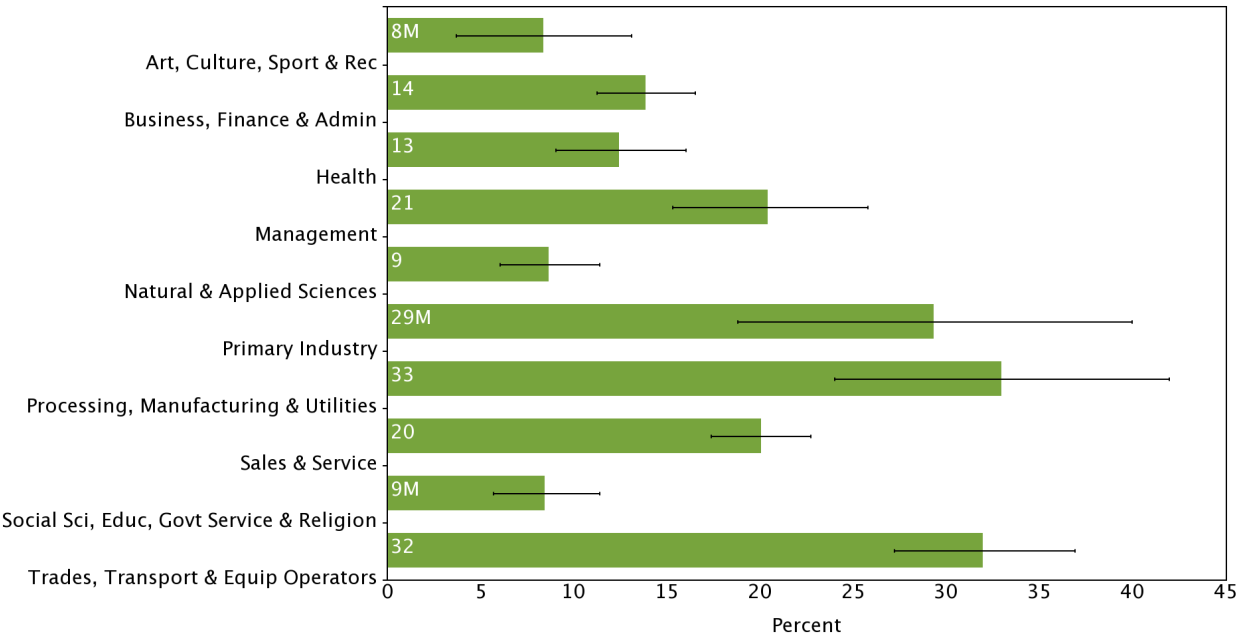
Public Health Unit	Current Smoking[a] (%)				
	2005	2007/08	2009/10	2011/12	2013/14
Peel	17.4*	15.3	14.8	14.2	10.9*
Halton Regional	17.2	17.7	16.1	17.4	13.6
Ottawa	16.9	16.3	14.3	14.1	14.1
Toronto	17.0	16.2	15.0	15.3	14.6
Middlesex-London	16.7	18.9	19.5	18.4	15.0
York Regional	14.5	13.6	15.2	14.7	15.1
Waterloo	18.0	20.4	17.1	19.9	16.0
Durham Region	24.1*	19.7	17.9	20.8	16.3*
Windsor-Essex County	22.6	18.3	21.1	16.1	17.0
North Bay Parry Sound	25.4	25.9	22.0	25.6	18.2
Elgin St. Thomas	25.8	24.7	19.3	25.4	18.2
Grey Bruce	20.0	19.9	17.0	21.5	18.2
Wellington-Dufferin-Guelph	20.4	22.1	17.3	19.4	18.3
Haliburton, Kawartha, Pine Ridge	21.1	23.3	24.0	23.2	18.8
Hamilton	21.7	21.6	18.2	18.9	18.8
Huron County	23.0	22.0	17.1	21.4	19.1
Northwestern (ON)	21.2	23.2	21.6	16.0	19.2
Haldimand-Norfolk	28.7*	24.1	21.8	22.6	19.2*
Simcoe Muskoka	22.4	22.0	23.2	18.6	19.3
Kingston, Frontenac, Lennox & Addington	21.5	23.2	17.0	17.1	19.5
Perth	18.2	16.0	21.5	19.1	19.7
Eastern Ontario	25.9	26.0	24.7	23.7	19.8
Oxford County	22.1	27.7	22.5	26.3	20.2
Niagara Region	21.8	23.8	20.2	17.3	21.4
Lambton	24.4	23.8	22.3	23.5	21.6
Renfrew County	26.8	23.8	24.1	20.7	21.8
Chatham-Kent	23.4	25.8	20.5	24.0	21.8
Sudbury	23.2	24.5	23.7	25.3	22.4
Leeds, Grenville & Lanark	24.0	22.6	24.5	23.2	22.5
Hastings Prince Edward	25.6	26.2	26.2	26.7	22.6
Algoma	22.5	21.7	27.4	22.7	22.6
Thunder Bay	26.1	25.2	23.6	21.7	23.1
Porcupine	28.2	27.7	24.6	27.1	23.8
Brant	24.7	22.0	26.4	22.9	25.0
Peterborough	20.0	21.7	18.5	23.8	25.4
Timiskaming	25.9	22.7	19.2	22.8	29.1
Ontario	19.6*	19.0	17.9[y]	17.8	16.5*[y]

[a] Current smoking defined as past 30-day use and 100 cigarettes in lifetime.
[b] Ordered by 2014 current smoking (lowest to highest).
* Significantly different (lower) from 2013/14 to 2005.
[y] Significantly different from 2013/14 to 2009/10.
Source: Canadian Community Health Survey 2005-2013/14.

Current Smoking (Past 30 Days), by Occupation

- In 2014, current smoking was highest among workers in processing, manufacturing and utilities (33%); trades, transport and equipment operators (32%); and primary industry (29%M), representing a combined total of 461,400 (or 37%) of the 1,253,900 employed smokers in Ontario aged 15 to 75 years (CCHS 2014; Figure 2-11). In recent years, there have been no observed changes in these estimates.
- Sales and service had the greatest number of current smokers, representing 326,200 (20%) of the 1,253,900 employed smokers in Ontario aged 15 to 75 years (Figure 2-11). A group comprising trades, transport and equipment operators was the second largest, at 300,700 (32%).
- Among unemployed Ontarians aged 15 to 75 years, the prevalence of current smoking was 21%, representing 6% (108,600) of the 1.9 million smokers in Ontario aged 15 to 75 years (CCHS 2014; data not shown).

Figure 2-11: Current Smoking (Past 30 Days), by Occupation, Ages 15 to 75, Ontario, 2014

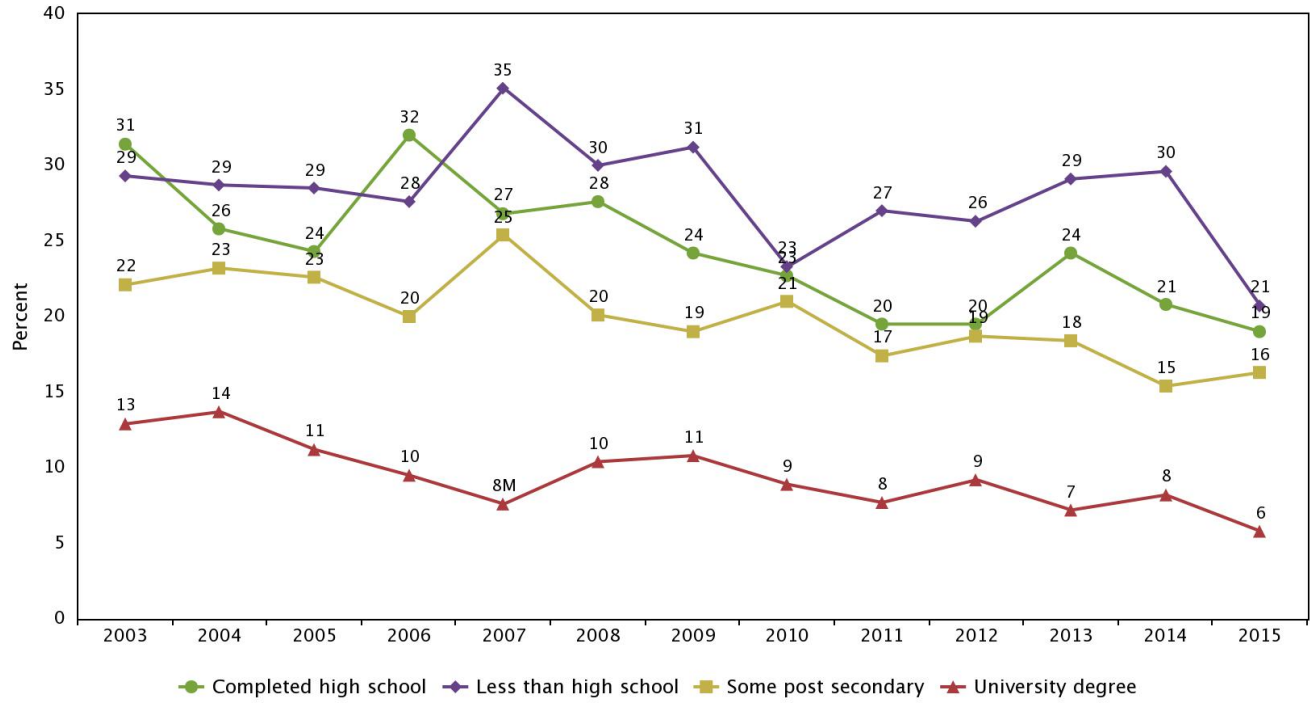


Note: M = Marginal. Interpret with caution: subject to moderate sampling variability. Full data table for this graph provided in the Appendix (Table 2A-11).
Source: Canadian Community Health Survey 2014.

Current Smoking (Past 30 Days), by Educational Attainment

- According to the CAMH Monitor, in 2014, 13%[vii] of Ontarians aged 18 years and over were past-30 day current smokers.[viii] In recent years, Ontarians with a university degree were about two to four times less likely to be current smokers than those with less education (Figure 2-12).
- Over the past few years, levels of smoking have remained relatively steady among all educational attainment levels (Figure 2-12). (Note: The apparent drop from 2014 to 2015 among those with less than a high school education—from 30% to 21%—is not statistically significant but bears close scrutiny in the future.)

Figure 2-12: Current Smoking (Past 30 Days), by Educational Attainment, Ages 18+, Ontario, 2003 and 2015



Note: M = Marginal. Interpret with caution: subject to moderate sampling variability. Full data table for this graph provided in the Appendix (Table 2A-12).
Source: Centre for Addiction and Mental Health Monitor 2003-2015.

[vii] The CAMH Monitor and the Canadian Community Health Survey each present different rates of smoking, albeit these rates are consistent with each other over time. For further information on differences between these two surveys, see Appendix A.
[viii] Past-30 day current smoking on the CAMH Monitor includes only those respondents who have smoked 100 or more cigarettes in their lifetime.

Risk Factors and Social Determinants of Health

The purpose of this section is to characterize current smokers by other recognized behavioural and social risk factors for poor health and other social determinants of health.

The high rate of cigarette smoking for certain sub-populations is of concern from an equity perspective. At the same time, it is notable that the large majority of Ontario's smokers are not represented by these sub-population groups. Table 2-3 lists a number of subpopulations that have a rate of current smoking of 25% or more, as observed in the 2013/14 Canadian Community Health Survey.

Table 2-3: Subpopulations of Current Smokers with a Rate of Smoking of 25% or More, Ontario, 2013/14

Group	Value (%)	Population Estimate (n)
12+ (baseline)	16	1,924,900
18+ (baseline)	18	1,904,500
Income: $5,000 – $9,999 (Age18+)	35	34,300
Income: $10,000 – $14,999 (Age 18+)	34	83,800
Cultural background: Aboriginala (Age 12+)	33.5	96,400
Occupation: Trades (Age 15-75)	32	304,600
Chronic disease: Mood disorder (Age 12+)	31	306,000
Chronic disease: Exceed low-risk drinking (Age 19+)	31	496,100
Homosexual/Bisexual (Age 18-59)	28.5	57,700
Age 25-29, Male	28	131,100
Occupation: Manufacturing (Age 15-75)	28	91,700
Age 35-39, Male	27	115,400
Age 50-54, Male	26	136,300
Age 20-29, Male	26	249,500
Age 45-49, Male	26	123,700
Country of origin: Poland (Age 12+)	26	30,200
Occupation: Primary Industry (Age 15-75)	25	36,600
Country of origin: Portugal (Age 12+)	25	31,300
Age 30-44, Male	25	329,100

[a] Aboriginal excludes First Nations on-reserve. Subpopulations ordered by value from highest to lowest.
Source: Canadian Community Health Survey 2013-2014.

To explore the association of risk factors and social determinants of health with smoking status

(current smoker vs. nonsmoker), we conducted separate analyses for youth (students in grades 7 to 12 using OSDUHS data), young adults (aged 18 to 29 years using CCHS data) and adults (18 years and older using CCHS data). The analysis for youth explored smoking status among sub-populations defined by risky behaviours (e.g., drinking, drug use) and social determinants of health (e.g., income, housing). The analysis for young adults and adults explored smoking status among sub-populations defined by chronic disease risk factors (e.g., obesity, inactive lifestyle) and social determinants of health (e.g., income, food security). Not all the indicators used in the youth analyses were available for young adults/adults and vice versa (variable definitions can be found in Appendix A: Tables A-1 and A-2).

Youth

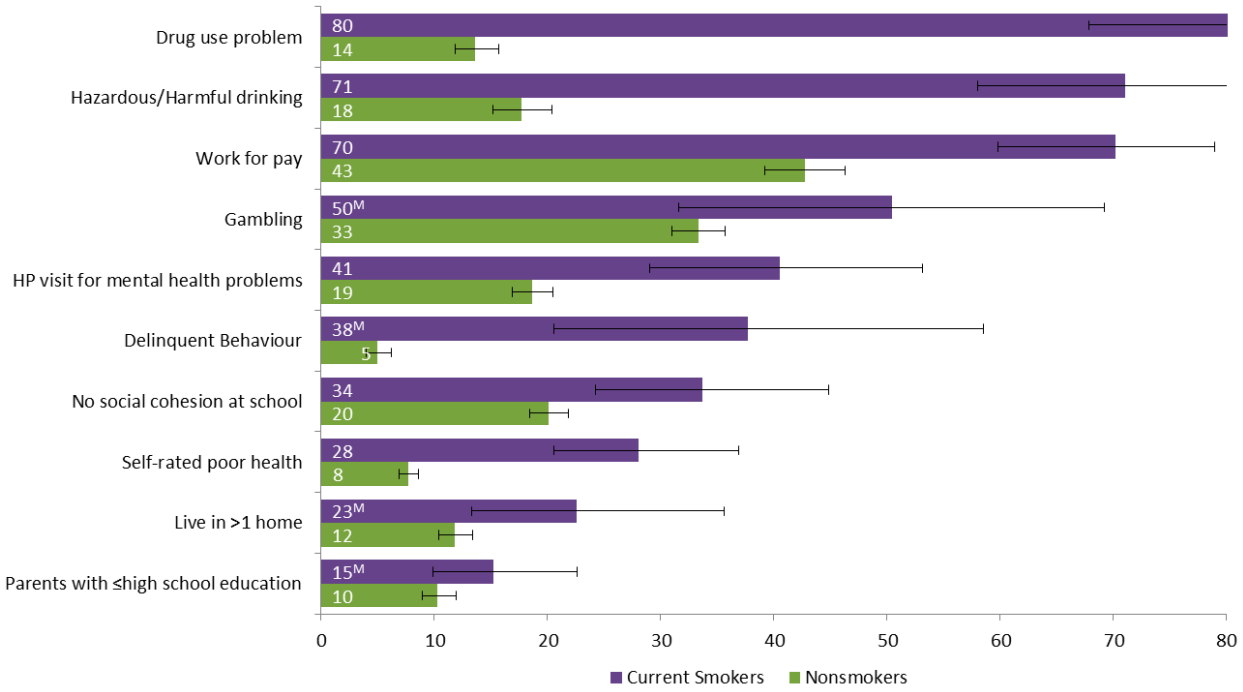
- Among students, current smokers were significantly more likely than nonsmokers to have a drug-use problem (80% vs. 14%), be a hazardous drinker (71% vs. 18%), work for pay (70% vs. 43%),visit a health professional for a mental health problem (41% vs. 19%), engage in delinquent behaviour (38%[M] vs. 5%), feel no social cohesion at school (34% vs. 20%), have poor self-rated health (28% vs. 8%). (M = Marginal. Interpret with caution: Subject to moderate sampling variability.) (Figure 2-13; OSDUHS 2015).

Young Adults

- Among those aged 18 to 29 years, more current smokers than nonsmokers were born in Canada (87% vs. 76%) and identified as White (80% vs. 62%; CCHS 2014, data not shown).
- Current smokers aged 18 to 29 were more likely to be male compared to nonsmokers (67% vs. 47%; CCHS 2014, data not shown).
- More current smokers than nonsmokers aged 18 to 29 engaged in additional behaviours that are risk factors for the development of chronic diseases: unhealthy eating habits (eating less than five fruits or vegetables per day: 77% vs. 62%), drinking in excess of the low-risk drinking guidelines (53% vs. 32%).
- Similarly, a higher proportion of current smokers relative to nonsmokers had been clinically diagnosed with a mood disorder (13% vs. 7%; CCHS 2014, data not shown).

- Similar proportions of current smokers and nonsmokers aged 18 to 29 were inactive in leisure time (42% vs. 40%) or overweight (39% vs. 35%; CCHS 2014, data not shown).
- A greater proportion of current smokers than nonsmokers aged 18 to 29 worked in trades, transport and equipment operator occupations (18% vs. 10%; CCHS 2014, data not shown).
- A higher proportion of current smokers than nonsmokers aged 18 to 29 reported not having a family doctor (20% vs. 12%) or having less than a high school education (13% vs. 6%; CCHS 2014, data not shown).

Figure 2-13: Factors[a] Associated with Smoking Status among Students in Grades 9 to 12, Ontario, 2015

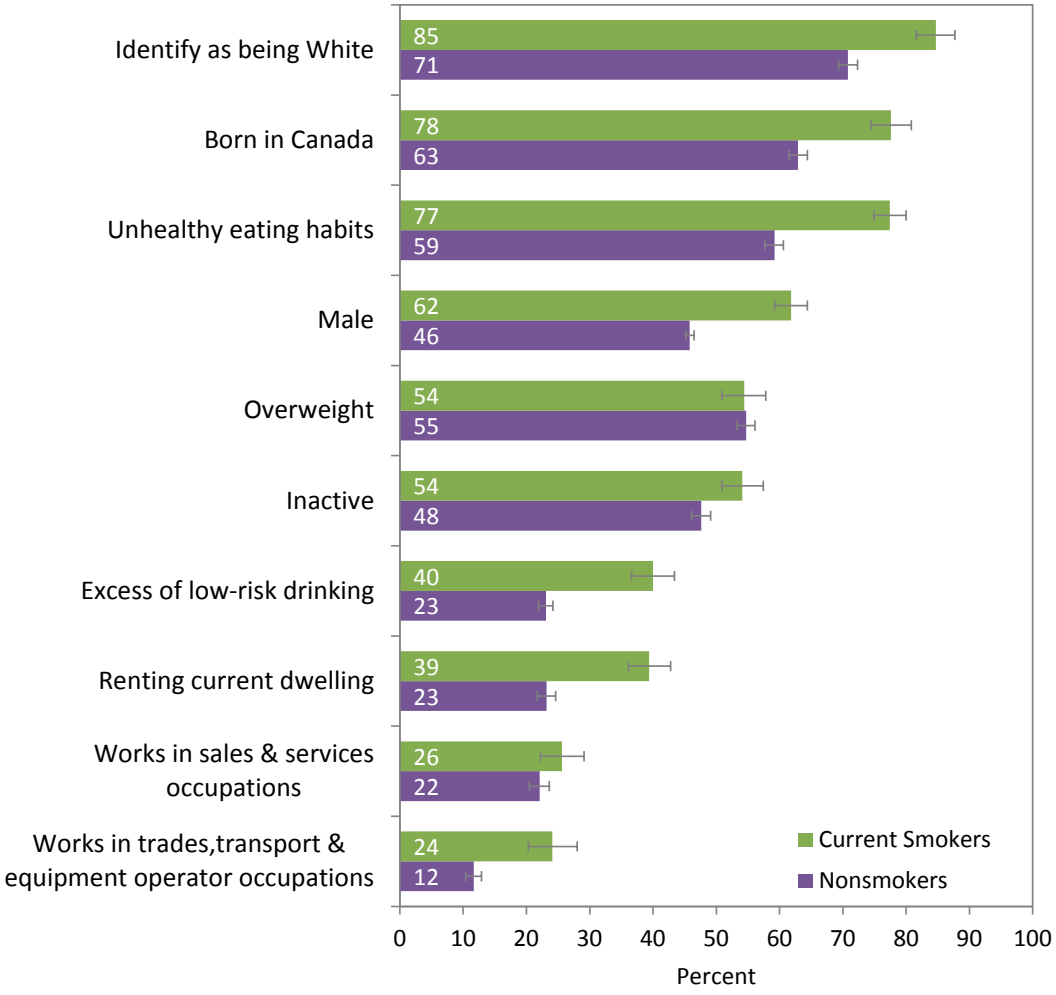


[a] Indicator definitions and information on data analysis provided in Appendix A.
Note: Horizontal lines represent 95% confidence intervals. M = Marginal. Interpret with caution: subject to moderate sampling variability. Full data table for this graph provided in the Appendix (Table 2A-13).
Source: Ontario Student Drug Use and Health Survey 2015.

Adults

- Current smokers aged 18 years and older more frequently identified as White (85%) compared to nonsmokers (71%); they were also more likely to be Canadian born compared to nonsmokers (78% vs. 63%; CCHS 2014; Figure 2-14).
- A greater proportion of current smokers than nonsmokers aged 18 and older engaged in other behaviours that are risk factors for the development of chronic disease: having unhealthy eating habits (eating less than five fruits or vegetables per day: 77% vs. 59%), being inactive in leisure time (54% vs. 48%) and drinking in excess of the low-risk drinking guidelines (40% vs. 23%).
- More young adults aged 18 to 29 who currently smoke reported drinking in excess of low-risk drinking guidelines compared to all adult current smokers (53% vs. 40%; CCHS 2014; data not shown).
- A greater proportion of current smokers than nonsmokers were male (62% vs. 46%).
- Similar proportions of current smokers and nonsmokers reported being overweight (54% vs. 55%).
- More current smokers reported living in a rented dwelling compared to nonsmokers (39% vs. 23%).
- Current smokers more frequently reported working in trades, transportation and equipment operation occupations (24% vs. 12%), whereas a similar proportion of current smokers and nonsmokers reported working in sales and service occupations (26% vs. 22%).
- Compared to nonsmokers, a greater proportion of current smokers reported poorer social determinants of health, such as lower education (less than high school: 17% vs. 11%), not having a regular family doctor (14% vs. 7%), were categorized as severely food insecure (7.1% vs. 1.4%) or were unemployed (6% vs. 4%; CCHS 2014, data not shown).

Figure 2-14: Factors[a] Associated with Smoking Status, 18+, Ontario, 2014



[a] Indicator definitions and information on data analysis provided in Appendix A.
Note: Horizontal lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 2A-14).
Source: Canadian Community Health Survey 2014.

MPOWER Comparison with Ontario: Tobacco Use

Below is a comparison of two MPOWER indicators related to tobacco use (monitoring and smoking prevalence) to the current situation in Ontario (Table 2-4).

Table 2-4: Assessing Tobacco Use: MPOWER Indicators Applied to Ontario

MPOWER Indicator	Highest MPOWER Requirement	Situation in Ontario
Monitoring	Recent, representative and periodic data for both adults and youth.	Meets the requirement for the highest score.
Smoking prevalence	Daily smoking, age-standardized rate, <15%, among 15 years and older.	Daily smoking, age-standardized rate, 13.3% among 12+, 2014. Note: Compared to MPOWER definition, the age used here for Ontario is slightly lower: 15 years vs. 12 years in Ontario, which contributes to a slightly lower rate of smoking.

Scientific Advisory Committee: Overview of Tobacco Use (Tobacco-related Disparities and Equity) Goals and Recommendations

The Scientific Advisory Committee (SAC)[ix] goal for tobacco use including tobacco-related disparities and equity is: To eliminate tobacco-related illness and death in Ontario—rapidly, equitably and cost-effectively; and to reduce tobacco-related disparities—both the unequal distribution of disease and the inequitable application and impact of interventions—while reducing the overall burden of tobacco, as a key strategy for achieving health equity in Ontario.[6] The SAC report includes several recommendations addressing disparities and equity, targeted interventions, community involvement and evaluation and monitoring. Reducing differences in tobacco use between population groups is expected to contribute to improved health equity.

[ix] Upon request of the Ministry of Health Promotion and Sport, a committee of lead tobacco control researchers in Ontario was convened to provide scientific and technical advice and recommendations to the Government of Ontario to inform the comprehensive tobacco control strategy renewal for 2010-2015.

2010 Scientific Advisory Committee Recommendations

Disparities and Equity

SAC Recommendation 8.1: Incorporate equity considerations into the renewal of Ontario's strategy to reduce tobacco use and exposure, and into all future phases of comprehensive tobacco control in Ontario.

Current Status: The Strategy funds the Aboriginal Tobacco Program, an initiative of Cancer Care Ontario, with the aim of preventing and reducing commercial tobacco use among First Nations, Inuit and Métis (FNIM) communities.

Targeted Interventions

SAC Recommendation 8.2: Use a portion of the additional revenue generated by increasing taxation on tobacco to allocate resources to interventions directed at sub-populations that do not optimally benefit from universal interventions.

Current Status: Ontario does not directly earmark funds generated by increased tobacco taxes to targeted interventions. It does, however, fund interventions for select sub-populations, which may not benefit from universal interventions. Although outside the reporting period, in the 2016/17 Ontario budget, $5 million was earmarked for cessation in vulnerable communities.

Counselling and prescriptions for smoking cessation medications through the Ontario Drug Benefit (ODB) program, an initiative that covers seniors, MOHLTC programs (Long-term Care, Home Care and Homes for Special Care), Ministry of Community and Social Services (Ontario Disability Support Program and Ontario Works) and the Trillium Drug Plan. In 2015/16, a total of 24,735 ODB patients received counselling or cessation medication.

The Ministry's 2013/14 Health System Research Fund addressed several targeted populations including Lesbian, Gay, Bisexual, Transgendered and Queer (LGBTQ) youth and young adults and aboriginal communities. The results for the most recent Health System Research Fund have yet to be announced.

Community Involvement

SAC Recommendation 8.3: Involve members of identified priority communities in the conceptualization, design and implementation of interventions that will form Ontario's renewed strategy to reduce tobacco use and exposure in support of reducing tobacco-related inequities.

Current Status: Various public health units involve youth and young adults in conceptualization, design and implementation of interventions.

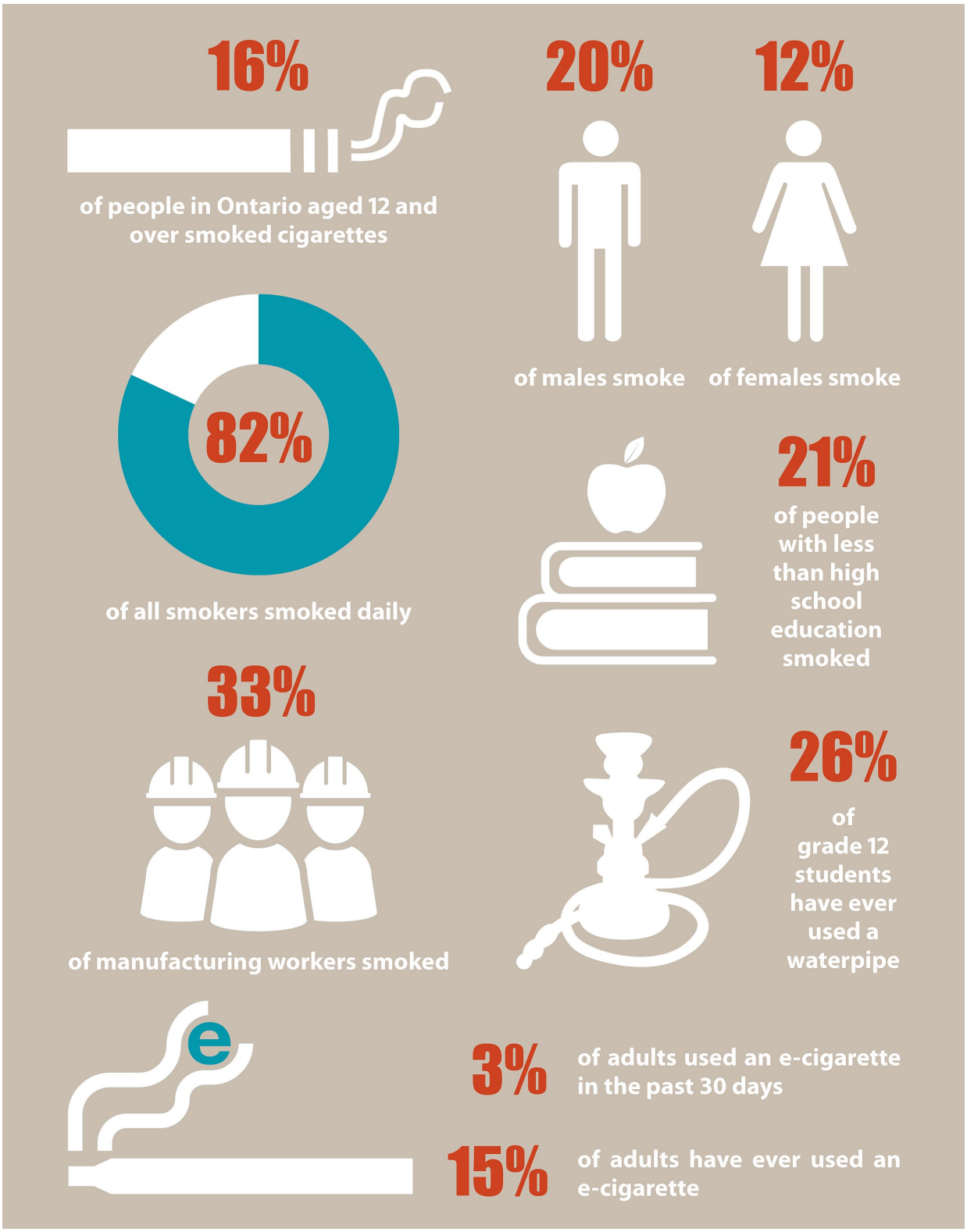
The Strategy funds an Aboriginal Tobacco Program, which works with stakeholders across Ontario to prevent and reduce commercial tobacco use.

Evaluation and Monitoring

SAC Recommendation 8.4: Ensure monitoring and surveillance of tobacco-related disparities and that evaluation of policies and services capture the differential impact on sub-populations.

Current Status: The Strategy funds the Ontario Tobacco Research Unit to conduct monitoring and surveillance initiatives including working with SFO partners on evaluation.

Visual Summary of Key Tobacco Use Indicators



Appendix: Data Tables

Table 2A-1: Current Smoking (Past 30 Days), Ages 12+ and 19+, Ontario, 2000/01 to 2014

Age	Year	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
12+	2000/01	2,305,500	23.3	22.7	24
	2003	2,141,100	20.8	20.2	21.4
	2005	2,069,300	19.6	19	20.1
	2007	2,117,000	19.5	18.8	20.2
	2008	2,035,600	18.5	17.6	19.4
	2009	1,963,200	17.6	16.7	18.5
	2010	2,043,700	18.2	17.2	19.1
	2011	2,053,200	18	17.1	19
	2012	2,027,000	17.6	16.6	18.6
	2013	1,963,800	16.9	16	17.8
	2014	1,889,000	16.1	15.2	17
19+	2000/01	2,183,400	24.8	24.2	25.5
	2003	2,049,500	22.4	21.8	23.1
	2005	1,989,900	21.2	20.6	21.8
	2007	2,059,100	21.3	20.5	22.1
	2008	1,976,600	20.1	19.1	21.1
	2009	1,897,800	19.1	18.1	20
	2010	1,979,700	19.6	18.6	20.6
	2011	2,015,700	19.7	18.6	20.7
	2012	1,993,500	19.3	18.1	20.4
	2013	1,923,100	18.3	17.3	19.3
	2014	1,859,000	17.6	16.6	18.6

Note: Data table is for Figure 2-1.
Source: Canadian Community Health Survey 2000/01, 2003, 2005, 2007-2014.

Table 2A-2: Cigar Use (Past 30 Days), by Age and Sex, Ontario, 2014

	Age				
Sex	**18-19**	**20-24**	**25-29**	**30+**	**12+**
Female	4[M]	3[M]	2[M]	0.6[M]	1[M]
Male	10[M]	15	12	6	7
Total	7[M]	9	7	3	4

M = Marginal. Interpret with caution: subject to moderate sampling variability.
Note: Data table is for Figure 2-2.
Source: Canadian Community Health Survey 2014.

Table 2A-3: Past-Year Use of an E-Cigarette, Age, Ontario, 2013 and 2015

Year	Group	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2013	18-24	157,100	13.2 M	7.8	21.5
	25-44	276,700	8.3	6	11.3
	45-64	243,400	6.7	5.3	8.5
	65+		S		
2014	18-24	268,300	22.8 M	15.5	32.2
	25-44	404,600	12.2	9.3	16
	45-64	290,900	8.1	6.4	10.1
	65+	44,200	2.4 M	1.6	3.7
2015	18-24	427,700	33.1	24	43.7
	25-44	374,700	11.1 M	7.7	15.8
	45-64	250,400	7	5.2	9.3
	65+	44,500	2.4 M	1.4	4.3

Note: M = Marginal. Interpret with caution: subject to moderate sampling variability. S=Suppressed. Results too unreliable to be published due to (unweighted) sample size less than 30 or coefficient of variation greater than 33.3% (extreme sampling variability). Data table is for Figure 2-3.
Source: Centre for Addiction and Mental Health Monitor 2013-2015.

Table 2A-4: Ever Use of an E-Cigarette, Age, Ontario, 2013 and 2015

Year	Age	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2013	18-24	175,600	14.8 M	9.1	23.2
	25-44	359,100	10.8	8.2	14
	45-64	310,400	8.6	6.9	10.5
	65+	28,000	1.5 M	0.8	2.7
2014	18-24	365,100	31	22.6	40.9
	25-44	504,800	15.3	12.1	19.2
	45-64	339,700	9.4	7.7	11.5
	65+	64,900	3.5 M	2.4	5.2
2015	18-24	493,300	38.2	28.6	48.8
	25-44	623,100	18.5	14.1	23.8
	45-64	327,900	9.2	7.2	11.7
	65+	64,700	3.6 M	2.3	5.6

Note: M = Marginal. Interpret with caution: subject to moderate sampling variability. Data table is for Figure 2-4.
Source: Centre for Addiction and Mental Health Monitor 2013-2015.

Table 2A-5: Waterpipe Use, Past Year and Ever Use, by Grade, Ontario, 2015

Primary Indicator	Grade	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Any use of water-pipe (past year)	Grade 7		S		
	Grade 8	3,800	3.2 [M]	1.7	5.9
	Grade 9	11,200	7.5	5.5	10
	Grades 7-12	113,100	12.3	10.8	13.9
	Grade 10	19,500	12.6	9.5	16.4
	Grade 11	30,700	18.9	15.2	23.4
	Grade 12	47,300	21.4	18	25.3
Ever use of water-pipe	Grade 7		S		
	Grade 8	4,500	3.7 [M]	2.1	6.6
	Grade 9	12,700	8.5	6.4	11.2
	Grades 7-12	132,400	14.3	12.6	16.2
	Grade 10	22,800	14.7	11.5	18.6
	Grade 11	35,000	21.6	17.3	26.5
	Grade 12	56,500	25.6	20.5	31.3

S = data suppressed due to small sample sizes.
Note: Data table is for Figure 2-5.
Source: Ontario Student Drug Use and Health Survey 2015.

Table 2A-6: Daily Smoking, Ages 12+ and 19+, Ontario, 2000/01 to 2014

Year	Age	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2000/01	12+	2,009,700	20.3	19.7	21
	19+	1,908,500	21.7	21.1	22.4
2003	12+	1,763,100	17.2	16.6	17.7
	19+	1,689,400	18.5	17.9	19.1
2005	12+	1,693,400	16	15.5	16.5
	19+	1,635,900	17.4	16.9	17.9
2007/08	12+	1,748,700	16	15.4	16.5
	19+	1,699,200	17.4	16.8	18
2009/10	12+	1,627,200	14.5	14	15.1
	19+	1,581,700	15.8	15.2	16.4
2011/12	12+	1,646,100	14.4	13.7	15
	19+	1,616,700	15.7	15	16.4
2013/14	12+	1,548,500	13.3	12.7	13.8
	19+	1,526,200	14.5	13.8	15.1
2014	12+	1,545,600	13.2	12.3	14
	19+	1,528,000	14.4	13.5	15.4

Note: Data table is for Figure 2-6.
Source: Canadian Community Health Survey 2000/01, 2003, 2005, 2007-2014.

Table 2A-7: Occasional Smoking (Past 30 Days), Ages 12+ and 19+, Ontario, 2000/01 to 2014

Year	Age	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2000/01	12+	295,800	3	2.7	3.2
	19+	274,900	3.1	2.8	3.4
2003	12+	378,000	3.7	3.4	4
	19+	360,000	3.9	3.6	4.3
2005	12+	375,900	3.6	3.3	3.8
	19+	354,000	3.8	3.5	4.1
2007/08	12+	327,000	3	2.7	3.3
	19+	318,200	3.3	3	3.6
2009/10	12+	375,600	3.4	3.1	3.7
	19+	356,500	3.6	3.2	3.9
2011/12	12+	394,400	3.4	3.1	3.8
	19+	388,500	3.8	3.4	4.1
2013/14	12+	376,400	3.2	2.9	3.5
	19+	363,200	3.4	3.1	3.8
2014	12+	343,300	2.9	2.5	3.3
	19+	331,000	3.1	2.7	3.6

Note: Data table is for Figure 2-7.
Source: Canadian Community Health Survey 2000/01, 2003, 2005, 2007-2014.

Table 2A-8: Daily Smoking as a Proportion of Current Smoking, Ages 12+ and 19+, Ontario, 2000/01 to 2014

Year	Age	Value (%)
2000/01	12+	87
	19+	88
2003	12+	83
	19+	83
2005	12+	82
	19+	82
2007/08	12+	84
	19+	84
2009/10	12+	81
	19+	82
2011/12	12+	81
	19+	81
2013/14	12+	81
	19+	81
2014	12+	82
	19+	82

Note: Data table is for Figure 2-8.
Source: Canadian Community Health Survey 2000/01, 2003, 2005, 2007-2014.

Table 2A-9: Mean Number of Cigarettes Smoked Daily (Daily Smokers), by Sex, Ages 12+, Ontario, Select Years, 2005 to 2014

Year	Sex	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2005	Females	10,000,500	13.8	13.4	14.2
	Males	15,214,600	16.5	16.1	16.9
2007/08	Females	9,824,100	13.4	13	13.7
	Males	15,229,800	15.7	15.3	16.2
2009/10	Females	8,712,500	13	12.5	13.5
	Males	14,850,700	15.8	15.3	16.4
2011/12	Females	8,527,100	12.7	12.2	13.2
	Males	14,829,200	15.7	15.1	16.3
2013/14	Females	627,500	13.4	12.8	13.9
	Males	891,600	15.8	15.2	16.3
2014	Females	589,100	13.4	12.6	14.1
	Males	927,900	15.9	15	16.9

Note: Data table is for Figure 2-9.
Source: Canadian Community Health Survey 2005, 2007/08-2013/14, 2014.

Table 2A-10: Current Smoking (Past 30 Days), by Jurisdiction, Ages 12+ and 19+, 2014

Geography	Age	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Alberta	12+	626,200	18.3	16.6	20.1
	19+	603,800	19.6	17.7	21.4
British Columbia	12+	502,300	12.7	11.5	13.8
	19+	493,800	13.7	12.4	14.9
Manitoba	12+	144,700	14.2	12.2	16.2
	19+	139,800	15.3	13.1	17.5
New Brunswick	12+	123,100	19.1	16.9	21.3
	19+	121,600	20.8	18.3	23.2
Newfoundland and Labrador	12+	95,000	20.7	18	23.4
	19+	92,000	21.8	18.9	24.7
Northwest Territories	12+	11,300	31.9	27.4	36.3
	19+	10,600	33.9	29	38.9
Nova Scotia	12+	165,600	20.4	18.1	22.8
	19+	162,300	21.9	19.4	24.5
Nunavut	12+	16,000	59.3	49.3	69.2
	19+	14,300	64	53.9	74.1
Ontario	12+	1,889,000	16.1	15.2	17
	19+	1,859,000	17.6	16.6	18.6
Prince Edward Island	12+	23,900	19.1	15.5	22.7
	19+	22,900	20.3	16.4	24.1
Quebec	12+	1,267,800	18	16.8	19.2
	19+	1,235,700	19.1	17.8	20.4
Saskatchewan	12+	170,200	19.2	17	21.4
	19+	165,400	20.7	18.3	23
Yukon	12+	7,400	23.7	19.7	27.8
	19+	7,300	26	21.6	30.3
Canada	12+	5,042,300	16.7	16.2	17.3
	19+	4,928,500	18	17.4	18.6

Note: Data table is for Figure 2-10.
Source: Canadian Community Health Survey 2014.

Table 2A-11: Current Smoking (Past 30 Days), by Occupation, Ages 15 to 75, Ontario, 2014

Group	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Art, Culture, Sport & Rec	23,400	8.4 [M]	3.7	13.1
Business, Finance & Admin	172,700	13.9	11.2	16.5
Health	49,700	12.5	9	16
Management	112,400	20.5	15.3	25.8
Natural & Applied Sciences	47,100	8.7	6	11.4
Primary Industry	47,700	29.4 [M]	18.8	40
Processing, Manufacturing & Utilities	113,000	33	24	42
Sales & Service	326,200	20.1	17.4	22.7
Social Sci, Educ, Govt Service & Religion	61,000	8.5 [M]	5.7	11.4
Trades, Transport & Equip Operators	300,700	32	27.2	36.9

Note: M = Marginal. Interpret with caution: subject to moderate sampling variability. Data table is for Figure 2-11.
Source: Canadian Community Health Survey 2014.

Table 2A-12: Current Smoking (Past 30 Days), by Educational Attainment, Ages 18+, Ontario, 2003 to 2015

Year	Group	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2003	University degree		12.9	10	16.4
	Some post-secondary		22.1	19	25.5
	Less than high school		29.3	24.4	34.7
	Completed high school		31.4	27.2	35.9
2004	University degree		13.7	10.9	17.2
	Some post-secondary		23.2	20	26.7
	Completed high school		25.8	21.9	30
	Less than high school		28.7	23.7	34.3
2005	University degree		11.2	8.8	14.1
	Some post-secondary		22.6	19.4	26.1
	Completed high school		24.3	20.6	28.5
	Less than high school		28.5	23.1	34.6
2006	University degree		9.5	7	12.6
	Some post-secondary		20	16.7	23.8
	Less than high school		27.6	21.6	34.4
	Completed high school		32	27	37.5
2007	University degree		7.6 [M]	5.1	11.1
	Some post-secondary		25.4	21.6	29.5
	Completed high school		26.8	22.4	31.8
	Less than high school		35.1	28.4	42.4

Year	Group	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2008	University degree		10.4	7.8	13.7
	Some post-secondary		20.1	16.7	24.1
	Completed high school		27.6	22.7	33.1
	Less than high school		30	23.4	37.4
2009	University degree		10.8	8	14.4
	Some post-secondary		19	15.7	22.8
	Completed high school		24.2	19.6	29.6
	Less than high school		31.2	24.4	38.9
2010	University degree		8.9	6.9	11.4
	Some post-secondary		21	18.1	24.2
	Completed high school		22.7	18.9	27
	Less than high school		23.3	18.1	29.4
2011	University degree		7.7	5.9	9.9
	Some post-secondary		17.4	14.7	20.5
	Completed high school		19.5	16.1	23.5
	Less than high school		27	21	34
2012	University degree	295,400	9.2	7.1	11.8
	Some post-secondary	706,600	18.7	16	21.8
	Completed high school	410,700	19.5	16	23.7
	Less than high school	243,700	26.3	20.6	33
2013	University degree	240,300	7.2	5.4	9.4
	Some post-secondary	661,900	18.4	15.4	21.7
	Completed high school	510,900	24.2	19.8	29.1
	Less than high school	281,500	29.1	22.6	36.6
2014	University degree	299,600	8.2	5.9	11.2
	Some post-secondary	535,300	15.4	12.8	18.5
	Completed high school	430,400	20.8	16.5	25.8
	Less than high school	239,800	29.6	23	37.2
2015	University degree	216,200	5.8	4.6	7.3
	Some post-secondary	606,900	16.3	14	18.9
	Completed high school	401,300	19	15.9	22.6
	Less than high school	108,300	20.7	16	26.4

Note: M = Marginal. Interpret with caution: subject to moderate sampling variability. Data table is for Figure 2-12.
Source: Centre for Addiction and Mental Health Monitor 2003-2015.

Table 2A-13: Factors Associated with Smoking Status among Students in Grades 9 to 12, Ontario, 2015

Risk Factors	Current Smokers (%)	Nonsmokers (%)
Parents with ≤high school education	15.2[M]	10.3
Live in >1 home	22.6[M]	11.8
Self-rated poor health	28.0	7.7
No social cohesion at school	33.7	20.1
Delinquent Behaviour	37.7[M]	5.0
HP visit for mental health problems	40.5	18.6
Gambling	50.4[M]	33.3
Work for pay	70.2	42.7
Hazardous/Harmful drinking	71.0	17.7
Drug use problem	80.1	13.6

Note: Indicator definitions and information on data analysis provided in Appendix A. M = Marginal. Interpret with caution: subject to moderate sampling variability. Data table is for Figure 2-13.
Source: Ontario Student Drug Use and Health Survey 2015.

Table 2A-14: Factors Associated with Smoking Status, 18+, Ontario, 2014

Occupation	Current Smokers (%)	Nonsmokers (%)
Works in trades, transport & equipment operator occupations	24.1	11.7
Works in sales & services occupations	25.6	22.1
Renting current dwelling	39.4	23.2
Excess of low-risk drinking	40	23.1
Inactive	54.1	47.6
Overweight	54.4	54.7
Male	61.8	45.8
Unhealthy eating habits	77.4	59.2
Born in Canada	77.6	62.9
Identify as being White	84.7	70.8

Note: Data table is for Figure 2-14.
Source: Canadian Community Health Survey 2014.

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THE ONTARIO TOBACCO RESEARCH UNIT
UNITÉ DE RECHERCHE SUR LE TABAC DE L'ONTARIO

Generating knowledge for public health

Smoke-Free Ontario Strategy Monitoring Report:

Youth Prevention

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Prevention: Smoke-Free Ontario Strategy Components

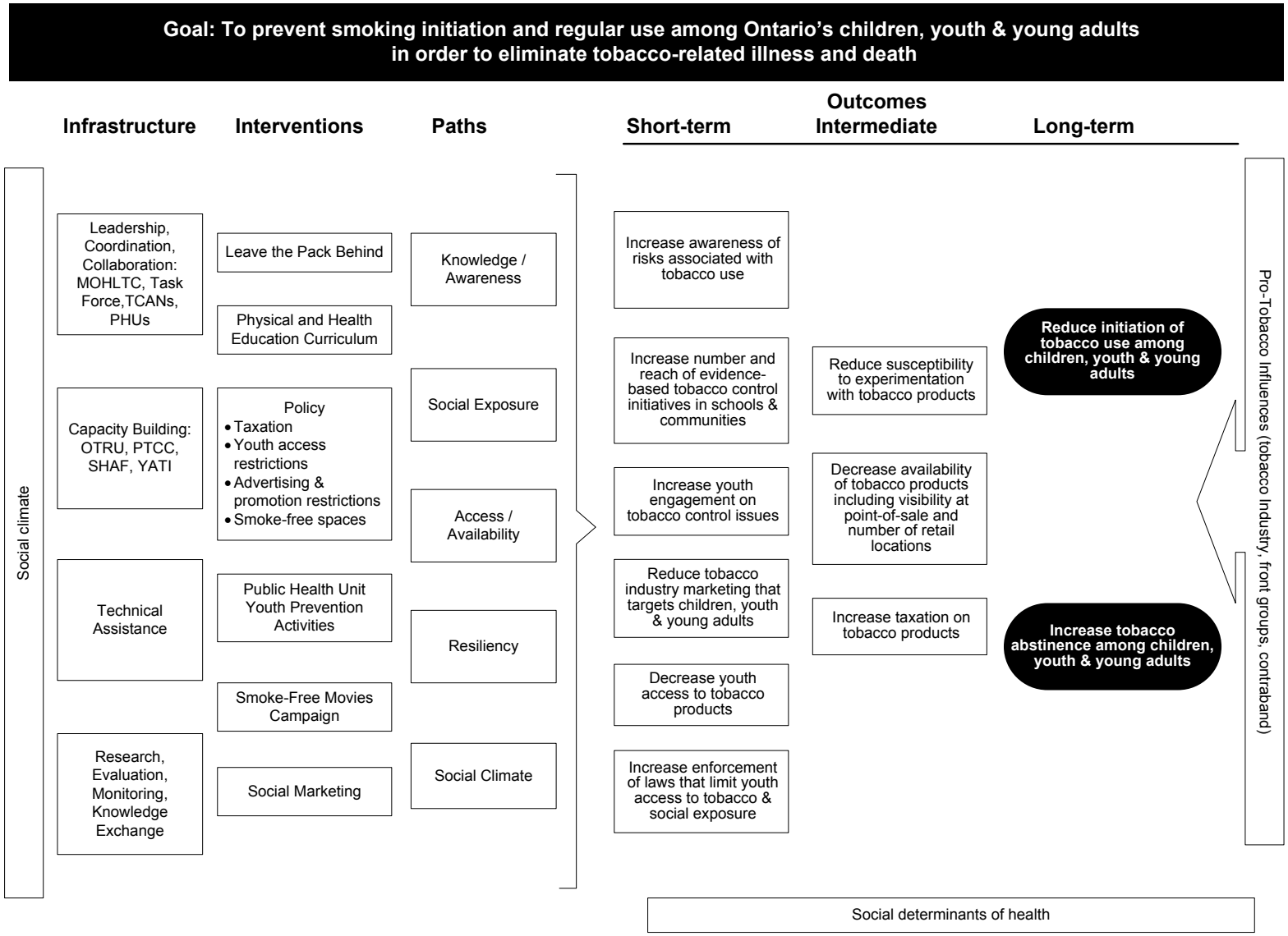
A comprehensive approach is required to prevent and reduce the prevalence of tobacco use among youth because of the complexity of factors that determine smoking initiation in this population.[1] Such an approach includes building capacity for the implementation of various interventions, such as federal and provincial policies, as well as provincial and regional public health programming. These interventions seek to prevent use through a number of pathways such as:

- Limiting social exposure to tobacco use among youth
- Decreasing access and availability of tobacco products
- Increasing knowledge of the harmful effects of tobacco use
- Increasing youth resiliency to make healthy choices and resist tobacco use initiation

In Ontario, the prevention component of the Smoke-Free Ontario Strategy is the main avenue by which progress toward these pathways/desired goals is expected to be achieved (Figure 3-1).

In this chapter, we provide an overview of current infrastructure, policy measures and prevention-related interventions in Ontario, which seek to prevent tobacco use among youth. We follow with an examination of progress toward prevention objectives at the population level.

Figure 3-1: Prevention Path Logic Model



Prevention Infrastructure

To ensure success, the prevention system has been designed to build capacity, provide technical assistance and offer research and evaluation support to key stakeholders—including public health unit staff, educators and service providers—and to deliver evidence-based programs, services and policies to the public. This infrastructure function is delivered by several key organizations with funding from the Ministry of Health and Long-Term Care (MOHLTC) including the Ontario Tobacco Research Unit (OTRU), the Program Training and Consultation Centre (PTCC), public health units (PHUs), Tobacco Control Area Networks (TCANs), Smoking and Health Action Foundation (SHAF) and the Youth Advocacy Training Institute (YATI).

Ontario Tobacco Research Unit

The Ontario Tobacco Research Unit (OTRU) provides research, monitoring, evaluation and teaching / training resources to the prevention component of the Strategy. Over the 2015/16 fiscal year (April to March), prevention initiatives conducted by OTRU included:

- Rapid scientific consulting to the Ministry and SFO partners on a variety of prevention topics.
- Knowledge and evaluation support—including consultation, design, ethics' protocols, data collection, analysis/interpretation, and reporting—to SFO partners working on 29 prevention projects.
- Prevention module of OTRU's online course (Tobacco and Public Health: From Theory to Practice) in which 1052 public-health personnel across the province enrolled.
- Evaluation of the ban on flavoured tobacco

Program Training and Consultation Centre

Within the prevention pillar, the Program Training and Consultation Centre (PTCC) provides a multi-day training course on the foundations of enforcing the *Smoke-Free Ontario Act* that includes regulations prohibiting tobacco sales to minors. This course is offered in collaboration with the Ministry of Health and Long-Term Care and is required training for any PHU employee enforcing the *Smoke-Free Ontario Act*. PTCC also supported two province-wide communities of

practice addressing practice areas relevant to tobacco use prevention (i.e., Tobacco Use Reduction for Young Adults and Tobacco-free Policy). PTCC Health Promotion Specialists and Media and Communications Specialists also provided consultation to local PHUs, TCANs and tobacco control coalitions working on community education and policy development initiatives (e.g., smoke-free multi-unit dwellings (MUDs), smoke-free movies, e-cigarettes).

In 2015/16[i], PTCC was involved in the following prevention initiatives:

- Delivered 43 training events reaching over 1284 clients. Training events included 21 workshops, 12 webinars and 10 special request workshops. Only a few of these were relevant to prevention. PTCC's training programs were attended by staff of Ontario's 36 PHUs, Community Health Centres, the health care sector (e.g., hospitals), non-governmental organizations and government.
- A total of 462 consultations were delivered by PTCC health Promotion Specialists and Media and Communication Specialist in 2015/16.
- A total of 226 public health practitioners and researchers were actively engaged across three provincial Communities of Practice.

Public Health Units

In Ontario, 36 local boards of health are responsible for delivering public health programs and services within their communities (henceforth referred to as Public Health Units, or PHUs). PHUs are critical stakeholders in the implementation of tobacco use prevention programming and policies in the Province and have a sizable infrastructure including program staff and enforcement personnel.

PHUs are responsible for the following prevention outcomes of the Ontario Public Health Standards:

- Youth have reduced access to tobacco products
- Priority populations adopt tobacco-free living

[i] Steven Savvaidis, Personal communication, September 19, 2016.

- To influence the development and implementation of a comprehensive tobacco control approach, PHUs are to work with school boards and/or staff of elementary, secondary, and post-secondary educational settings
- Tobacco vendors are in compliance with the *Smoke-Free Ontario Act*

The Ministry of Health and Long-Term Care has provided funding for youth tobacco use prevention at each of the Province's 36 PHUs. Although not mandated by the MOHLTC, many PHUs have chosen to hire a Youth Engagement Coordinator. These coordinators work collaboratively across risk factor-related programs within the PHU and externally through community partnerships with youth organizations. They also work with Youth Development Specialists and other regional stakeholders within the TCANs to establish regional plans and priorities for tobacco use prevention programming.[2] Youth Engagement Coordinators focus their work on a number of activities including: training on the principles of youth engagement across PHU programs, funding of youth-led health promotional activities, ongoing engagement of youth in tobacco control and creating opportunities for peer networking and learning.

Specific PHU level initiatives related to the *Smoke-Free Ontario Act* are discussed later in this chapter (Interventions).

Smoke-Free Ontario Advisory Groups, Committees and Task Forces

SFO Provincial Young Adult Prevention Advisory Group

The purpose of this Advisory Group is to provide a forum for provincial partners to collaborate, develop, implement and evaluate a comprehensive, coordinated, evidence-informed approach to reduce tobacco use among Ontario young adults including:

- Review evidence related to young adult tobacco use
- Move components of the SFO Strategy forward by supporting the work of any SFO working group

In 2016, two working groups were set: a) Tobacco/smoke free campus working group, and Workplace policy/programming working group. The latter group was placed on hold in early 2017.

SFO Prevention Task Force

The SFO Prevention Task Force was comprised of representatives of the tobacco control community who have an expertise in youth tobacco use prevention and organizations with expertise in youth development and youth engagement strategies. It was struck in 2011 to provide input on implementation of the renewed Strategy prevention programming and to identify areas for collaboration across programs. As of the release of this report, this committee was on hold.

SFO Scientific Advisory Committee

In 2010, the SFO Scientific Advisory Committee (SAC) identified a) the prevention of tobacco use among youth and young adults and b) the pervasive availability of tobacco products in the retail environment as major issues for tobacco control in Ontario. An update to their 2010 report is currently underway and is expected to be released in 2017. This report will include updated evidence reviews and consensus statements across numerous topics of relevance to this chapter including those related to prevention and pro-tobacco influences.

Smoking and Health Action Foundation

The Smoking and Health Action Foundation (SHAF) engaged in a number of prevention-related activities in 2015/16 to support, educate and build capacity in the Ontario public health community including PHUs and TCANs. SHAF provided training, technical assistance and knowledge exchange to Strategy partners on a number of current and emerging prevention topics such as contraband, e-cigarettes, plain and standardized packaging, tobacco taxation, tobacco industry activity, tobacco retailing, waterpipes, smoke-free movies (SHAF co-chairs the Ontario Coalition for Smoke-Free Movies) and, more generally, policy options to address young adult use and prevention.

Tobacco Control Area Networks

Tobacco Control Area Network (TCAN) Coordinators and Youth Development Specialists from each of the seven TCANs (representing the 36 PHUs) provide leadership, coordination and

collaborative opportunities centred on the prevention goal of the SFO Strategy. These efforts seek to engage youth and promote a tobacco-free lifestyle. TCANs assist in assessing local PHU training and technical assistance needs around youth prevention, and they help communicate Ministry policies and activities including local media and public relations initiatives.[3] One of the more important roles TCANs play is to plan and execute large regional projects and coordinate regional media activities (please see the Intervention section below for an overview of these projects).

Youth Advocacy Training Institute

The Ontario Lung Association's Youth Advocacy Training Institute (YATI) is a program that engages Ontario youth (and adults) by creating partnerships with provincial, regional and local organizations. YATI provides youth and adults with training in skill building, resources, and tools to empower these groups to positively affect change in their communities by promoting tobacco-free and healthy lifestyles.

In 2015/16, YATI delivered 78 trainings and events across Ontario, attended by 1628 youth and 1017 adults. This included 35 general trainings (435 youth and 317 adults). For youth, these trainings focused on knowledge and skills required to engage participants in health promotion and advocacy-oriented activities in support of tobacco prevention and other related health initiatives. For adults, these trainings focused on building the capacity of adults who work with youth across public health and the youth-serving sector by helping them learn the necessary skills to support youth engagement practice, in terms of tobacco prevention and health promotion and advocacy-oriented activities. Other training included 13 custom trainings (436 youth and 234 adults); 11 partnership trainings, which supported priority populations (111 youth and 289 adults); 13 special events (90 youth and 102 adults) and 6 summits (556 youth and 75 adults).

The YATI website was active in 2015/16, with the English site having 11,353 visits (8,328 unique visitors) and 42,484 page views and the French site having 855 unique visitors and 1,412 page views. The YATI Facebook account had 503 friends; their Twitter feed had 1,564 followers and 3,945 tweets; and the YATI YouTube channel had 18 subscribers and 16,233 views.

Prevention Interventions

The SFO Strategy includes a number of programs, services and policies focused on prevention and reduction of tobacco use among youth and young adults. These initiatives are centred on increasing knowledge of the harmful effects of tobacco use; increasing youth resiliency to make healthy choices and resist tobacco use initiation; limiting social exposure to tobacco use; and decreasing access and availability of tobacco products.

Where possible we have provided evaluative data for each intervention listed below. Given the nature of some of these interventions— and challenges in attributing changes in prevention-related outcomes at the population level to particular interventions—evaluative data are not currently available for many of the interventions discussed in this chapter.

Province-Wide Interventions

Freeze the Industry—Plain and Standardized Packaging Steering Committee

One of the main objectives of the Freeze the Industry—Plain and Standardized Packaging (FTI-PSP) Steering Committee is to develop a coordinated provincial social marketing campaign, which mobilizes youth in tobacco industry denormalization efforts to educate the public and elected officials on the need for plain and standardized packaging legislation and to build support for Federal legislation.

In 2015/16, this Committee has worked toward establishing training and capacity building, as well as the development of communication and social media tools including a public awareness campaign. Future reports will update progress.

Leave The Pack Behind

To address prevention goals, Leave The Pack Behind (LTPB) uses several tobacco control interventions including a) social marketing campaigns that use social media, mass media and interpersonal communication in print, electronic and face-to-face formats; and b) peer-to-peer

programs and services that actively discourage uptake/escalation of tobacco use, address social norms, support campus polices and provide general tobacco control education.

LTPB's Party *Without The Smoke* prevention campaign encouraged young adults to refrain from using any form of tobacco/nicotine products while partying. In a survey of 1,688 young adult students, two thirds (66%) were aware of the campaign and over half (54%) were able to identify at least one campaign message.[4]

LTPB's annual *wouldurather... contest* challenged post-secondary students and community-dwelling young adults to quit, reduce or stay smoke-free. In 2015/16, the prevention component of the contest attracted 5,285 young adult nonsmokers who pledged to be smoke-free for the duration of the contest.

Ontario's Health and Physical Education Curriculum

In September 2010, Ontario public schools began implementing the Ministry of Education's revised interim health and physical education curriculum for grades 1 to 8. This was the first revision since 1998. In 2014, the Ministry of Education published its Foundations for a Healthy School resource.[5] Using an integrated approach, this resource focuses on curriculum, teaching and learning; school and classroom leadership; student engagement; social and physical environments; and home, school and community partnerships. Under the health-related topic of *Substances Use, Addictions and Related Behaviours*, students begin to learn about tobacco during the junior grades (specifically grades 4 to 7). Learning focuses on understanding what tobacco is, what influences its uptake (i.e., peer pressure, industry advertising) and the effects and consequences of its use (i.e., health effects, social implications). This knowledge is integrated with the development of a variety of living skills (e.g., decision making and refusal skills) that help students make and maintain healthy choices.

The Ontario Physical and Health Education Association (Ophea) has developed online elementary and secondary school resources to support the implementation of the Health and Physical Education curriculum including substance use.[6] Each resource includes ready-to-use lesson plans and other supports such as student templates, assessment tools and daily physical activity ideas.

Smoke-Free Movies

Health organizations internationally, including the US Surgeon General, have drawn a causal link between smoking that is seen on screen and youth smoking initiation. In response, the Ontario Coalition for Smoke-Free Movies has endorsed the five actions recommended by the World Health Organization to limit exposure of smoking in youth-rated movies. Specifically, the Coalition endorses that a change be made to the current rating system in Ontario to ensure that any future movies released in Ontario rated for children and teens (G, PG, 14A) are free from smoking images and tobacco products.

The Ontario Coalition for Smoke-Free Movies formed in May 2010 to take collective action to counter the harmful impact of smoking in youth-rated movies released in Ontario. The Coalition is an alliance of health organizations including the Canadian Cancer Society (Ontario Division), Heart and Stroke Foundation of Ontario, NSRA/SHAF, Ontario Lung Association, OTRU, Physicians for a Smoke-Free Canada, PHUs, TCANs and YATI.

Between 2004 and 2014, 56% (877/1,564) of the top-grossing movies released in Ontario featured onscreen tobacco. Of the movies with tobacco content, 86% were rated for youth by the Ontario Film Review Board (G, PG, 14A).[7] Over this same period, these top-grossing movies contained a total of 29,620 tobacco incidents, with 85% of these incidents occurring in youth-rated movies. In 2014, 2,770 tobacco incidents occurred, up from 2,498 in 2013.

Exposure to onscreen smoking at current levels is expected to recruit more than 185,000 children and teens aged 0 to 17 living in Ontario today to become smokers. Eventually, more than 59,000 of those recruited to smoking as a result of this exposure will die prematurely from tobacco-induced diseases. It is projected that if an adult rating (18A) for smoking in movies was required in Ontario, it would avert at least 95,000 Ontario children and teens from becoming smokers and prevent more than 30,000 future tobacco deaths.

In 2016, a provincial monitoring survey administered by OTRU collected data from across 28 of 36 PHUs and 7 TCANs working toward raising public awareness on the issue of smoking in youth-rated movies. Results indicate that there were 165 Smoke-Free Movies initiatives reaching 41,300 people. These initiatives generated the following outputs: 44,627 promotional items and

information materials distributed; 3,390 signatures collected to support an 18A rating change; and 52 million (8 million earned, 44 million paid) media impressions generated resulting in 110,000 actions (30,000 earned actions; 80,000 paid actions). (Note: This survey may not have captured all paid and earned media impression and actions due to underreporting by some PHUs). Based on google analytics, there were 46,579 visits to SmokeFreeMovies.ca in 2016. The launch of the provincial Hey Parents Campaign in August 2016 appeared to be responsible for a significant increase in reach and actions over the previous year (for more information, go to the Hey Parents Campaign section under Select Regional Interventions, below).

In 2016, a second provincial monitoring survey involving 18 PHUs and 7 TCANs collected information from participants of local events. Of the 2,202 people completing the survey, there was a 32 percentage point relative increase after the event in those reported being 'very' or 'extremely' aware of the impact of smoking in movies on youth starting to smoke (51% pre-event vs. 83% post-event); 79% reported post-event an intent to take action on the issue; 93% reported post-event that they 'strongly' or 'somewhat' supported a rating of 18A for movies showing onscreen smoking (Note. Interpret with caution. Only 18 or 36 health units participated, and data collection was based on a convenience sample methodology).

Product Restrictions

On May 28, 2015, the *Making Healthier Choices Act* (Bill 45) received Royal Assent. This *Act* prohibited the sale of flavoured tobacco at retail stores in the Province, with exceptions. Specifically, regulations consolidated on November 13, 2015 (and in effect as of January 2016) mandated that the *Act* does not apply to flavouring agents in cigars that impart a flavour or aroma of wine, port, whiskey or rum (at the time, it did not apply to the flavour or aroma of menthol, but this regulation was revoked as of January 1, 2017 thus prohibiting menthol as a flavouring agent[8]). Likewise, an order amending the Schedule to the federal *Tobacco Act* came into force December 15, 2015 that prohibited the manufacture and sale of certain types of cigars that contain targeted additives (flavours). Cigarillos and cigars weighing less than or more than 1.4 g, but not more than 6 g, were captured in the amended Schedule.

Contribution: In 2015, Ontario wholesale sales of the total cigar category (little cigars, cigarillos

and cigars) fell 4.6% over 2011 sales (146,853,259 sticks in 2011 vs. 140,090,699 sticks in 2015).[ii] (Note. Annual sales data may be influenced by wholesale shipment dates). In 2015, little cigars/cigarillos comprised 8.7% of all cigar sales. In 2015, 82.6% of the Ontario cigar market was flavoured cigars, with menthol comprising 4.15% of all cigar sales.

Tobacco Taxation

There is strong evidence that an increase in cigarette taxes is an effective policy measure to drive down cigarette consumption, encourage current smokers to quit and prevent youth from becoming regular smokers.[9,10,11,12,13,14] On average, a 10% increase in price results in a 3 to 5% reduction in demand in higher income countries.[15,16,17] Contrary to the myth promoted by the Tobacco Industry, a recent OTRU study found no correlation between increasing tobacco taxes and the use of contraband tobacco.[18]

Youth are very sensitive to the cost of tobacco products.[19,20,21] Specifically, higher cigarette prices have been shown to prevent youth initiation,[20] prevent adolescents from becoming daily, addicted smokers and can impact the smoking behaviour of youth who are further along the smoking uptake continuum.[22] Increases in the price of tobacco through taxation are central to any preventive approach.

In Ontario, the provincial tobacco tax for a carton of 200 cigarettes was increased by $3.00 on February 25, 2016, resulting in an increase from $27.95 to $30.95 in total provincial tobacco tax. This increase is similar to the last provincial tobacco tax increase in May 2014 (provincial tobacco tax accounted for 32% of the overall retail price of 200 cigarettes in both May 2014 and February 2016). Both tobacco tax increases were simply adjustments for inflation in the price of cigarettes. The Ontario government plans to continue to increase the provincial tobacco tax annually at the rate of inflation for the next five years starting June 1, 2017.[23] Overall, federal and provincial tobacco and sales taxes account for 65.1% of the retail price of a carton of cigarettes in Ontario. The tobacco tax increase was not sufficient to place Ontario in the highest scoring category for taxation in the MPOWER model (75% of the retail price). Ontario continues to have the second lowest total taxes on tobacco ($63.14) of any Canadian province or territory (Table 3-1).

[ii] Health Canada, Personal Communication, December 7, 2016.

Table 3-1: Federal/Provincial/Territorial Tobacco Tax Rates (per 200 Cigarettes, February 2016)

Jurisdiction	Average Pre-Tax Price[a] (2015 Figure)	Federal Excise Duty	Provincial/ Territorial Excise Tax	Provincial/ Territorial Sales Tax or Harmonized Sales Tax[b]	Federal GST[c] 5%	Total Tobacco Taxes	Total Retail Price
Quebec	$29.18	$21.03	$29.80	No PST	$4.00	$54.83	$84.01
Ontario	$33.90	$21.03	$30.95[d]	HST: 13% = $11.16	See HST	$63.14	$97.04
British Columbia	$25.90	$21.03	$47.80	No PST	$4.74	$73.57	$99.46
Yukon	$35.37	$21.03	$42.00	No PST	$4.92	$67.95	$103.32
Alberta	$28.70	$21.03	$50.00[e]	No PST	$4.99	$76.22	$104.92
Nunavut	$39.32	$21.03	$50.00	No PST	$5.52	$76.55	$115.87
Saskatchewan	$36.06	$21.03	$50.00	PST: 5% = $5.35	$5.35	$81.73	$117.79
Newfoundland	$35.25	$21.03	$47.00	HST:15% =$15.49	See HST	$83.52	$118.77
Prince Edward Island	$33.16	$21.03	$50.00[f]	HST: 14% =$14.59	See HST	$85.62	$118.78
Nova Scotia	$35.41	$21.03	$51.04	HST: 15%=$16.12	See HST	$88.19	$123.60
New Brunswick	$44.37	$21.03	$44.52[g]	HST:13% =$14.29	See HST	$79.34	$124.21
Northwest Territories	43.16	$21.03	$57.20	No PST	$6.08	$84.31	$127.46
Manitoba	$37.89	$21.03	$59.00[h]	PST:7%= $9.43	$5.90	$95.36	$133.25

Note: Ordered by total retail price, from lowest to highest.
[a] This average estimate of "pre-tax price" for each province is calculated by using the Consumer Price Index and the CPI Intercity Index from Statistics Canada for a carton of 200 cigarettes available in 2015. The full methodology for the calculations is available upon request
[b] PST/HST is calculated on the total of pre-tax price + federal excise duty + provincial excise tax.
[c] GST is calculated on the total of pre-tax price + federal excise duty + provincial excise tax.
[d] Ontario tobacco tax increase effective February 25, 2016.
[e] Alberta tobacco tax increase effective October 28, 2015.
[f] Prince Edward Island tobacco tax increase effective June 20, 2015.
[g] New-Brunswick tobacco tax increase effective February 3, 2016.
[h] Manitoba tobacco tax increase effective April 20, 2015.
Source: Non-Smokers Rights Association (NSRA). Cigarette prices in Canada. A map comparing the average price of a carton of 200 cigarettes in Canada's provinces and territories, as of February 25, 2016.

Youth Access Laws and Vendor Compliance

PHUs are mandated to enforce the *Smoke-Free Ontario Act* in accordance with provincial protocols (e.g., the *Tobacco Compliance Protocol*, 2008). Likewise, PHUs are mandated to enforce the *Electronic Cigarettes Act* in accordance with provincial protocols (e.g., the *Electronic Cigarettes Compliance Protocol*, 2016).

In Ontario, it is illegal to sell tobacco products to anybody under the age of 19. MOHLTC funds PHUs to conduct two youth access checks of each tobacco vendor in their jurisdiction. In 2015, there were 20,956 youth access checks (compliance or enforcement) conducted in Ontario, in which a test shopper entered a store and attempted to purchase tobacco products. The test shopper was sold a tobacco product 1,005 times. Using the store as the unit of analysis, 97% of Ontario tobacco vendors were found to be in compliance with youth access legislation at the time of their last inspection (10,046 checks, with 315 sales).

Vendor Licensing

One opportunity to reduce tobacco retail outlet density is to require vendor licenses, annual fees or both. Licensing fees, especially if they are expensive, may deter would-be retailers or prompt current retailers to stop selling tobacco.[24,25] Most provinces in Canada have not established tobacco retailer license fees, but there are a few exceptions. For example, New Brunswick has a one-time fee of $100, with an annual renewal fee of $50.[26] Nova Scotia has a tobacco retailer licence fee of $124.60, renewable every three years.[27] In Ontario, the provincial government requires all retailers wishing to sell tobacco to have a valid Retail Sales Tax (RST) vendor's permit or, as of July 1, 2010, a tobacco retail dealer's permit issued under the *Tobacco Tax Act*. However, this system is free and requires only a one-time application, with no renewal required. As of 2015, a growing number of Ontario municipalities have had an annual tobacco retailer licence fee (Table 3-2).

Table 3-2: Annual Tobacco Retailer Licence Fees, Ontario

Municipality	Licence Fee
Ottawa	$806
Hamilton	$649
Sudbury	$440
Markham	$330
Vaughan	$298
Richmond Hill	$285
Mississauga	$277
Oakville	$267
Kingston	$251
Brampton	$215
Windsor	$188

Municipality	Licence Fee
Waterloo	$172
Burlington	$170
Wasaga Beach	$150
Halton Hills (Georgetown)	$131
Hawkesbury	$100
Chatham-Kent	$85
North Bay	$50
Cornwall	$40
Brockville	$36

Source: Canadian Cancer Society, December 10, 2015

Vendor Locations

Tobacco retail availability refers to the accessibility of tobacco products at the retail level. In essence, "availability" describes the level of convenience associated with obtaining tobacco in Ontario. Restricting the retail distribution and availability of tobacco products is considered an important mechanism to limit consumption and subsequent negative health effects.[28,29] In Ontario, legislation prohibits tobacco from being sold by vending machines, at pharmacies, hospitals and other health care and residential care facilities and, as of January 1, 2015, college and university campuses.[30]

Despite these advances, tobacco products continue to be available across the province through a large number of retail outlets (10,044 in 2015),[31] primarily convenience, gas and grocery stores. This is down from 10,620 in 2014, 11,581 in 2013, 12,455 in 2012 and a further decrease from the approximate 14,000 tobacco vendors that were operating in 2006 (Note: The reason for these decreases is unclear. It could be due to more accurate recording of vendors by Ministry, fewer vendors selling tobacco or both). Sixty-five per cent of Ontario tobacco retail outlets are located within 500 metres of a school.[32] Tobacco retailers are also more likely to be located in lower socioeconomic status neighbourhoods.

Higher tobacco retail outlet density has been associated with higher rates of youth smoking and increased likelihood of young smokers purchasing their own tobacco. According to the 2015 Ontario Student Drug Use and Health Survey, approximately 18% of underage students in grades 7 to 12 who had smoked a whole cigarette in the last 12 months reported purchasing their last

cigarette from a corner store, grocery store, supermarket, gas station or bar. Just over half of all underage students (62%) reported getting their last cigarette from social sources such as a friend or family member.[33] In a 2005 study prepared for Health Canada, young adult smokers report that they would smoke less if they had to travel farther to buy cigarettes.[34]

There is growing interest in policies to regulate the number and location of tobacco vendors. Provinces, such as Nova Scotia and Quebec have prohibited tobacco sales in a wide number of types of locations such as colleges and universities, theatres and bars and restaurants. As previously mentioned, Ontario legislation prohibits tobacco from being sold by vending machines and at pharmacies, hospitals, other health care and residential care facilities and college and university campuses.

Vendor Point-of-Sale Display Ban

Social exposure to tobacco products may promote the normalization of tobacco use, trigger initiation in youth and young adults through processes of social influence and modeling and may encourage the continued use of tobacco among smokers and relapse among quitters.[35,36] On May 31, 2008, a complete ban on the retail and wholesale display of tobacco products was implemented in Ontario in order to discourage youth from starting to smoke.[37] Those exempted from this ban include tobacconists, duty free retailers and manufacturers.

Select Regional Interventions

Youth prevention activities are running at the local and regional level across the Province. This work varies widely in funding, scope and available evaluative evidence, with some projects ongoing and other projects being one-time events. Numerous PHU/TCAN prevention projects that build knowledge and resiliency have reached out to OTRU's Knowledge and Evaluation Support initiative. Below is a brief summary of select prevention initiatives from across the province.

Bad Ways 2 Be Nice

Bad Ways 2 Be Nice (BW2BN) is an initiative that began with the Central East TCAN and is designed to raise awareness among young adults about the issue of supplying cigarettes to teenagers and encourage young adults to think twice before giving cigarettes to youth. In 2015,

Central East TCAN, Southwest TCAN and the Aboriginal Tobacco Program ran a number of events—such as a polaroid frame booth, post-it note activity, wheel spin-to-win "nice" or "not so nice" prizes—at various settings including colleges/universities, fairs/exhibitions and in the general community. In 2015, Southwest TCAN piloted BW2BN campaign videos.

Hey Parents Campaign

The Hey Parent Campaign is a provincial public education initiative in support of smoke-free movies. In 2013, the Central East TCAN formed a subcommittee to develop a communication campaign targeted at parents to raise awareness on the impact that tobacco imagery in film has on youth smoking behaviour. This subcommittee later expanded to include representatives from across most TCANs in Ontario.

As an initial step to guide the campaign development, an audience analysis was conducted within the Central East TCAN (excluding Kawartha) in 2014 to better understand parents' beliefs and opinions about the issue. In 2015, a vendor was hired to conduct focus groups within the Central East TCAN to further delve into results of the audience analysis. Based on the findings, the vendor created 3 campaign concepts and messages for consideration for the campaign. A second vendor was hired to test the messages and concepts via focus groups. Once the creatives and messages were developed they were pre-tested with the targeted audience and fine-tuned prior to the campaign launch, resulting in two final creatives. In late summer and early fall of 2016, all 7 TCANS and 36 PHUs across Ontario implemented *Hey Parents* in their local communicates using a variety of paid and earned communication channels. Survey results following this fall campaign revealed that the *Hey Parents Campaign* had very good reach, with almost half of all parents surveyed (47%) exposed to the campaign in the past 2 months (Note. Survey collection was centred in three PHUs and employed a convenience sample.)

Love My Life

An initiative of the East TCAN, Love My Life's (LML) goal is to meaningfully engage youth aged 10 to 24 around increasing tobacco-free environments, with the expectation that these will enhance supportive social and physical environments and influence policies that support healthy living. For instance, tobacco-free environments are expected to support the process of normalizing

tobacco-free living by removing tobacco use role-modeling.[38]

LML project-based activities take place within partner organizations and often include tobacco-free policy development and implementation (e.g., community arts project with a tobacco free theme, tobacco-free school project). OTRU is currently collecting administrative and participant-based surveys on this project, and annual results are anticipated in 2017.

Youth Social Identities and Tobacco Use Prevention Project: Uprise

In 2013, a Functional Analysis for Cultural Interventions was conducted by Rescue (The Behavior Change Agency), with teenagers in Central West and South West Ontario, to better understand the relationship between youth sub-cultures and tobacco use. Findings from this study showed that teens that are influenced by the Hip Hop and Alternative peer crowd are at the highest risk for tobacco use. In July 2015, a campaign called UPRISE was launched to address tobacco use among youth who identify with the Alternative peer crowd. UPRISE is designed based on Rescue's proprietary Social Branding® model. The objective of the campaign is to eliminate the pro-tobacco perceived norms of Alternative youth while simultaneously increasing the belief that being tobacco-free is an important component of being part of the Alternative peer crowd.

The following components are part of UPRISE's Social Branding® strategy:

- Attending events, such as rock music concerts, to build the brand's social influence within the Alternative culture
- Recruiting and training influencers within the Alternative culture, such as bands, to support UPRISE's key messages
- Aligning anti-tobacco messages with the peer crowd's values and interests, delivered through social media channels that alt youth are actively using

Data from UPRISE's social media content in 2015 (July – December) and 2016 (January – December) are highlighted in Table 3-3.

Table 3-3: UPRISE's Social Media Results, 2015 and 2016

Social Media Channel	2015 (July-December)	2016
Facebook		
Impressions (number of times a post from your page is displayed/seen)	961,980	5,521,055
Video Views	55,146	169,476
Engagements (any action that is performed on a piece of content)	10,261	41,737
Page Likes (number of fans that have liked the Facebook page)	824	1297
Instagram		
Reach (number of times people were exposed to our content)	Not available	185,442 (Q3/Q4 only)
Engagements	426	6625
Page Likes	138	231
Youtube		
Video Views	17,290	62,915

Youth Tobacco Prevention with Dental Professionals Project

The Youth Tobacco Prevention with Dental Professionals Project ran as a pilot project in the South West TCAN in 2015. Local PHUs partnered with dental professionals to test the usefulness of using prevention and cessation resources with high school-age youth (age 14-18) in dental settings.

Dental professionals were asked to: a) show a laminated infographic to each youth patient aged 14 to 18 who visited an office that described reasons to be tobacco free as well as the negative effects of using tobacco; b) provide all youth with a magnet associated with an Instagram account named "91 Reasons," that reflected the 91% of Ontario youth who don't smoke; and c) offer a youth cessation booklet to youth patients aged 14 to 18 who identified as tobacco users or who were identified as a tobacco user by the dental professional.

Of 153 dental professionals approached, 87 (or 57%) responded to an online survey (run by OTRU in partnership with the South West TCAN). Among respondents, one in five *always* shared the two main project resources: an infographic and magnet. Approximately 60% of dental professionals *often* or *sometimes* shared, whereas 20% *rarely* showed these resources to youth patients. About 8 in 10 dental professionals (79%) provided cessation booklets to their patients who smoked. No data are available about the effects of this intervention on youth initiation and cessation. However, the intervention is based on published research that demonstrated that face-to-face interaction with a health-care provider and providing print materials to youth can reduce the risk of smoking initiation among youth.[39]

Prevention Outcomes: Population Level

The prevention goal of the Strategy is to prevent smoking initiation and regular use among Ontario's children, youth and young adults in order to eliminate tobacco-related illness and death. The long-term goals of prevention are to reduce initiation of tobacco use and to increase tobacco abstinence among children, youth and young adults (Figure 3-1). In working toward these desired outcomes, the more immediate objectives of the Strategy are to increase awareness and adoption of school and community tobacco prevention initiatives.

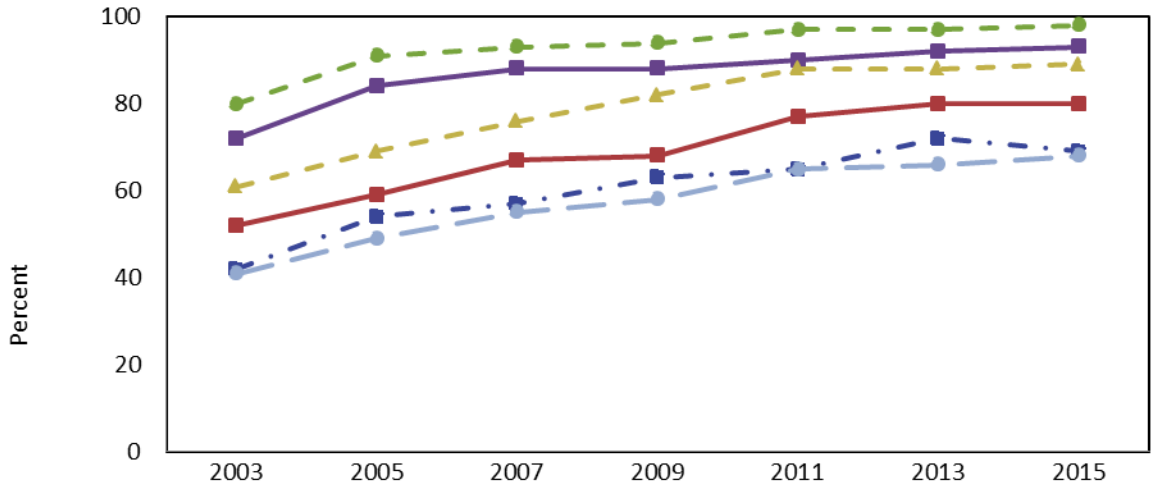
Long-Term Outcomes: Cigarettes

Comprehensive tobacco control programs, such as the SFO Strategy, focus on reducing the initiation and prevalence of tobacco use among children, youth and young adults. Indicators related to the progression to smoking include lifetime abstinence, past-year initiation, past-year smoking and past 30-day current smoking.

Lifetime Abstinence: Students in Grades 7 to 12

- Among students, lifetime abstinence from cigarettes ranged from 98% of students in grade 7 to 68% of students in grade 12 (OSDUHS 2015 data; Figure 3-2), with overall lifetime abstinence among all grades combined at 81%.
- From the 2005 pre-SFO baseline year, there was a significant increase in lifetime abstinence among all grades except grade 8 (Figure 3-2).

Figure 3-2: Lifetime Abstinence, by Grades 7 to 12, Ontario, 2003 to 2015



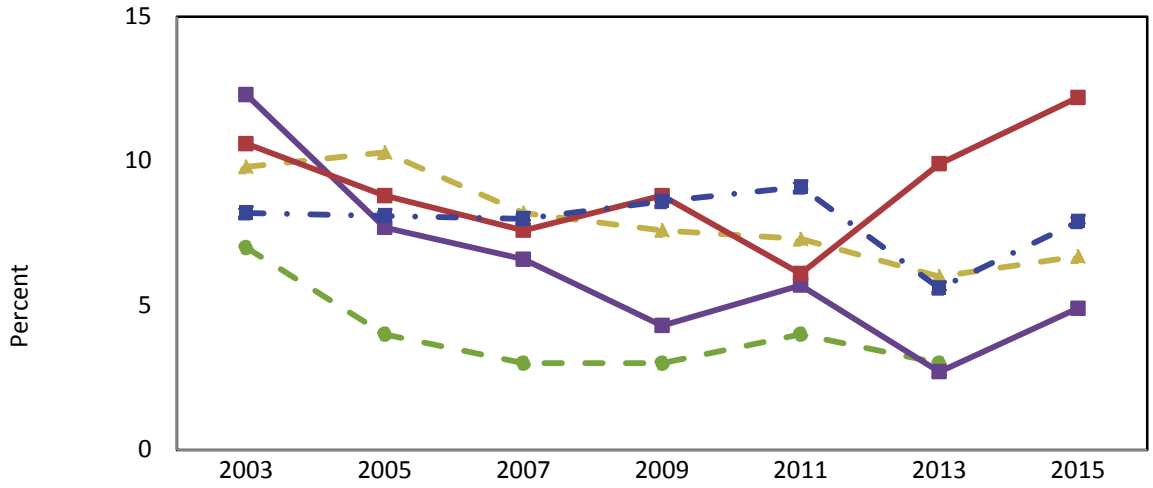
	2003	2005	2007	2009	2011	2013	2015
Grade 7	80	91	93	94	97	97	98
Grade 8	72	84	88	88	90	92	93
Grade 9	61	69	76	82	88	88	89
Grade 10	52	59	67	68	77	80	80
Grade 11	42	54	57	63	65	72	69
Grade 12	41	49	55	58	65	66	68

Note: Full data table for this graph provided in the Appendix (Table 3A-1).
Source: Ontario Student Drug Use and Health Survey 2003–2015 (Biennial).

Past-Year Initiation: Students in Grades 7 to 12

- In 2015, first use of cigarettes at any time in the previous 12 months ranged from 5% for grade 9 students to 12% for grade 11 students (Figure 3-3). (Grade 7/8 student data suppressed due to small sample size.)
- There were no significant changes in 2015 from our pre-SFO baseline year of 2005.

Figure 3-3: Use of Cigarettes for the First Time in the Past Year, by Grades 7 to 12, Ontario, 2003 to 2015



	2003	2005	2007	2009	2011	2013	2015
Grade 7-8	7	4	3	3	4	3	S
Grade 9	12	8	7	4	6	3	5
Grade 10	10	10	8	8	7	6	7
Grade 11	11	9	8	9	6	10	12
Grade 12	8	8	8	9	9	6	8
Total	9	7	6	6	6	5	6

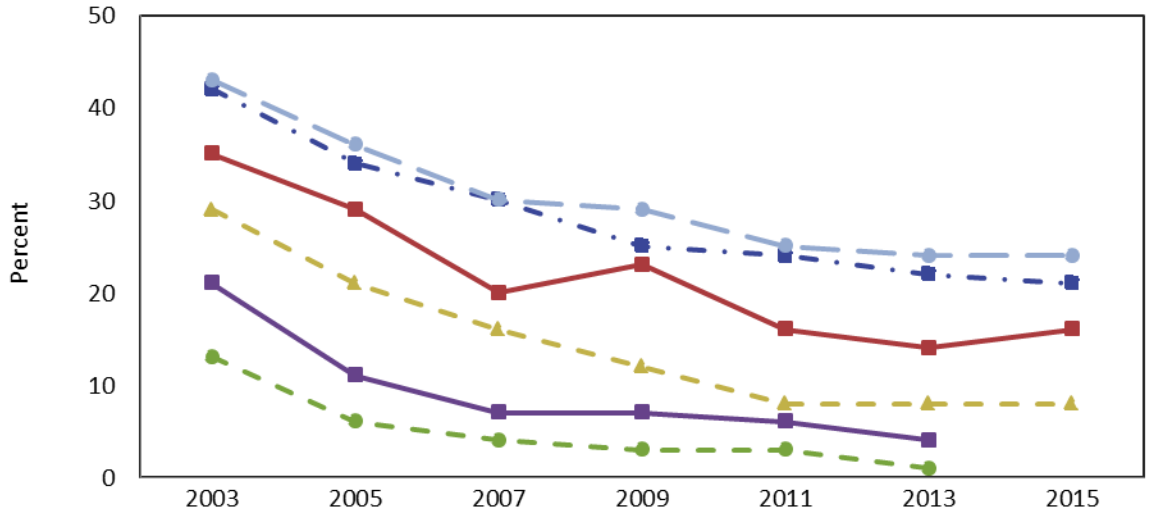
S = data suppressed due to small sample sizes.
Note: Full data table for this graph provided in the Appendix (Table 3A-2).
Source: Ontario Student Drug Use and Health Survey 2003–2015 (Biennial).

Past-Year Smoking: Students in Grades 7 to 12

- Among students in grades 7 to 12, the 2015 overall prevalence of smoking in the past year, even a few puffs, was 14% (representing 134,700 students; data not shown). (Note. Respondents in any given grade reported about their smoking behaviour over the previous year.)

- In 2015, past-year smoking significantly declined among all students in grades 7 to 12 (combined) compared to the pre-SFO baseline year of 2005 (14% vs. 23%). However, declines have been stagnant since 2011.
- Over the period 2005 to 2015, there were significant declines in past-year smoking among students in grades 9, 10, 11 and 12 (Figure 3-4); over the period 2005 to 2013, there were significant declines in past-year smoking among students in both grade 7 and grade 8 (Figure 3-4; Note: In 2015, data for grades 7 and 8 were suppressed due to small sample sizes).
- In 2015 the prevalence of past-year smoking was 8% in grade 9, significantly lower than all higher grades (Figure 3-4). Grade 10 past-year smoking was significantly lower than grade 12 past-year smoking (16% vs. 24%, respectively).

Figure 3-4: Past-Year Smoking, by Grades 7 to 12, Ontario, 2003 to 2015



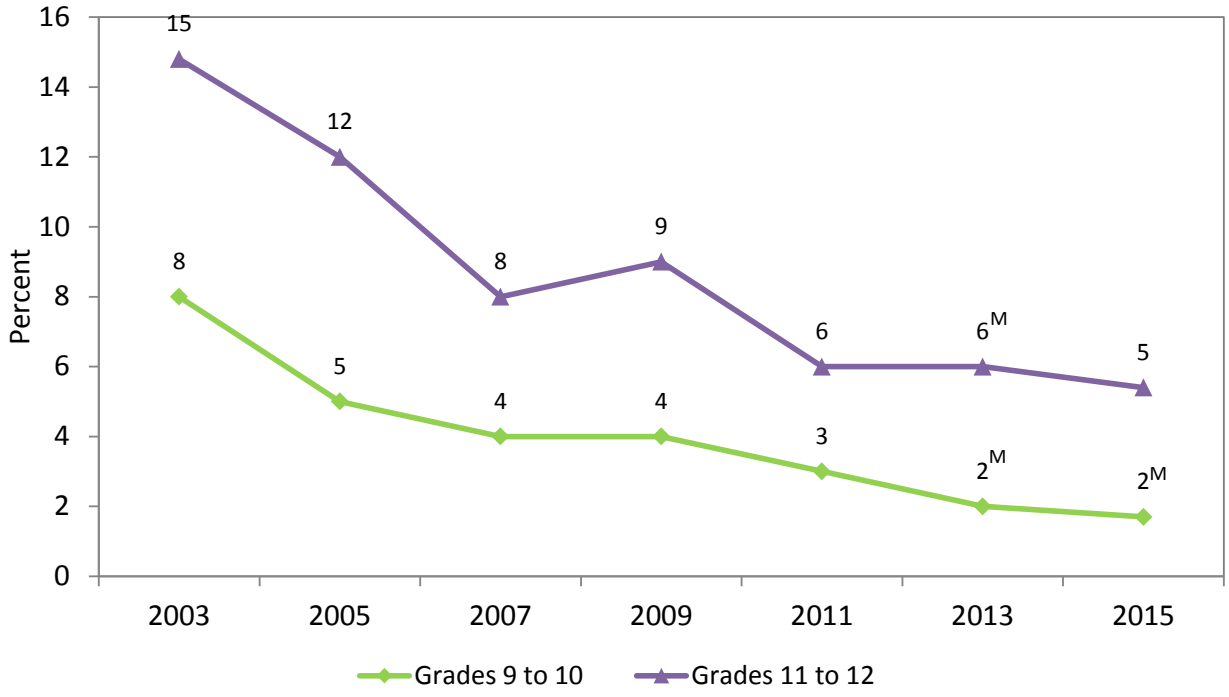
	2003	2005	2007	2009	2011	2013	2015
Grade 7	13	6	4	3	3	1	S
Grade 8	21	11	7	7	6	4	S
Grade 9	29	21	16	12	8	8	8
Grade 10	35	29	20	23	16	14	16
Grade 11	42	34	30	25	24	22	21
Grade 12	43	36	30	29	25	24	24

Note: Data collection for grades 8, 10 and 12 started in 1999. S = data suppressed due to small sample sizes. Full data table for this graph provided in the Appendix (Table 3A-3).
Source: Ontario Student Drug Use and Health Survey 2003–2015 (Biennial).

Current Smoking (Past-30 Days): Students in Grades 9 to 12

- In 2015, past-30 day current smoking was significantly higher among students in grades 11 to 12 (combined) compared to students in grades 9 to 10 (5% vs. 2%; Figure 3-5).
- From 2011 to 2015, there has not been significant change in the prevalence of current smoking among students in grades 9 to 10 and grades 11 to 12.
- Over the period 2005 to 2015, the prevalence of past 30-day smoking was cut by about 60% for students in grades 9 to 10 and in grades 11 to 12 (Figure 3-5).

Figure 3-5: Current Smoking (Past-30 Days), by Grade, Ontario, 2003 to 2015



M= Marginal. Interpret with caution.
Note: Full data table for this graph provided in the Appendix (Table 3A-4).
Source: Ontario Student Drug Use and Health Survey 2003–2015 (Biennial).

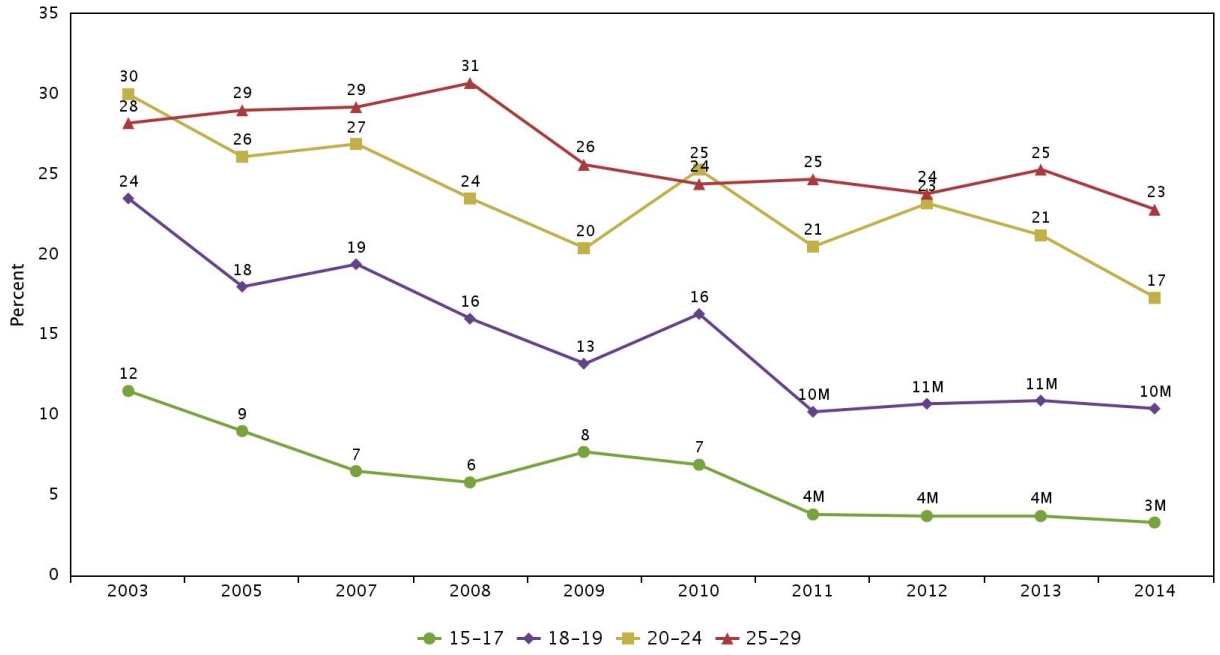
Current Smoking (Past-30 Days): Youth and Young Adults Aged 15 to 29

- In 2014, 23% of young adults aged 25-29 were current smokers and there has not been a significant change in this rate over the five-year period from 2010. Notably, 29% of males aged 25-29 were current smokers in 2014.
- The rate of current smoking for young adults aged 20 to 24 significantly decreased over

the past five years from 24% in 2010 to 17% in 2014.

- Over the period 2005 to 2014, there has been a significant decline in past-30 day current smoking by age including 15 to 17, 18 to 19, 20 to 24 and 25 to 29.
- According to the Canadian Community Health Survey[iii] (CCHS), youth aged 15 to 17 have a significantly lower rate of current smoking than young adults, with their level stable in recent years (3% in 2014;[iv] Figure 3-6).
- Among 18 to 19 year olds, the rate of current smoking was 10% in 2014, significantly lower than that of young adults aged 25 to 29 years (Figure 3-6).
- In 2014, males aged 18 to 19, 20 to 24 and 25 to 29 were significantly more likely to smoke in the past-30 days compared to females of the same age (Figure 3-7). (Data for males 15 to 17 was suppressed due to small sample sizes).

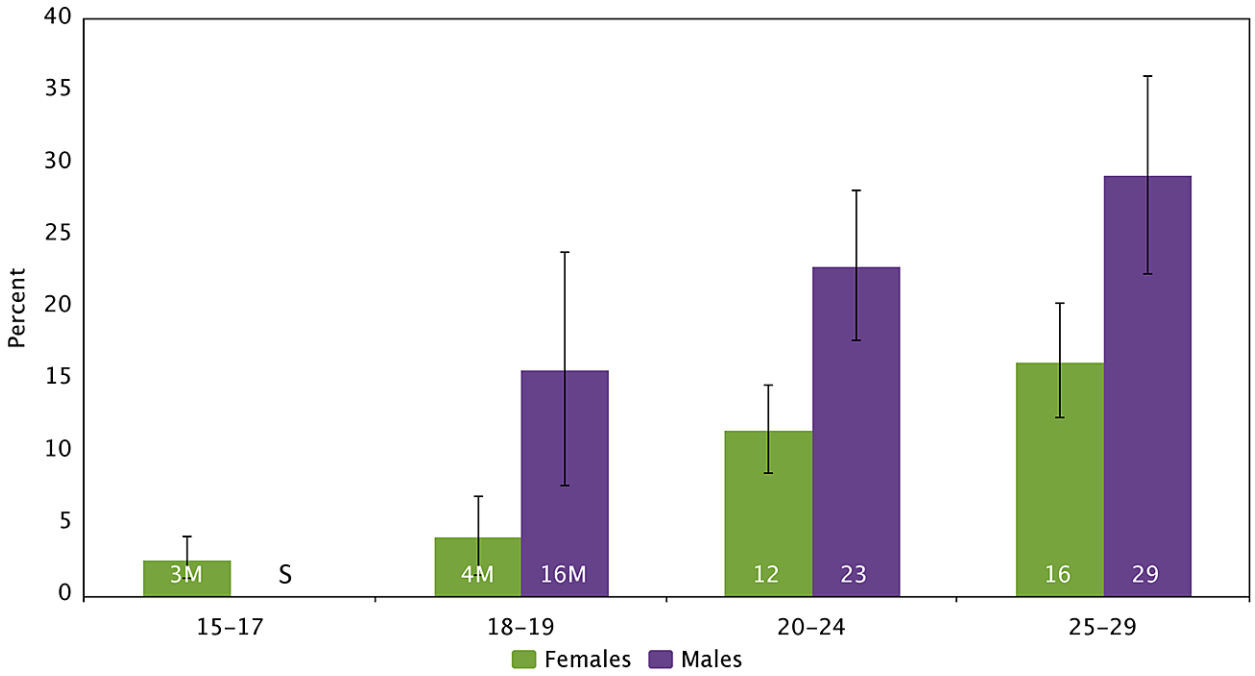
Figure 3-6: Current Smokers (Past-30 Days), Youth and Young Adults, Ontario, 2003 to 2014



Note: M= Marginal. Interpret with caution. X-axis scale (year) not uniform—interpret with caution. Full data table for this graph provided in the Appendix (Table 3A-5).
Source: Canadian Community Health Survey 2003, 2005, 2007-2014.

[iii] Note: The Canadian Community Health Survey, on which this section is based, considers both in-school and out-of-school respondents.
[iv] The 2015 Canadian Community Health Survey was unexpectedly delayed and was not available when this report was released.

Figure 3-7: Current Smokers (Past-30 Days), Youth and Young Adults, by Sex, Ontario, 2014



Note: Vertical lines represent 95% confidence intervals. M=Marginal. Interpret with caution: subject to moderate sampling variability. S = data suppressed due to small sample sizes. Full data table for this graph provided in the Appendix (Table 3A-6).
Source: Canadian Community Health Survey 2014.

Long-Term Outcomes: Use of Alternative Products

Cigars

- According to the 2014 CCHS, past-month use of cigars was 3.3% among 12 to 18 year olds, significantly unchanged from 2009/10 at 5%.

Smokeless Tobacco Products

- In 2015, among Ontario students in grades 7 to 12, 6.3% used smokeless tobacco products (chewing tobacco or snuff) in the past year, significantly unchanged since 2011 (4.6%). Among these past-year users in 2015, 78% tried these products only a few times (OSDUHS, 2015).

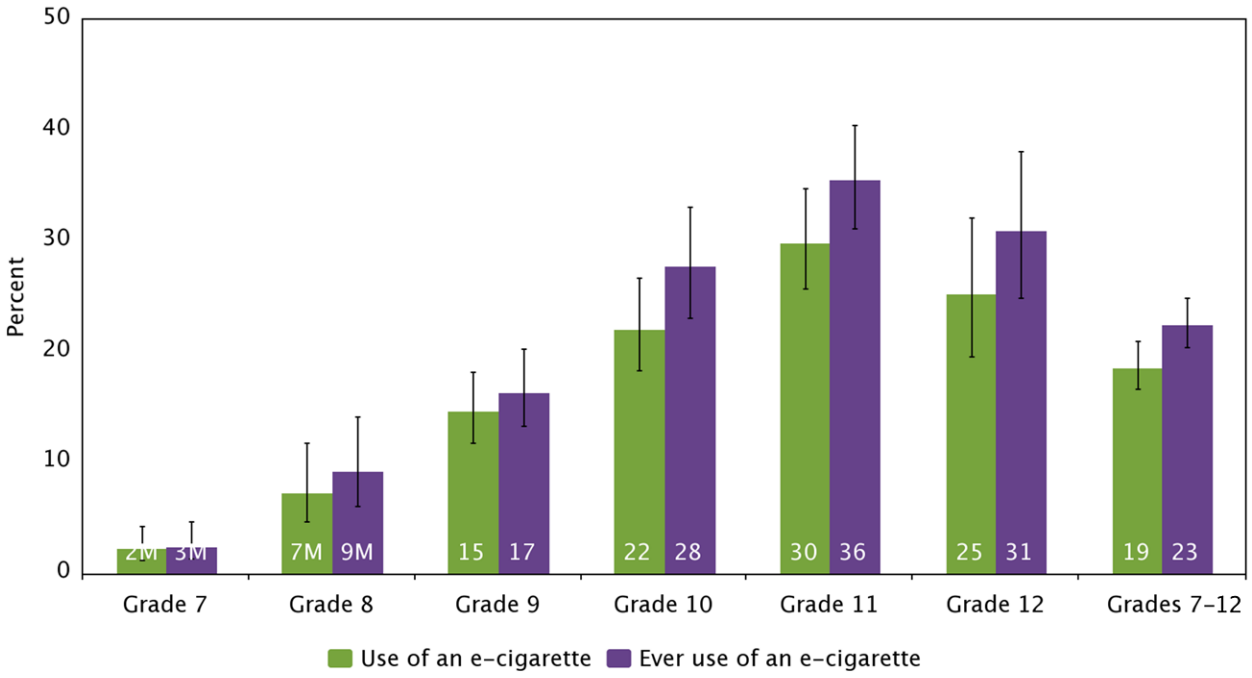
Electronic Cigarettes

- Among students in grades 7 to 12 in 2015, 23% (208,400) had ever used an e-cigarette. Prevalence of ever use varied by grade (Figure 3-8), with rates in grades 7 (3%), 8 (9%) and

9 (17%) significantly lower than that reported in grades 10 (28%), 11 (36%) and 12 (31%).

- Among students in grades 7 to 12, 19% (172,500 students) had used an e-cigarette in the past year (including only a few puffs; Figure 3-8), with rates in grades 7 (2%), 8 (7%) and 9 (15%) significantly lower than that reported in grades 10 (22%), 11 (30%) and 12 (25%).
- Significantly more male than female students in grades 7 to 12 had ever used an e-cigarette a) in their lifetime (27% vs. 18%) or b) in the past year (22% vs.16%; OSDUHS 2015, data not shown).
- Among all past-year users (19%), 6% had used e-cigarettes every day, and 19% had used e-cigarettes in the past month (OSDUHS, 2015; data not shown).
- In Canada, e-cigarettes are not permitted to contain nicotine, yet available evidence suggests that a number of users obtain nicotine juice for their e-cigarettes. Of students in grades 7 to 12 using an e-cigarette in the past year, 14% reported using nicotine-based e-cigarettes, 50% reported using non-nicotine e-cigarettes and 9% used both kinds (a further 26% were not sure what kind of e-cigarette they used; OSDUHS 2015, data not shown).
- Among grade 9 to 12 students who used an e-cigarette in the past year, 19% said they tried smoking it with marijuana, hash oil or wax (OSDUHS, data not shown).

Figure 3-8: E-Cigarette Use, Past Year and Ever Use, by Grade, Ontario, 2015

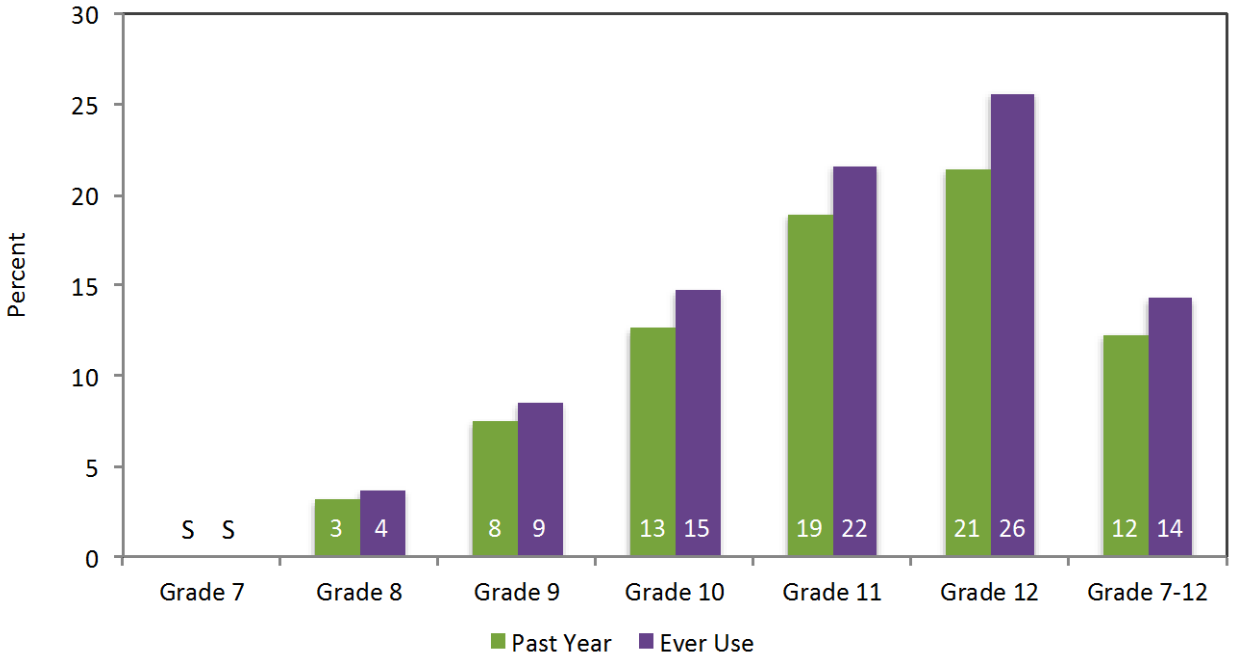


Note: Full data table for this graph provided in the Appendix (Table 3A-7).
Source: Ontario Student Drug Use and Health Survey 2015.

Waterpipes

- Among students in grades 7 to 12 in 2015, 14% (132,400 students) had ever used a waterpipe. Prevalence of ever use varied by grade (Figure 3-9), with rates in grades 8 and 9 significantly lower than those reported in grades 10, 11 and 12.
- Among students in grades 7 to 12, 12% (113,100 students) had used a waterpipe in the past year (including only a few puffs; Figure 3-9), with rates in grades 8 and 9 significantly lower than those reported in grades 11 and 12; and grade 10 lower than that reported for grade 12.
- Past-year use of waterpipe did not differ between 2013 and 2015 (12% vs. 12%).

Figure 3-9: Waterpipe Use, Past Year and Ever Use, by Grade, Ontario, 2015



S = data suppressed due to small sample sizes.
Note: Full data table for this graph provided in the Appendix (Table 3A-8).
Source: Ontario Student Drug Use and Health Survey 2015.

Cannabis Use

The use of Cannabis—which is also known as marijuana, weed, pot, grass, hashish, hash and hash oil—has led to widespread interest in recent years amongst health practitioners, in part, given talk about its possible legalization by the current federal government.

- Among students in grades 7 to 12, lifetime abstinence from cannabis was 76% in 2015 (among students in grades 9 to 12, it was 68%). Abstinence differed by grade: 99% in grade 7, 95% in grade 8, 88% in grade 9, 73% in grade 10, 61% in grade 11 and 58% in grade 12 (OSDUHS 2015). Only 15.5% of past-year cigarette smokers had a lifetime abstinence from cannabis compared to 86% of non-cigarette smokers.
- Among students in grades 7 to 12, 21% used cannabis in the past year (among students in grades 9 to 12, it was 28%; OSDUHS 2015). Reportable levels by grade include: 10% in grade 9, 25% in grade 10, 35% in grade 11 and 37% in grade 12.
- Among students in grades 7 to 12, 14% used cannabis during the past month (among grades 9 to 12, 18% used cannabis). Specifically, past month use of cannabis was 7% in grade 9, 15% in grade 10, 24% in grade 11 and 24% in grade 12 (OSDUHS 2015).

Short and Intermediate-Term Outcomes

Awareness of School and Community Prevention Initiatives

- In 2015, very few students (3%) had participated in an event sponsored by youth groups who were raising awareness of smoking and tobacco issues, although 27% had heard of such groups, unchanged from 2013 (OSDUHS 2013, 2015, data not shown).

Social Climate

Social climate refers to societal norms, practices and beliefs and to patterns of human actions and interactions. Evidence suggests that creating a healthy social climate is a key path for achieving and sustaining the desired outcomes of a comprehensive tobacco control program. One important indicator of the social climate around tobacco use is the social acceptability of smoking.

Social Acceptability

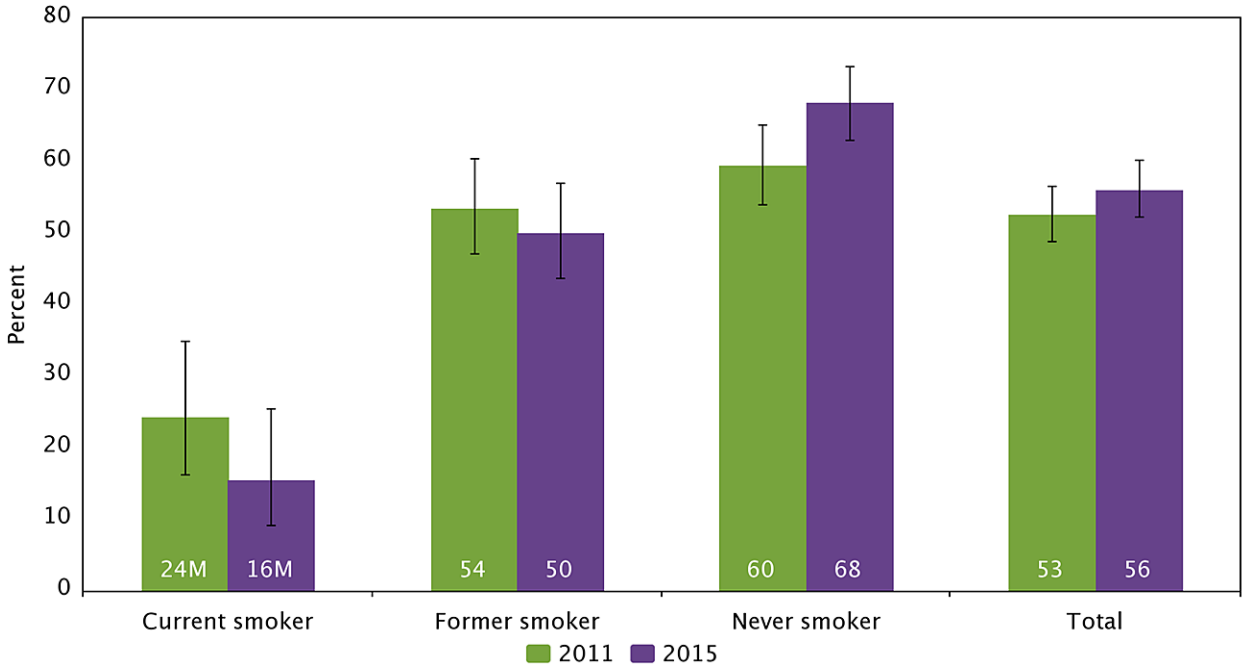
- In 2015, 68% of never smokers, 50% of former smokers and 16% of current smokers aged 18 years and over reported that it was unacceptable for adults to smoke (CAMH Monitor 2015; Figure 3-10), unchanged from 2011.
- In 2015, smoking by teenagers was viewed as highly unacceptable among all adults regardless of the respondent's smoking status (Figure 3-11). Never smokers and former smokers reported a significantly higher level of disapproval of smoking by teenagers, than did current smokers (93% and 92% vs. 71%; Figure 3-11).

- Adult views on the unacceptability of teenagers smoking remained stable from 2011 to 2015 (Figure 3-11).
- In 2015, 41% of adults viewed it as unacceptable for adults to use e-cigarettes whereas 77% viewed it as unacceptable for teenagers to use an e-cigarette (CAMH Monitor 2015, data not shown).

Smoking in Movies

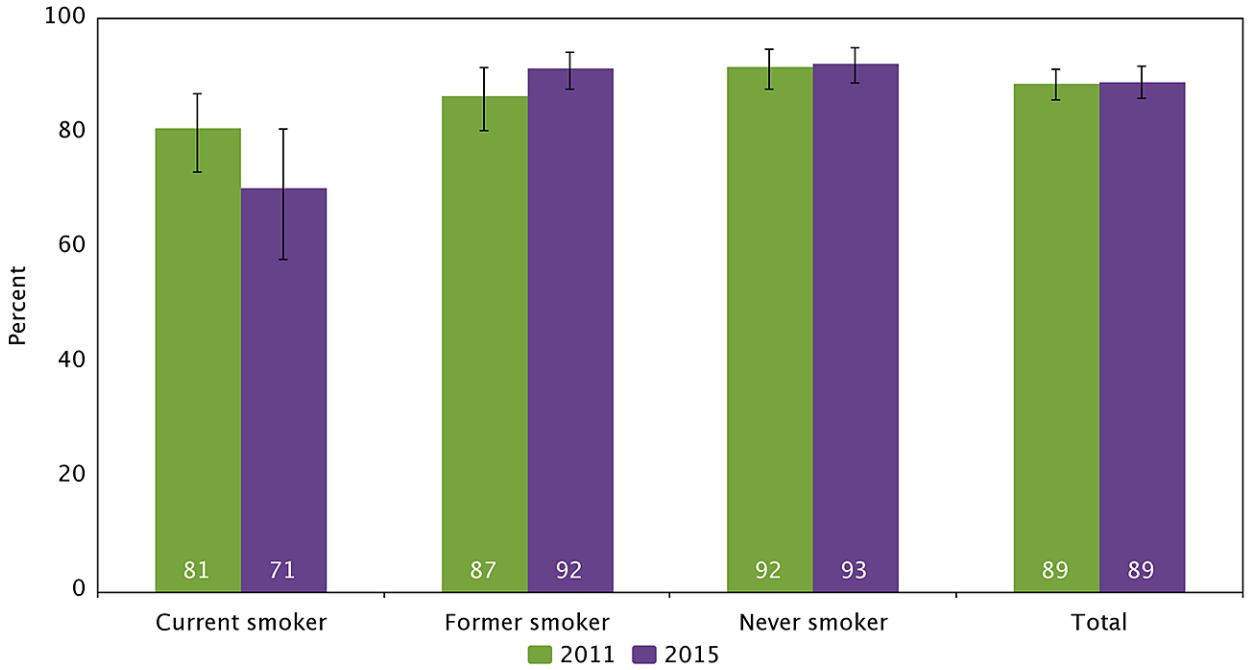
- Three in 10 students who were nonsmokers (30%) were in agreement that movies showing characters smoking should be rated 18A compared to 14% of students who were past-year smokers (OSDUHS 2015, data not shown; 14% is a marginal estimate. Interpret with caution).
- Over half of all adults (54%) agreed that movies showing characters smoking should be rated 18A. One in three (33%) current smokers were also in agreement (CAMH Monitor 2015, data not shown).

Figure 3-10: Adult Views on the Social Unacceptability of Adults Smoking Cigarettes, by Smoking Status, Ontario, 18+, 2011 and 2015



Note: Vertical lines represent 95% confidence intervals. M=Marginal. Interpret with caution: subject to moderate sampling variability. Full data table for this graph provided in the Appendix (Table 3A-9).
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2011 and 2015.

Figure 3-11: Adult Views on the Social Unacceptability of Teenagers Smoking Cigarettes, by Smoking Status, Ontario, 18+, 2011 and 2015



Note: Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 3A-10).
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2011 and 2015.

Ease of Obtaining Cigarettes

In 2015, 53% of students in grades 7 to 12 under the age of 19 believed it was fairly easy or very easy to obtain cigarettes, a significant decrease from 61% reported in 2013 (OSDUHS, data not shown). Students in grades 9 to 12 were much more likely to report it was fairly easy or very easy to obtain cigarettes compared to students in grades 7 to 8 (64% vs. 21%).

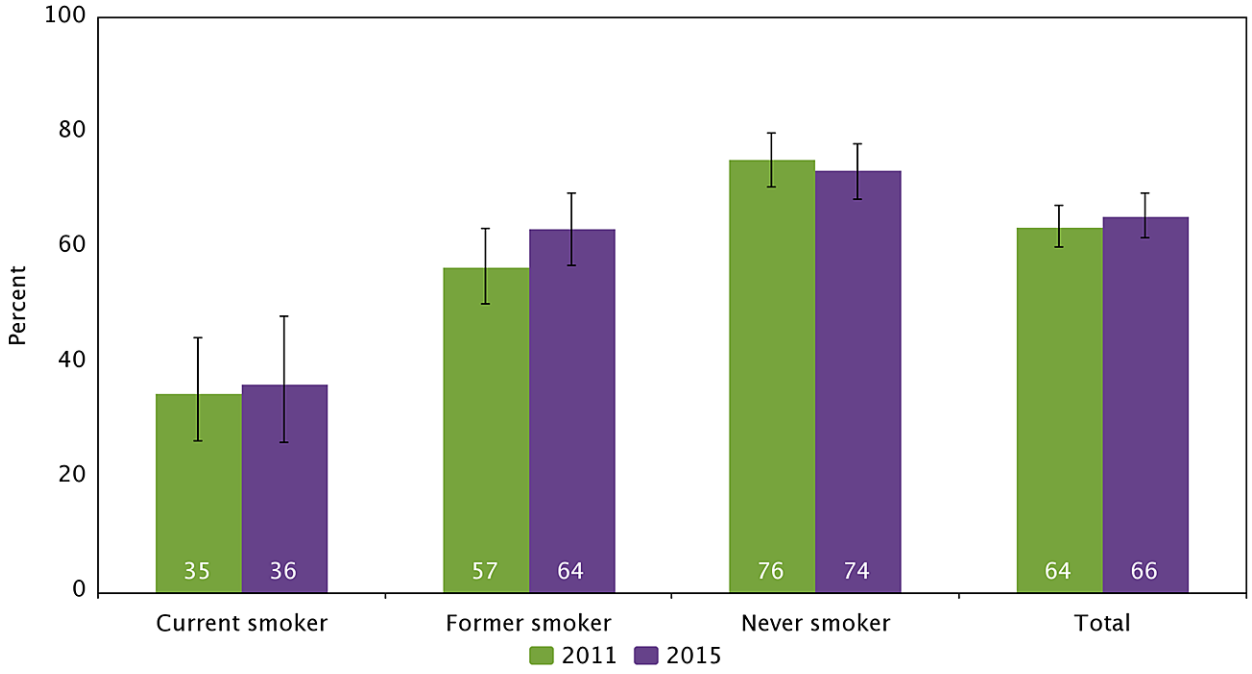
Support for Measures Related to Product Availability

Retail Sales

- In 2015, 63% of Ontario students in grades 7 to 12 under 19 years of age indicated their support for further restrictions on tobacco sales. That is, 35% agreed that tobacco products should not be sold at all and 28% responded that tobacco products should be sold in government-owned stores, similar to the way alcohol is sold in liquor stores. Only 17% responded that tobacco products should be sold in a number of places as they are now (OSDUHS 2015, data not shown).

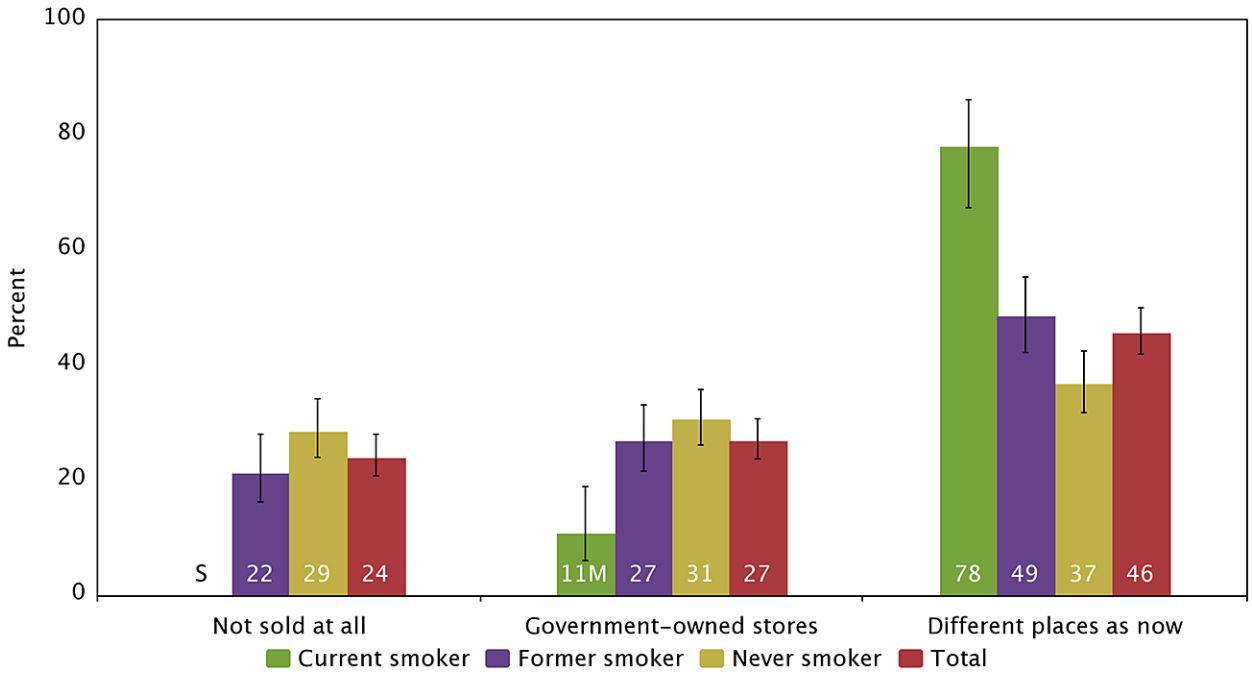
- In 2015, 66% of all Ontario adults agreed that the number of retail outlets that sell cigarettes should be greatly reduced, a rate unchanged in recent years (Figure 3-12, CAMH Monitor 2015). Significantly more never smokers and former smokers agreed with this policy option (74% and 64%, respectively) compared to 36% of current smokers (Figure 3-12).
- In 2015, 51% of adults in Ontario indicated their support for further restrictions on tobacco retail location. Specifically, almost one quarter (24%) responded that tobacco products should not be sold at all, 27% responded tobacco should be sold in government-owned stores similar to the way alcohol is sold in Liquor Control Board of Ontario stores, and 46% agreed that tobacco should be sold in a number of different places as they are now (Figure 3-13; no change over a 5-year reference period, 2011 to 2015, data not shown).
- Opinion about how tobacco products should be sold differed by grade (for kids under 19 years of age), with 48% of grade 7 and 8 students indicating that tobacco products should not be sold at all but only 31% of students in grades 9 to 12 sharing this view.

Figure 3-12: Agreement that the Number of Retail Outlets Selling Cigarettes Should Be Reduced, by Smoking Status, Ages 18+, Ontario, 2011 and 2015



Note: Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 3A-11).
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2011 and 2015.

Figure 3-13: Views on How Tobacco Should Be Sold, Ages 18+, Ontario, 2015



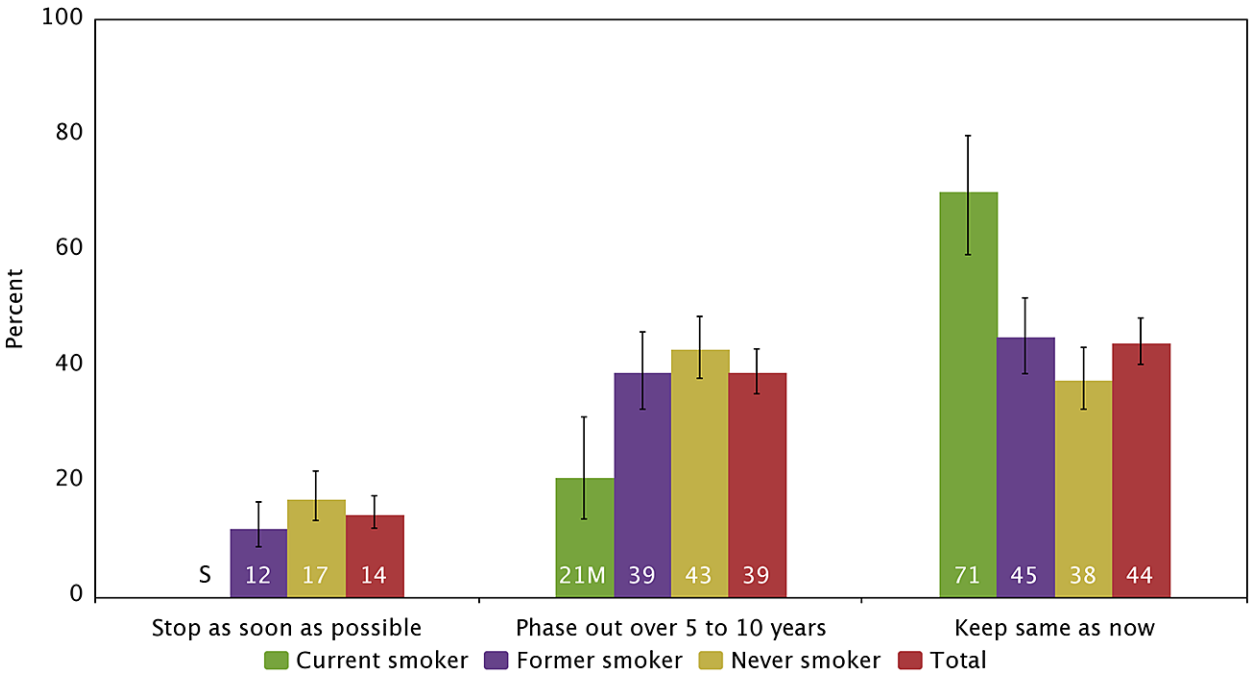
Note: S = data suppressed due to small sample sizes. Survey wording as follows: Which of the following comes closest to your view of how we should treat tobacco products in Ontario? Tobacco products should be sold in a number of different places, AS THEY ARE NOW; Tobacco products should be sold in government-owned stores similar to the way alcohol is sold in LCBO stores; Tobacco products should not be sold at all. Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 3A-12).
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2015.

Support for the Prohibition of Tobacco Products

- In 2015, 14% of Ontario adults responded that the sale of cigarettes should be stopped as soon as possible, 39% felt cigarettes should be phased out over the next five to 10 years and 44% felt that the sale of cigarettes should be kept as it is now (Figure 3-14), unchanged from the reference year of 2011 (data not shown).
- Two out of every ten smokers (21%) felt that cigarettes should be phased out in five to 10 years, whereas, 71% of smokers responded that the sale of cigarettes should be kept the same (Figure 3-14).
- Over half of all Ontario adults are in agreement that tobacco products should forever not be sold to youth who are now teenagers even when they reach adulthood (Figure 3-15); 28% of current smokers are likewise in agreement (Note. Marginal estimate. Interpret with caution).
- Adults in Ontario had varied beliefs about where e-cigarettes should be sold including

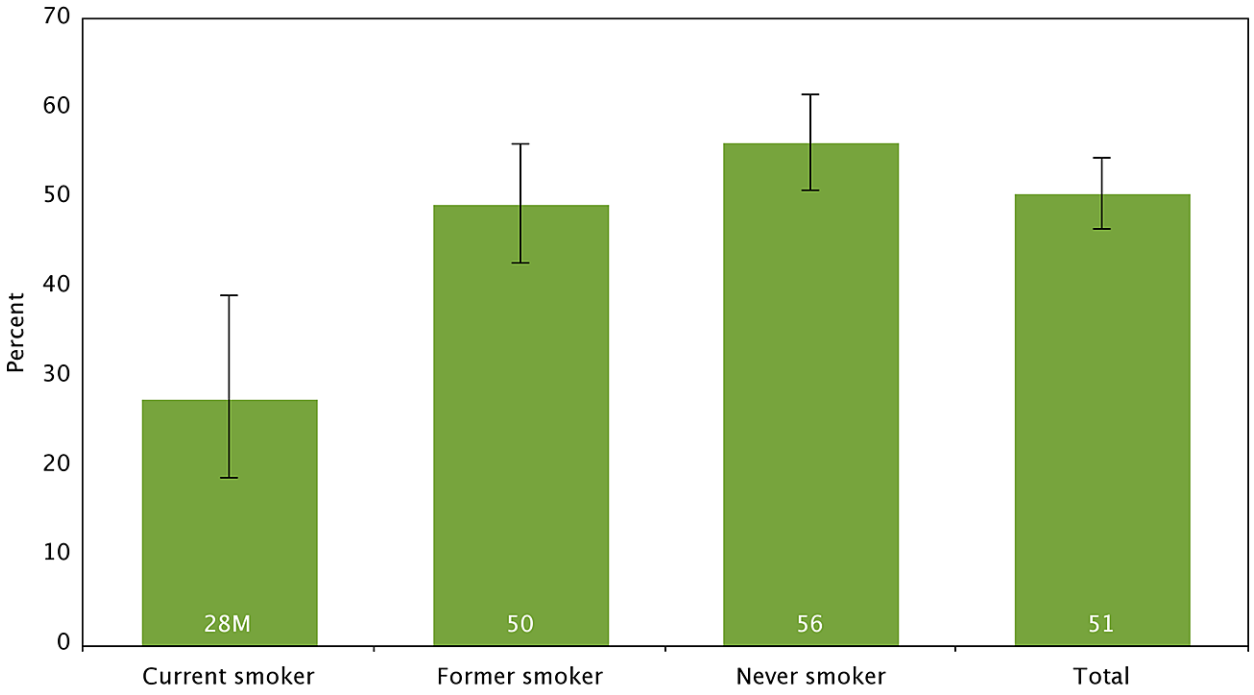
not at all (21%), different place as is the case now (31%), government-owned stores (13%), pharmacies (12%), vape shop (12%), with 12% responding that they did not know where it should be sold (Figure 3-16). Among past-year e-cigarette users, 63% believed e-cigarettes should be sold in different places as is the case now (CAMH Monitor 2015, data not shown).

Figure 3-14: Views on the Sale of Cigarettes, by Smoking Status, Ages 18+, Ontario, 2015



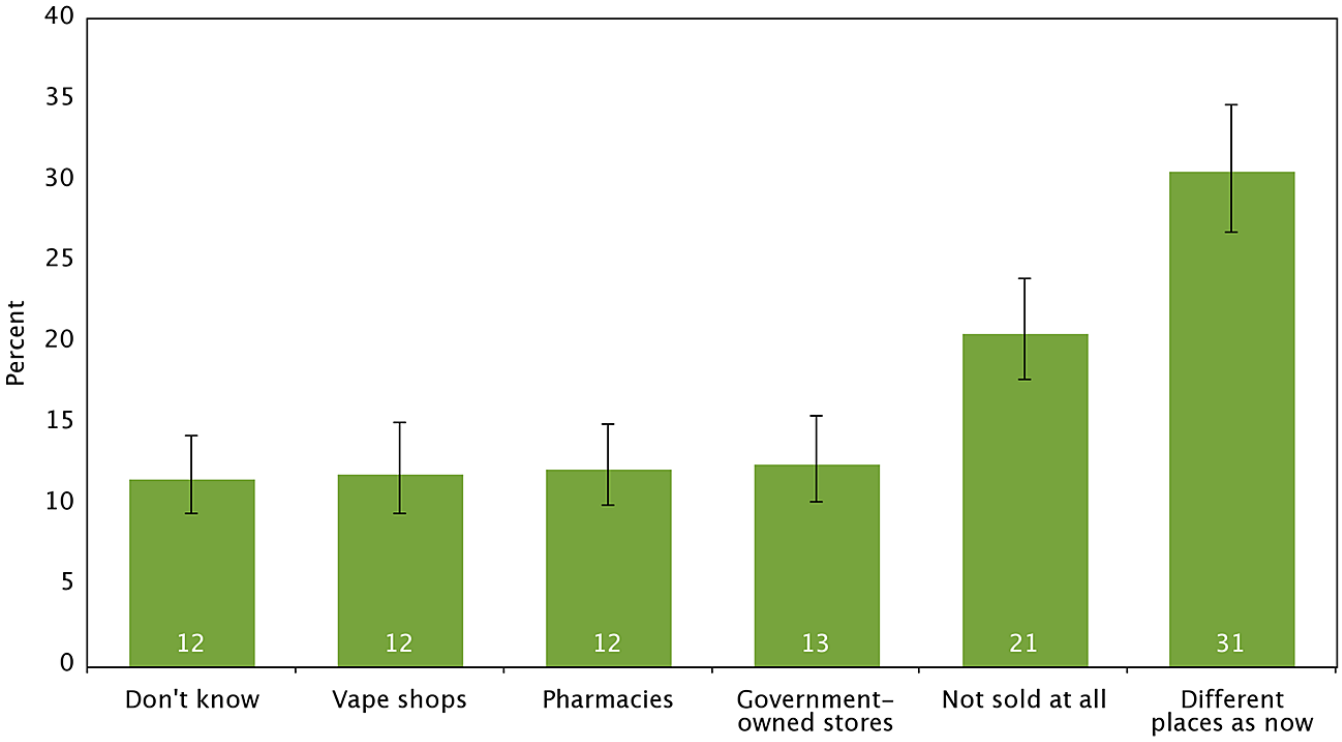
Note: S = data suppressed due to small sample sizes. Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 3A-13).
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2015.

Figure 3-15: Agreement that Tobacco Products Should Forever Not Be Sold to Youth Who Are Now Teenagers Even When They Reach Adulthood, Ontario, 2015



Note: Vertical lines represent 95% confidence intervals. M=Marginal. Interpret with caution: subject to moderate sampling variability. Full data table for this graph provided in the Appendix (Table 3A-14).
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2015.

Figure 3-16: Opinion About Where E-Cigarettes Should Be Sold, Ontario, 2015



Note: Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 3A-15).
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2015.

MPOWER Comparison with Ontario: Prevention

Six MPOWER indicators relate to prevention: Monitoring, Health Warning Labels, Mass Media Campaigns, Tobacco Advertising Bans, Advertising Ban Compliance and Taxation (Table 3-4).

Table 3-4: Assessing Prevention: MPOWER Indicators Applied to Ontario

MPOWER Indicator	Highest MPOWER Requirement	Situation in Ontario
Monitoring	Recent, representative and periodic data for both adults and youth).	Meets the requirement for the highest score.
Health warning labels on cigarette packages	Large health warning labels (i.e., over 50% of package panel, graphic, rotate, specific health warnings).	Meets the requirement for the highest score.
Mass media campaigns	Research to gain a thorough understanding of the target audience, air time (radio and television) and placement (billboards, print ad); effectively and efficiently reach a target audience; gain publicity or news coverage for the campaign; evaluation of the campaign reach and impact.	Since January 2011, no sustained and intensive provincial prevention campaigns have been conducted in Ontario with duration longer than three weeks. There have been varied online and local campaigns and the Ontario Ministry of Health and Long-Term Care created a new campaign in March 2013 called Quit the Denial (a campaign targeting young adults aged 18 to 29 years old who are social smokers but don't view themselves as smokers).
Tobacco advertising bans	Ban on all forms of direct and indirect advertising.	Direct mail to adult readership, non-tobacco goods and services with tobacco brand names and appearance of tobacco products in TV and/or films are allowed in Ontario (and Canada).
Advertising ban compliance	Complete compliance.	Meets the requirement for the highest score.
Taxation	Tobacco tax > 75% of the retail price.	Tobacco tax at 65.1% of the retail price in Ontario in 2015.

Scientific Advisory Committee: Overview of Prevention Goals and Recommendations

The Scientific Advisory Committee[v] (SAC) goal for prevention is: "To prevent the uptake of tobacco use among youth and young adults in Ontario, where uptake encompasses all stages of smoking, initiation and progression." The SAC report includes several recommendations on media and social marketing, movies and video games, policy enforcement, program alignment, high-risk youth and young adults, evaluation and monitoring, retail access and compliance and cessation assessment and early intervention. As related in earlier parts of this chapter, progress has been made in many of these areas, but more work remains to address several shortcomings (e.g., movies and video game ads to denormalize tobacco industry and change social norms) and to increase intensity (e.g., media and social marketing, assessment of smoking status and provision of cessation services to youth and young adults).

2010 Scientific Advisory Committee Recommendations

Media and Social Marketing

SAC Recommendation 5.1: Implement media and social marketing strategies using traditional and non-traditional media (e.g., viral and interactive media channels) that denormalize the tobacco industry, highlight the social unacceptability of tobacco use, identify resources available to youth and young adults who want to quit and encourage youth and young adults to refrain from tobacco use.

Current Status: Since January 2011, no sustained and intensive campaigns have been conducted in Ontario with duration longer than three weeks. There have been varied online and local campaigns and the MOHLTC created a campaign in March 2013 called Quit the Denial (a campaign targeting young adults aged 18 to 29 years old who are social smokers but don't view themselves as smokers).

[v] Upon request of the Ministry of Health Promotion and Sport, a committee of lead tobacco control researchers in Ontario was convened to provide scientific and technical advice and recommendations to the Government of Ontario to inform the comprehensive tobacco control strategy renewal for 2010-2015.

Movies and Video Games

SAC Recommendation 5.2: Require adult ratings for movies (18A) and video games (Mature) with any tobacco imagery.

Current Status: The Ontario Film Review Board (OFRB) provides a 'tobacco use' content advisory for movies released in Ontario. Of the 879 top-grossing movies released over the period 2008 to 2014, 438 featured tobacco imagery, yet the OFRB posted tobacco use observations for only two thirds of these (288/438).

Current Status: Tobacco use continues to be shown in movies that are rated for youth viewing.

SAC Recommendation 5.3: Require ads that aim to denormalize tobacco companies and change social norms related to tobacco products and their use preceding movies and video games that contain tobacco imagery, as well as warnings on movie and video game packaging.

Current Status: No requirements for ads preceding movies and video games that contain tobacco imagery.

Policy Enforcement

SAC Recommendation 5.4: Develop, implement and enforce comprehensive tobacco control policies within and across settings (e.g., schools, colleges, universities and communities).

Current Status: Comprehensive legislation on sales to minors enforced; legislation enacted to: a) prohibit the sale of tobacco on college and university campuses, as of January 1, 2015, and b) prohibit flavoured tobacco ("adult" flavours excepted such as wine, port, whiskey or rum), with a delayed implementation date of January 1, 2017 for menthol-flavoured tobacco products.

The Ministry of Finance strengthened oversight of raw leaf tobacco, effective January 1, 2015, to enable comprehensive coverage of the tobacco supply chain and provides greater opportunity to

disrupt the diversion of raw leaf tobacco to contraband manufacturers.[vi]

The Ontario government also introduced legislation that amended the *Tobacco Tax Act* to: increase fines for offences related to marked tobacco products and allow for the impoundment of vehicles used to transport contraband tobacco.

Program Alignment

SAC Recommendation 5.5: Align cessation and prevention programs in schools, colleges, universities and communities with other activities (e.g., media and social marketing, policy interventions), within the provincial Tobacco Control Strategy.

Current Status: TCANs, health units, YATI and LTPB have variously worked in these settings, leveraging prevention programs and other activities.

High-Risk Youth and Young Adults

SAC Recommendation 5.6: Target program interventions to the schools, colleges, universities and workplaces where youth and young adults are at greatest risk for tobacco use.

Current Status: TCANs, health units, YATI and LTPB have variously targeted prevention programs in these settings. The extent to which high-risk youth and young adults are targeted is unknown at this time.

Evaluation and Monitoring

SAC Recommendation 5.7: Further develop and implement an integrated system of intervention development, evaluation and surveillance that is applicable province-wide and at the local level, to: A) Identify high-risk environments and at-risk sub-populations. B) Guide the implementation of evidence-based prevention initiatives (programs and policies). C) Evaluate the impact that changes in programs and policies have on youth and young adult smoking behaviour over time.

[vi] Ontario Ministry of Finance. *Contraband Tobacco: Recent Action Taken*. Queen's Printer of Ontario, 2010. Accessed on February 27, 2017.

Current Status: OTRU, in partnership with SFO partners, have a strong provincial-level surveillance system in place. Additional surveillance work remains at the local level and in the identification of high-risk environments and sub-populations. OTRU provides SFO partners knowledge and evaluation support.

Retail Access and Compliance

SAC Recommendation 5.8: Implement revised and more rigorous (realistic) compliance protocols with tobacco retailers regarding sales to underage consumers.

Current Status: No change to existing protocol.

Cessation Assessment and Early Intervention

SAC Recommendation 5.9: Ensure smoking status is assessed and cessation services are provided in all settings (e.g., social, school and health care) providing services to youth and young adults.

Current Status: Not consistently implemented.

Chapter Summary

Policies and programs to prevent initiation—including taxation, restrictions on youth access, smoking bans, advertising bans, youth engagement initiatives and school-based programming—have had some success in the general youth population. Reporting of past 30-day current smoking is too small in the lower grades to adequately measure in 2015, but it is 2% in grades 9 and 10 combined and 5% for grade 11 and 12, which is significantly lower from that reported for the pre-SFO baseline year of 2005 (5% and 12%, respectively; Figure 3-5).

Despite improvements in recent years, past 30-day current smoking is firmly established among 18- to 19-year olds (10%), young adults aged 20 to 24 (17%) and young adults aged 25 to 29 (23%; Figure 3-6). However, rates of past-30 day current smoking are much higher for young adult males (12% for females and 23% for males aged 20 to 24; Figure 3-7). Efforts to prevent initiation in this young adult age group include expansion of LTPB to community colleges and targeted social marketing campaigns. Overall, more research may be needed to support interventions that will more quickly and effectively prevent initiation among young adults.

Among youth, emerging products, including e-cigarettes and waterpipes, are a growing concern. According to the Ontario Student Drug Use and Health Survey, e-cigarettes have a particularly high rate of ever and past-year use (Table 3-5), albeit cigarettes may be used more frequently. Cannabis has the highest ever use and past-year use compared to these other products.

Table 3-5: Ever Use and Past-Year Use of Cigarettes, E-Cigarettes, Waterpipe and Cannabis, Grades 7 to 12, 2015

Product	Ever use, %	Past year, %
Cigarettes	19	14
E-Cigarettes	23	19
Waterpipe	14	12
Cannabis	24	21

Source: Ontario Student Drug Use and Health Survey 2015.

Although Ontario does well on most of the MPOWER indicators related to prevention, there are still noticeable gaps in meeting these minimum requirements. Despite a small increase again

this past year, tobacco tax is still lower than the 75% of retail price minimum; mass media campaigns, though improved, are still inadequate in target, duration and intensity; and gaps remain in banning advertising of tobacco products.

Ontario continues to fall short on several of the Scientific Advisory Committee recommendations for preventing tobacco use among youth and young adults. Notably, tobacco use continues to be shown in movies that are rated for youth viewing; there are no requirements to run ads denormalizing tobacco preceding movies and video games that contain tobacco imagery; and the protocols for compliance of tobacco retailers with restrictions on sales to minors have not improved. Moreover, SAC noted that beyond basic information about tobacco being provided in all schools, prevention efforts need to focus on high-risk schools, colleges and workplaces where youth and young adults are at greatest risk for tobacco use. Our analyses of 2015 data indicate that a significant number of students in grades 9 to 12 who are current smokers also have a drug use problem (80%), a hazardous drinking problem (71%), and engage in delinquent behaviour (38%; See Figure 2-13 in Tobacco Use chapter). It is unclear whether sufficient effort is being directed to targeting youth and young adults who are most at risk of becoming established tobacco users.

The progress in decreasing cigarette initiation among school-aged youth has held course. At the same time, there is stagnation in decreasing cigarette use among young adults indicating a need for more focus on policies and programs for those at high risk. Moreover, alternative tobacco products, including e-cigarettes and waterpipes, are being used by a significant number of youth and young adults. Cannabis use is particularly high compared to these other products. Prevention infrastructure, programming, policies and surveillance need to keep pace not only with existing patterns of tobacco use but new and emerging patterns as well.

Visual Summary of Key Prevention Indicators

Past Year Use

14% of grade 7 to 12 students used cigarettes

24% of grade 12 students used cigarettes (peak)

6% of grade 7 to 12 students used cigarettes for the first time

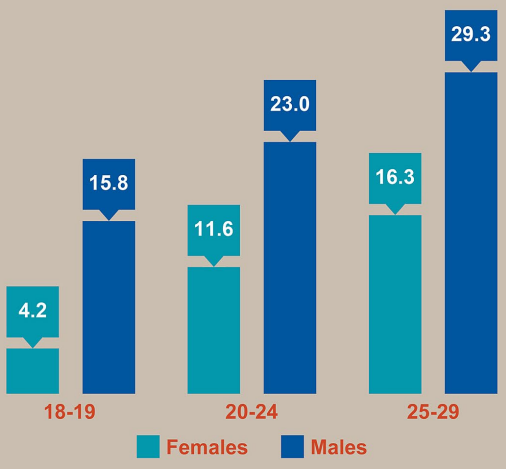
12% of grade 11 students used cigarettes for the first time (peak)

19% of grade 9 to 12 students tried smoking marijuana, hash oil or wax with e-cigarettes (among those who used e-cigarettes)

19% of grade 7 to 12 students used e-cigs

30% of grade 11 students used e-cigs (peak)

Past 30 Day Use



12% of grade 7 to 12 students used waterpipe

21% of grade 12 students alone used waterpipe

Male youth and young adults were significantly more likely to smoke than females of the same age

Appendix: Data Tables

Table 3A-1: Lifetime Abstinence, by Grades 7 to 12, Ontario, 2003 to 2015

Grade	2003	2005	2007	2009	2011	2013	2015
Grade 7	80	91	93	94	97	97	98
Grade 8	72	84	88	88	90	92	93
Grade 9	61	69	76	82	88	88	89
Grade 10	52	59	67	68	77	80	80
Grade 11	42	54	57	63	65	72	69
Grade 12	41	49	55	58	65	66	68
Grade 7-12	57	67	72	74	78	80	81

Note: Data table is for Figure 3-2.
Source: Ontario Student Drug Use and Health Survey 2003–2015 (Biennial).

Table 3A-2: Use of Cigarettes for the First Time in the Past Year, by Grades 7 to 12, Ontario, 2003 to 2015

Year	Grade	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2003	Grade 7	5.8	4.3	7.8
	Grade 8	8.1	5.2	12.3
	Grade 9	12.3	10.1	14.8
	Grade 10	9.8	7.9	12.1
	Grade 11	10.6	9	12.5
	Grade 12	8.2	6.6	10.1
	Grades 7-12	9.3	8.4	10.3
2005	Grade 7	2.9	1.7	5
	Grade 8	5.3	3.2	8.6
	Grade 9	7.7	5.7	10.2
	Grade 10	10.3	8	13.2
	Grade 11	8.8	6.5	11.8
	Grade 12	8.1	5.9	11.1
	Grades 7-12	7.3	6.4	8.3
2007	Grade 7	S		
	Grade 8	5.2	2.7	9.8
	Grade 9	6.6	4.6	9.3
	Grade 10	8.2	5.8	11.6
	Grade 11	7.6	5.4	10.6
	Grade 12	8	5.5	11.3
	Grades 7-12	6.3	5.2	7.7
2009	Grade 7	S		
	Grade 8	3.6	2	6.5
	Grade 9	4.3	2.6	6.9
	Grade 10	7.6	5.5	10.5
	Grade 11	8.8	6.3	12.2
	Grade 12	8.6	5.6	13
	Grades 7-12	6.1	5.1	7.4
2011	Grade 7	S		
	Grade 8	4.5	2.6	7.7
	Grade 9	5.7	3.7	8.6
	Grade 10	7.3	4.5	11.5
	Grade 11	6.1	3.9	9.5
	Grade 12	9.1	5.6	14.6
	Grades 7-12	6.3	5.1	7.6

Year	Grade	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2013	Grade 7	S		
	Grade 8	S		
	Grade 9	2.7	1.4	5
	Grade 10	6	3.8	9.4
	Grade 11	9.9	6.5	14.8
	Grade 12	5.6	3.9	8
	Grades 7-12	5.3	4.3	6.5
2015	Grade 7	S		
	Grade 8	S		
	Grade 9	4.9 [M]	3.3	7.2
	Grade 10	6.7	5	9
	Grade 11	12.2	9.2	16
	Grade 12	7.9 [M]	5.6	11
	Grades 7-12	6.3	5.4	7.4

Note: M=Marginal. Interpret with caution: subject to moderate sampling variability. S = data suppressed due to small sample sizes. Data table is for Figure 3-3.
Source: Ontario Student Drug Use and Health Survey 2003–2015 (Biennial).

Table 3A-3: Past-Year Smoking, by Grades 7 to 12, Ontario, 2003 to 2015

Grade	2003	2005	2007	2009	2011	2013	2015
Grade 7	13	6	4	3	3	1	S
Grade 8	21	11	7	7	6	4	S
Grade 9	29	21	16	12	8	8	8
Grade 10	35	29	20	23	16	14	16
Grade 11	42	34	30	25	24	22	21
Grade 12	43	36	30	29	25	24	24
Grade 7-12	31	23	18	18	15	14	14

Note: S = data suppressed due to small sample sizes. Data table is for Figure 3-4.
Source: Ontario Student Drug Use and Health Survey 2003–2015 (Biennial).

Table 3A-4: Current Smoking (Past-30 Days), by Grade, Ontario, 2003 to 2015

Year	Grades 9 to 10	Grades 11 to 12
2005	5	12
2007	4	8
2009	4	9
2011	3	6
2013	2	6
2015	2	5

Note: Data table is for Figure 3-5.
Source: Ontario Student Drug Use and Health Survey 2003–2015 (Biennial).

Table 3A-5: Current Smokers (Past-30 Days), Youth and Young Adults, Ontario, 2003 to 2014

Year	Age	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2003	15-17	54,700	11.5	9.7	13.2
	18-19	75,600	23.5	20.4	26.6
	20-24	256,400	30	27.2	32.7
	25-29	214,900	28.2	25.7	30.8
2005	15-17	47,600	9	7.3	10.8
	18-19	58,800	18	15.4	20.5
	20-24	231,900	26.1	23.8	28.3
	25-29	228,800	29	26.8	31.3
2007	15-17	35,500	6.5	4.8	8.2
	18-19	63,100	19.4	13.7	25
	20-24	226,400	26.9	23.3	30.4
	25-29	255,300	29.2	25.9	32.6
2008	15-17	28,900	5.8	4.2	7.5
	18-19	54,600	16	12.1	19.8
	20-24	208,700	23.5	19.6	27.5
	25-29	260,700	30.7	27.2	34.2
2009	15-17	40,100	7.7	5.4	9.9
	18-19	44,500	13.2	9.6	16.8
	20-24	179,600	20.4	17	23.8
	25-29	224,900	25.6	21.9	29.2
2010	15-17	37,000	6.9	5	8.9
	18-19	55,300	16.3	12.1	20.5
	20-24	238,500	25.3	21.2	29.3
	25-29	212,100	24.4	21.3	27.6
2011	15-17	19,600	3.8 [M]	2.3	5.2
	18-19	35,000	10.2 [M]	6.9	13.5
	20-24	199,800	20.5	17.1	24
	25-29	214,500	24.7	21.1	28.4
2012	15-17	20,400	3.7 [M]	1.9	5.5
	18-19	31,000	10.7 [M]	7	14.5
	20-24	228,900	23.2	19.2	27.2
	25-29	211,200	23.8	19.9	27.7
2013	15-17	18,700	3.7 [M]	2.2	5.1
	18-19	37,800	10.9 [M]	7.2	14.6
	20-24	197,700	21.2	17.8	24.6
	25-29	242,700	25.3	21.6	29
2014	15-17	17,800	3.3 [M]	1.7	4.9
	18-19	33,700	10.4 [M]	5.8	15
	20-24	171,000	17.3	14.3	20.4
	25-29	202,900	22.8	18.8	26.7

Note: M=Marginal. Interpret with caution: subject to moderate sampling variability. Data table is for Figure 3-6.
Source: Canadian Community Health Survey 2003-2014.

Table 3A-6: Current Smokers (Past-30 Days), Youth and Young Adults, by Sex, Ontario, 2014

Age	Sex	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
15-17	Females	6,700	2.6 [M]	1.2	4.1
15-17	Males		S		
18-19	Females	6,400	4.2 [M]	1.5	6.9
18-19	Males	27,400	15.8 [M]	7.7	23.9
20-24	Females	56,700	11.6	8.5	14.6
20-24	Males	114,200	23	17.8	28.2
25-29	Females	73,300	16.3	12.4	20.3
25-29	Males	129,500	29.3	22.4	36.1

Note: M=Marginal. Interpret with caution: subject to moderate sampling variability. S = data suppressed due to small sample sizes. Data table is for Figure 3-7.
Source: Canadian Community Health Survey 2014.

Table 3A-7: E-Cigarette Use, Past Year and Ever Use, by Grade, Ontario, 2015

Use of an E-Cigarette	Group	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Past Year	Grade 7	2,600	2.3 [M]	1.2	4.2
	Grade 8	8,900	7.4 [M]	4.6	11.8
	Grade 9	22,000	14.7	11.7	18.2
	Grade 10	34,500	22.2	18.3	26.7
	Grade 11	48,700	30	25.7	34.7
	Grade 12	55,900	25.3	19.5	32.1
	Grades 7-12	172,500	18.7	16.7	20.9
Ever Use	Grade 7	2,800	2.5 [M]	1.3	4.6
	Grade 8	11,300	9.4 [M]	6.1	14.1
	Grade 9	24,700	16.5	13.3	20.3
	Grade 10	43,200	27.8	23.1	33.1
	Grade 11	57,700	35.6	31.1	40.4
	Grade 12	68,800	31.1	24.9	38.1
	Grades 7-12	208,400	22.6	20.4	24.9

Note: M=Marginal. Interpret with caution: subject to moderate sampling variability. Data table is for Figure 3-8.
Source: Ontario Student Drug Use and Health Survey 2015.

Table 3A-8: Waterpipe Use, Past Year and Ever Use, by Grade, Ontario, 2015

Any Use of a Waterpipe	Group	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Past Year	Grade 7		S		
	Grade 8	3,800	3.2 [M]	1.7	5.9
	Grade 9	11,200	7.5	5.5	10
	Grade 10	19,500	12.6	9.5	16.4
	Grade 11	30,700	18.9	15.2	23.4
	Grade 12	47,300	21.4	18	25.3
	Grades 7-12	113,100	12.3	10.8	13.9
Ever use of waterpipe	Grade 7		S		
	Grade 8	4,500	3.7 [M]	2.1	6.6
	Grade 9	12,700	8.5	6.4	11.2
	Grade 10	22,800	14.7	11.5	18.6
	Grade 11	35,000	21.6	17.3	26.5
	Grade 12	56,500	25.6	20.5	31.3
	Grades 7-12	132,400	14.3	12.6	16.2

Note: M=Marginal. Interpret with caution: subject to moderate sampling variability. S = data suppressed due to small sample sizes. Data table is for Figure 3-9.
Source: Ontario Student Drug Use and Health Survey 2015.

Table 3A-9: Adult Views on the Social Unacceptability of Adults Smoking Cigarettes, by Smoking Status, Ontario, 18+, 2011 and 2015

Year	Smoking Status	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2011	Current smoker		24.4 [M]	16.3	34.9
	Former smoker		53.7	47	60.3
	Never smoker		59.6	53.9	65.1
	Total		52.7	48.8	56.6
2015	Current smoker	218,600	15.7 [M]	9.1	25.5
	Former smoker	1,409,700	50.2	43.6	56.9
	Never smoker	4,139,600	68.4	63	73.3
	Total	5,767,900	56.2	52.2	60.2

Note. M=Marginal. Interpret with caution: subject to moderate sampling variability. Data table is for Figure 3-10.
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2011 and 2015.

Table 3A-10: Adult Views on the Social Unacceptability of Teenagers Smoking Cigarettes, by Smoking Status, Ontario, 18+, 2011 and 2015

Year	Group	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2011	Current smoker		81.2	73.3	87.1
	Former smoker		86.9	80.6	91.5
	Never smoker		92	87.7	94.9
	Total		88.9	85.9	91.3
2015	Current smoker	987,600	70.8	58	80.9
	Former smoker	2,554,400	91.6	87.9	94.2
	Never smoker	5,608,000	92.5	88.9	95
	Total	9,150,000	89.3	86.3	91.7

Note: Data table is for Figure 3-11.
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2011 and 2015.

Table 3A-11: Agreement that the Number of Retail Outlets Selling Cigarettes Should Be Reduced, by Smoking Status, Ages 18+, Ontario, 2011 and 2015

Year	Group	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2011	Current smoker		34.8	26.3	44.4
	Former smoker		56.9	50.2	63.4
	Never smoker		75.6	70.7	80
	Total		63.9	60.1	67.5
2015	Current smoker	507,500	36.4	26.1	48.1
	Former smoker	1,782,200	63.6	57	69.7
	Never smoker	4,451,900	73.7	68.5	78.2
	Total	6,741,600	65.8	61.9	69.6

Note: Data table is for Figure 3-12.
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2011 and 2015.

Table 3A-12: Views on How Tobacco Should Be Sold, Ages 18+, Ontario, 2015

Policy Option	Smoking Status	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Different places as now	Current smoker	1,091,100	78.2	67.5	86.1
	Former smoker	1,367,300	48.7	42.1	55.4
	Never smoker	2,244,000	37.1	31.9	42.5
	Total	4,702,400	45.8	41.9	49.9
Government-owned stores	Current smoker	152,600	10.9 [M]	6.1	18.8
	Former smoker	757,400	27	21.6	33.1
	Never smoker	1,858,600	30.7	26.1	35.8
	Total	2,768,600	27	23.7	30.6
Not sold at all	Current smoker		S		
	Former smoker	604,200	21.5	16.2	28.1
	Never smoker	1,746,100	28.8	24.1	34.1
	Total	2,485,400	24.2	20.9	28

Note: S = data suppressed due to small sample sizes. Survey wording as follows: Which of the following comes closest to your view of how we should treat tobacco products in Ontario? Tobacco products should be sold in a number of different places, AS THEY ARE NOW; Tobacco products should be sold in government-owned stores similar to the way alcohol is sold in LCBO stores; Tobacco products should not be sold at all. Data table is for Figure 3-13.
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2015.

Table 3A-13: Views on the Sale of Cigarettes, by Smoking Status, Ages 18+, Ontario, 2015

Policy Option	Smoking Status	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Stop as soon as possible	Current smoker		S		
Phase out over 5 to 10 years	Current smoker	291,900	21 [M]	13.5	31.1
Keep same as now	Current smoker	982,700	70.6	59.3	79.9
Stop as soon as possible	Former smoker	335,500	12	8.6	16.4
Phase out over 5 to 10 years	Former smoker	1,094,700	39.1	32.6	45.9
Keep same as now	Former smoker	1,268,100	45.3	38.8	51.9
Stop as soon as possible	Never smoker	1,039,700	17.2	13.4	21.8
Keep same as now	Never smoker	2,284,700	37.7	32.6	43.2
Phase out over 5 to 10 years	Never smoker	2,617,900	43.2	38	48.7
Stop as soon as possible	Total	1,477,500	14.4	11.8	17.5
Phase out over 5 to 10 years	Total	4,004,600	39.1	35.2	43
Keep same as now	Total	4,535,600	44.3	40.3	48.3

Note: M=Marginal. Interpret with caution: subject to moderate sampling variability. S = data suppressed due to small sample sizes. Data table is for Figure 3-14.
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2015.

Table 3A-14: Agreement that Tobacco Products Should Forever Not Be Sold to Youth Who Are Now Teenagers Even When They Reach Adulthood, Ontario, 2015

Smoking Status	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Total	5,189,700	50.6	46.6	54.6
Never smoker	3,416,700	56.4	50.9	61.7
Former smoker	1,388,500	49.5	42.8	56.1
Current smoker	384,500	27.7 [M]	18.7	39.1

Note: M=Marginal. Interpret with caution: subject to moderate sampling variability. Data table is for Figure 3-15.
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2015.

Table 3A-15: Opinion About Where E-Cigarettes Should Be Sold, Ontario, 2015

Location	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Don't know	1,197,400	11.7	9.5	14.3
Only vape shops	1,230,200	12	9.5	15.1
Only pharmacies	1,257,900	12.3	10	15
Government-owned stores	1,291,300	12.6	10.2	15.5
Not sold at all	2,115,200	20.7	17.7	24
Different places as now	3,137,100	30.7	26.9	34.7

Note: Data table is for Figure 3-16.
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2015.

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THE ONTARIO TOBACCO RESEARCH UNIT
UNITÉ DE RECHERCHE SUR LE TABAC DE L'ONTARIO

Generating knowledge for public health

Smoke-Free Ontario Strategy Monitoring Report:

Smoking Cessation

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Cessation: Smoke-Free Ontario Strategy Components

A main objective of tobacco control efforts is to increase the proportion of smokers who successfully quit smoking. Desired outcomes include increasing the proportion of smokers intending to quit, decreasing cigarette consumption (for example, transitioning smokers to non-daily smoking or greatly reducing the number of cigarettes smoked per day) and increasing the actual number of quit attempts.

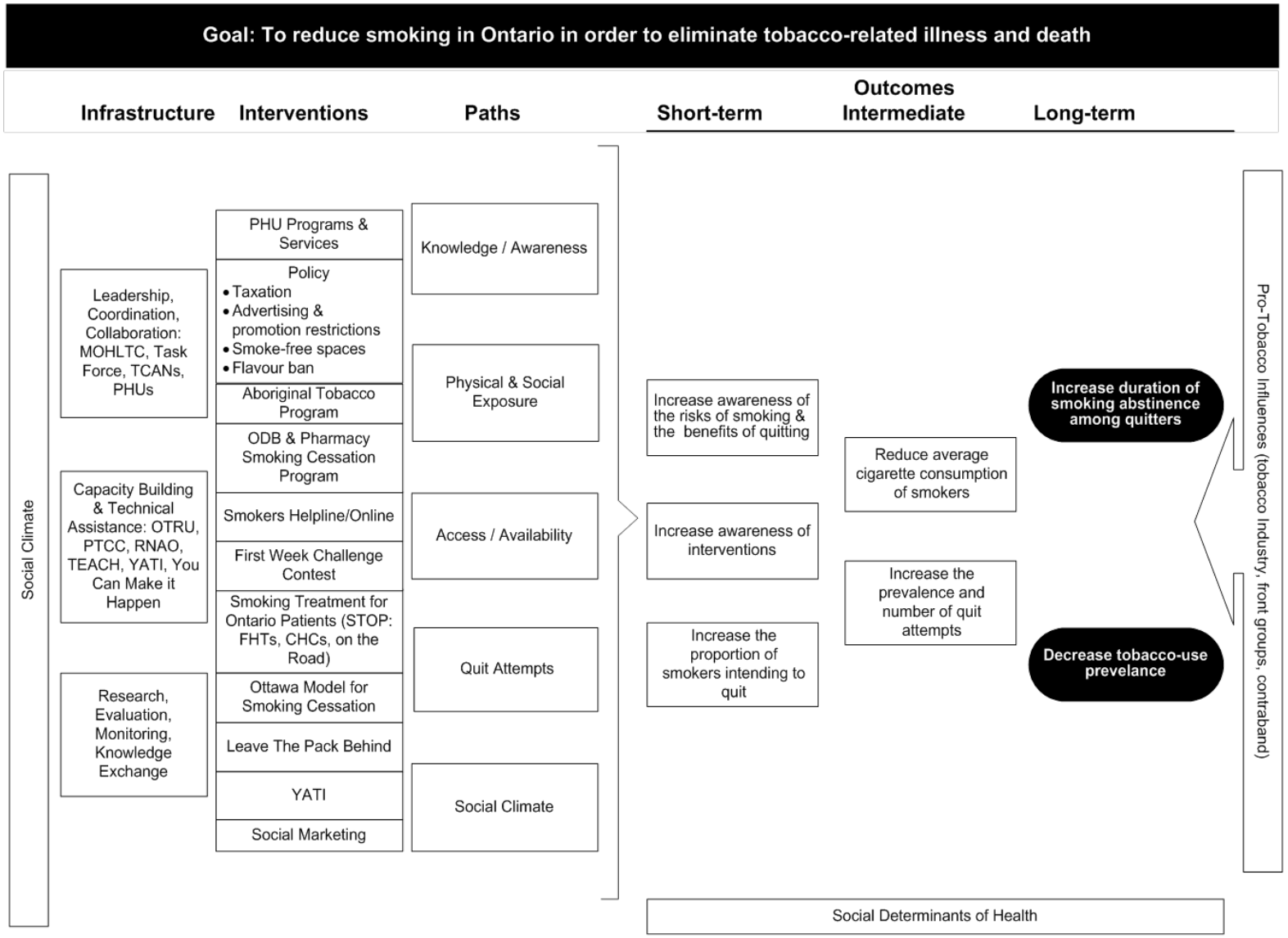
These cessation outcomes can be achieved through a number of evidence-based pathways such as:

- Decreasing access and availability of tobacco products[1,2]
- Increasing knowledge of tobacco harm and awareness of available cessation supports
- Promoting and supporting quit attempts
- Limiting physical and social exposure to tobacco products[3,4]

These pathways are expected to influence the social climate (or social norms) surrounding tobacco-use behaviour by reducing its social acceptability; this in itself is considered key to achieving and sustaining the desired cessation outcomes.[5,6] The cessation component of the Smoke-Free Ontario (SFO) Strategy is the main avenue by which progress toward these pathways and desired cessation outcomes are expected to be achieved (Figure 4-1).

In this chapter, we provide a brief overview of current cessation infrastructure, policy measures and cessation-related interventions and outcomes. We follow with an examination of progress toward cessation objectives at the population level.

Figure 4-1: Cessation Path Logic Model



Cessation Infrastructure

Several cessation infrastructure components support the development and implementation of a variety of programs, services and policies. The Ontario Ministry of Health and Long-Term Care (MOHLTC) – Health Protection Policy and Programs Branch has dedicated staff working on the cessation portfolio. A Cessation Task Force, comprised of partners from the tobacco control community who have expertise and experience working in the area of cessation, provides information and advice in developing and supporting the implementation of cessation programs, services and policies in the Province. In 2015, the Ministry also convened a Cessation Strategy Advisory Group to advise on the development of a new cessation strategy. This Advisory Group completed its work in 2016.

To ensure success, the cessation system has been designed to build capacity, provide technical assistance and offer research and evaluation support to key stakeholders—including public health unit staff, nurses, physicians and other health professionals, and to deliver evidence-based programs, services and policies to the public. The following section summarizes the infrastructure delivered by several key organizations.

Ontario Tobacco Research Unit

In 2015/16, the Ontario Tobacco Research Unit (OTRU)'s cessation work included an evaluation of the RNAO Nursing Best Practice Smoking Cessation Initiative in healthcare settings and a report presenting data that counters the common myths related to smoking cessation.[7] OTRU continued analyzing data from the Ontario Tobacco Survey;[8,9,10,11,12] recruited smokers to participate in the Smokers' Panel and used the Panel to solicit information about the impact of the flavoured tobacco sales ban and the outdoor smoking ban in playgrounds, sports fields and on restaurant and bar patios. OTRU provided rapid scientific consulting to the MOHLTC, Health Protection Policy and Programs Branch and SFO partners. OTRU also responded to 75 knowledge and evaluation support requests from SFO partners in 2015/16. Cessation-focused knowledge and evaluation support requests included an evaluation of the Niagara Pharmacy Pilot Program and environmental scans of cessation services provided by health practitioners in the Central West and North West TCANs.[13,14,15] OTRU's online course (Tobacco and Public Health: From Theory to

Practice) is another cessation resource available to public health personnel across the Province. In 2015/16, a total of 1,747 people enrolled in the online course cessation module and 5,328 smokers were registered in Smokers' Panel as of December 2, 2016. OTRU staff are also actively involved in the Cessation Task Force, Communities of Practice and other provincial committees relevant to the SFO Strategy.

Ottawa Model for Smoking Cessation

The University of Ottawa Heart Institute provides support and training to sites that are implementing the Ottawa Model for Smoking Cessation (OMSC or, the Ottawa Model). Outreach facilitators support sites through troubleshooting, reporting and on-site training (e.g., Grand Medical Rounds, education days, on-unit clinical rounds). Various workshops are offered throughout the year that provide health professionals with an overview of the Ottawa Model program and how it can be successfully implemented in any practice setting. Additional topics include an overview of nicotine addiction, current cessation medications and recommendations on their use, behaviour change theories and various counselling strategies, special patient populations, providing follow up with smokers, and organizational change strategies.

In 2015/16, the University of Ottawa Heart Institute partnered with the Canadian Mental Health Association for the second year to host a workshop focused on implementing systematic tobacco cessation approaches within mental health and addiction programs. The Ottawa Model also offers five e-learning courses to health professionals at participating Ottawa Model sites. The courses focus on providing an overview of the Ottawa Model, nicotine addiction, quit smoking medications, strategic advice and how to complete a smoking cessation consultation.

Reach: In 2015/16, a total of 2,566 health professionals (physicians, nurses and nurse practitioners, pharmacists, respiratory therapists, social workers, dieticians, medical residents, and other allied health professionals) participated in Ottawa Model knowledge translation events. Outreach facilitators and program coordinators trained 1,235 front-line staff on-site, 104 health professionals completed the e-learning modules and 277 health professionals attended Ottawa Model workshops. A total of 29 invited presentations (e.g., Grand Rounds and senior management meetings) were delivered on the topic of smoking cessation, reaching

approximately 645 audience members. In addition, 305 health professionals, researchers and policy makers attended the eighth annual Ottawa Conference.[i]

No specific information is readily available about the Ottawa Model's influence on health professionals' practice behaviour.

Program Training and Consultation Centre

In 2015/16, the Program Training and Consultation Centre (PTCC) provided a variety of cessation-related capacity building activities. PTCC offered several cessation-related training workshops that were tailored to meet the needs of local public health units and their community partner agencies, on topics such as: Brief Counselling Techniques for Smoking Cessation, a Woman-Centred Approach to Tobacco Use and Pregnancy, Integrating a Motivational Interviewing Approach into Tobacco Treatment, and Facilitating Group Cessation. The PTCC also developed a new Equity-Informed Approach to Tobacco Treatment training workshop that focused on addressing the cessation needs of priority populations.

The PTCC also supported province-wide knowledge exchange in the area of smoking cessation. The PTCC continued to support a province-wide community of practice on tobacco-use reduction among young adults which included a focus on smoking cessation. A provincial knowledge exchange forum was held in February 2016 on the use of media to promote quit attempts. This 2-day forum featured presentations from leading international and Ontario-based researchers as well as concurrent workshops. A total of 132 participants attended.

PTCC Health Promotion Specialists and Media and Communications Specialists provided consultations to local public health unit tobacco control staff to help them advance local cessation initiatives. This included helping local health departments to develop and engage local cessation networks, to plan and implement training opportunities for community partners, and to develop local cessation media campaigns. In partnership with the Propel Centre for Population Health Impact, the PTCC also completed documentations of local community efforts to build

[i] Kerri-Anne Mullen, Program Manager, Ottawa Model for Smoking Cessation Network, Personal communication, September 14, 2016.

cessation capacity, and of equity-based tobacco control interventions.[16,17]

Reach: In 2015/16, the PTCC delivered 43 training events on all aspects of tobacco control, which reached 1284 clients. Training events included 21 workshops, 12 webinars and 10 special request workshops. A portion of these training events were related to cessation. PTCC's training programs were attended by staff of Ontario's 36 public health units, Community Health Centres, the health care sector (e.g., hospitals), non-governmental organizations and government. A total of 226 public health practitioners and researchers were actively engaged across three provincial Communities of Practice. In addition, 462 consultations were delivered by PTCC health Promotion Specialists and Media and Communication Specialist.[ii]

Public Health Units and Tobacco Control Area Networks

Under the Ontario Public Health Standards,[18] public health units (PHUs) are required to do a number of activities related to the area of cessation infrastructure, including: increasing capacity of workplaces to develop and implement of cessation programs, increasing public awareness through communication strategies, and providing advice and information to link people to community cessation programs and services.

The seven Tobacco Control Area Networks (TCANs), regional groupings of one to nine neighbouring PHUs, have a mandate to provide leadership, coordination and collaborative opportunities centered on cessation (as well as other Strategy goals). PHU and TCAN staff are actively involved in the Cessation Task Force, Communities of Practice and committees to represent the local level in the planning of cessation interventions.

Registered Nurses' Association of Ontario

The Tobacco Intervention Initiative is a program undertaken by the Registered Nurses' Association of Ontario (RNAO). The goal of the RNAO Initiative is to strengthen and sustain the capacity of nurses and other health practitioners to implement evidence-based tobacco cessation strategies and techniques in their daily practice and, more specifically, to adopt the

[ii] Steven Savvaidis, Senior Manager, Program Training and Consultation Centre, Personal communication, September 19, 2016.

RNAO Smoking Cessation Best Practice Guideline recommendations at the individual and organizational levels. Since 2007, a multi-pronged approach has been used to support health practitioners and organizations to encourage assessment and documentation of tobacco and nicotine use by every client.

Key programmatic components of the strategy include:

- Establishment of implementation sites in health care organizations across Ontario
- Delivery of training workshops in tobacco cessation to nurses and other health care practitioners (i.e., Tobacco Intervention Best Practice Smoking Cessation Champions)
- Support from a Tobacco Intervention Specialist
- Use of RNAO resources (e.g., TobaccoFreeRNAO.ca website, e-learning course)
- Ongoing engagement with schools of nursing in the Province to disseminate and implement the tobacco cessation guide (Nursing Faculty Education Guide: Tobacco Use and Associated Health Risks) among nursing faculty and nursing students

Reach: Since 2007, the RNAO Initiative has trained over 4,000 health practitioners and has been adopted in over 65 Implementation sites.[19]

Effects: Evaluation studies of the RNAO Initiative were conducted in 2010, 2011, 2012, 2014, 2015 using a mixed-methods approach (web survey of Champions, case studies of public health and healthcare organizations).[20,21,22,23,24] These studies demonstrated that project-specific components, such as the Champion Workshops and Tobacco Intervention Specialists' support, as well as the uptake of RNAO evidence-based cessation resources, had been instrumental in increasing nurses' capacity in smoking cessation. Champions reported an increase in knowledge and confidence in delivering tobacco cessation strategies after attending a Tobacco Intervention Workshop with sustained increased levels of confidence and knowledge 6 and 12 months after the workshop. The evaluation studies also show that most Champions deliver at least the Ask and Advise components of the minimal intervention recommended by the guideline (e.g., Ask, Advise, Assist and Arrange).

Management buy-in and support has been consistently shown in the evaluation studies as being crucial to ensuring successful implementation of the RNAO Initiative, increasing nurses' and

other health practitioners' engagement in the provision of tobacco cessation services and adopting cessation policies and practices at the organizational level. Lack of staff, lack of time and lack of patient interest were consistently identified as barriers to implementation. These findings need to be interpreted with caution due to survey response bias and limitations on generalizing from information gathered through case studies.

Training Enhancement in Applied Cessation Counselling and Health Project

The Training Enhancement in Applied Cessation Counselling and Health Project (TEACH) aims to enhance treatment capacity for tobacco cessation interventions by offering evidence-based, accredited, accessible and clinically relevant curricula to a broad range of health practitioners such as registered nurses, addiction counsellors, social workers, respiratory therapists and pharmacists. The core-training course focuses on essential skills and evidence-based strategies for intensive cessation counselling. The project also offers specialty courses targeting interventions for specific populations (e.g., patients with mental health, addictions or chronic disease; woman-centred approach; youth and young adults; First Nations, Inuit and Métis populations) and a one-hour webinar: Educational Rounds for health practitioners. Other key elements of the TEACH Project include collaboration and partnership with other cessation training groups, hospitals, community stakeholders and government; community of practice activities to provide health practitioners with clinical tools and applications, as well as opportunities for networking and continuing professional education; regional practice leaders who provide support for tobacco dependence treatment initiatives across Ontario; and an evaluation component to examine project impact and knowledge transfer. TEACH training is considered the training standard for primary-care settings and community-based services planning to offer cessation services including Family Health Teams, Community Health Centre, Nurse Practitioner-Led clinics, Addiction Agencies, and Aboriginal Health Access Centres.

Reach: Since the project's launch in 2006, TEACH has trained 4,128 unique health practitioners from diverse disciplines in intensive cessation counselling across Ontario. In 2015/16, TEACH trained 447 practitioners in five core courses (one classroom and four online). Participants included registered nurses, nurse practitioners, addiction counsellors, health

promoters/educators, social workers, pharmacists and respiratory therapists who came from a variety of settings including PHUs (79), hospitals (71), Family Health Teams (67), Community Health Centres (48), Addiction Agencies (35), Aboriginal Health Access Centres (13), Nurse Practitioner-Led Clinics (13) and other settings. In 2015/16, 1,240 practitioners attended the 12 webinars for health and allied health practitioners offered by TEACH. In addition, 259 dentists attended two webinars offered in partnership with the Ontario Dental Association.[25]

Effects: In 2015/16, practitioners rated measures of feasibility, importance and confidence on TEACH core course topic areas (e.g., tobacco use and dependence, evidence-based screening and assessment tools, psycho-social interventions and pharmacotherapy, etc.) significantly higher following TEACH training. The perceived feasibility to incorporate cessation practices into practitioners' own practices increased from a mean score of 7.5/10 at baseline to 8.4/10 post-training; the perceived level of importance for the cessation practices increased from a mean score of 8.9/10 at baseline to 9.2/10 post-training; and the perceived confidence in using the knowledge and skills gained at TEACH increased from a mean score of 6.3/10 at baseline to 8.2 post-training).

In 3- and 6-month follow-up surveys from the July 2015 Core Course cohort, practitioner engagement in intensive cessation counselling or brief interventions with clients (either group or individual) increased following TEACH training (41.5% at 3 months and 47.8% at 6 months). (Note: Interpret with caution due to relatively low response rates at follow-up; approximately 26% at 3 months and 18% at 6 months.)

TEACH participants identified barriers to engaging in smoking cessation including lack of practitioners' time, lack of client motivation to participate, lack of organizational support, lack of funding, insufficient staff for implementation and the need for more practice.

You Can Make It Happen

You Can Make It Happen (YCMIH) is an initiative of Ontario PHUs in partnership with the Canadian Cancer Society Smokers' Helpline and is focused on providing resources and support to health professionals to help clients quit tobacco use. Project activities include the development and dissemination of resources to assist health professionals with brief interventions as well as

materials to share with patients and clients, PHU or partner support to providers as they develop cessation services for their client population, linkages to regional cessation Communities of Practice and work groups. The project is implemented across all TCANs and targets various health professionals including nurses, pharmacists, dental professionals and optometrists.

Reach: In 2016, the YCMIH website received a total of 7,179 visits, half of which (3,658) were from accounts hosted by Canadian internet service providers, suggesting that the site is reaching its target audience.[iii] Per website visit, visitors looked at an average of 1.59 pages and spent 1 minute 52 seconds per page view. A total of 1,248 PDF documents were downloaded from the website with the three most commonly downloaded products being the Ontario Drug Benefit Formulary form, 5A's Overview Staff Pocket Card, and the Tips and Quit Plan Handout.

A province-wide evaluation of YCMIH conducted by OTRU found that 9,656 materials were distributed through trainings, meeting, mail-outs and information booths to 6,750 health practitioners in 2016 (based on responses from across 25 PHUs). The most commonly distributed YCMIH resources were the 5A's Overview Staff Pocket Card (2,732 copies distributed to 2,019 health practitioners) and the Assist Tips and Quit Plan handout (2,517 copies distributed to 1,425 health practitioners).

No specific information is readily available about YCMIH's influence on health professionals' practice behaviour or the program's impact on clients.

Youth Advocacy Training Institute

The Youth Advocacy Training Institute (YATI) offered two Train the Trainer sessions in 2015/16 in support of the N-O-T on Tobacco (NOT) Youth Smoking Cessation Program. A total of 23 participants attended the training sessions from a variety of professional backgrounds including youth engagement coordinators, school staff, public health staff and staff of Ontario Indian Friendship Centres.[26] For more information about the NOT youth smoking cessation program, please refer to the summary in the Other Cessation Interventions to Increase Quit Attempts section of this chapter.

[iii] Google Analytics. Distributed by Donna Kosmack, Southwest TCAN. Personal communication, January 30, 2017.

Cessation Interventions

The Strategy includes a mix of policies, programs and services that work toward cessation goals.

Interventions to Limit Physical and Social Exposure

Several tobacco control policies have been implemented in Ontario that promote and facilitate quitting behaviour by limiting physical exposure (e.g., exposure to secondhand smoke) and social exposure to tobacco (e.g., the visual exposure to tobacco products and/or use in social environments). These policies include restrictions on marketing and promotion of tobacco products, and smoking bans in bars, restaurants, vehicles, workplaces, and outdoor spaces (e.g., playgrounds, sports and recreational fields, restaurant and bar patios).

Point-of-Sale Display Ban and Marketing Restrictions

Restrictions on marketing and promotion of tobacco products is an essential policy tool aimed at reducing tobacco use.[27,28,29] In Ontario, a complete ban on the retail and wholesale display of tobacco products took effect on May 31, 2008. Marketing, promotion and sponsorship of tobacco products is also regulated under the *Federal Tobacco Act*, which includes a total ban on tobacco advertising on television, radio and in newspapers and magazines. There remain only two exceptions to the federal advertising ban: tobacco advertising in a publication that is mailed directly to an adult who is identified by name, and signs in places where youth are not permitted to enter by law.

Protection from Secondhand Smoke

Since 2006, a number of policies to protect against secondhand smoke have been introduced in Ontario, including bans on smoking in public places, workplaces, cars transporting minors and outdoor spaces (e.g., playgrounds, sports fields and sporting surfaces, and restaurant and bar patios). While these policy measures are not implemented for the purpose of increasing cessation, studies have shown that smoke-free policies reduce consumption and support recent quitters by reducing cues for smoking and increasing their likelihood of quitting permanently.[30,31,32,33,34]

Interventions to Limit Availability

Various tobacco control policies limit the availability of tobacco products and as a result contribute to overall cessation goals. These policies include a ban on the sale of flavoured tobacco products (including menthol as of January 1, 2017), restrictions on the location where tobacco products may be sold and tobacco tax increases.

Flavoured Tobacco Sales Ban

The addition of flavour to tobacco products has been shown to increase the palatability of tobacco products and encourage the progression from experimental to regular tobacco use among youth.[35] Evidence demonstrating the effectiveness of a flavoured tobacco ban is limited due to the relative infancy of this policy. However, one study has suggested a general decrease in smoking rates and cigarette consumption among youth following a flavoured cigarette ban (excluding menthol); yet an increase in post-ban menthol cigarette use was noted among smokers highlighting the importance of a complete ban on flavoured tobacco products.[36] Among adults, recent research suggests that menthol cigarette smokers are less likely to quit smoking than non-menthol cigarette smokers.[37,38,39] OTRU is currently evaluating both the general flavour ban and the new menthol ban.

Tobacco Product Availability

Restricting the retail distribution and availability of tobacco products is considered an important mechanism to limit consumption, contribute to cessation and to prevention and ultimately reduce subsequent negative health effects.[40,1,2] In Ontario, legislation prohibits tobacco from being sold by vending machines, at pharmacies, on college and university campuses, hospitals and other healthcare and residential-care facilities. Despite these advances, tobacco products continue to be available across the Province through a large number of retail outlets (approximately 10,044 in 2015), primarily convenience and grocery stores. This is down from 10,620 in 2014, 11,581 in 2013 and a further decrease from the approximate 14,000 tobacco vendors that were operating in 2006.[41] The reason for these decreases is unclear. It could be due to more accurate recording of vendors by the Ministry, fewer vendors selling tobacco, fewer vendors in general or a combination of all three. An analysis of the tobacco vendor distribution in

Ontario found that tobacco vendors were more likely to be found in deprived neighbourhoods (e.g., high proportion of residents on government assistance, single parent families, less than high school education, and homes needing major repairs) and within 500m of a school in deprived neighbourhoods.[42]

Tobacco Taxation

There is strong evidence that an increase in cigarette taxes is an effective policy measure to drive down cigarette consumption, encourage current smokers to quit and prevent youth from becoming regular smokers.[43,44,45,46,47,48] On average, a 10% increase in price results in a 3 to 5% reduction in demand in higher income countries.[49,50,51] Contrary to the myth promoted by the Tobacco Industry, a recent OTRU study found no correlation between increasing tobacco taxes and the use of contraband tobacco.[52]

In Ontario, the provincial tobacco tax for a carton of 200 cigarettes was increased by $3.00 on February 25, 2016, resulting in an increase from $27.95 to $30.95 in total provincial tobacco tax. This increase is similar to the last provincial tobacco tax increase in May 2014 (provincial tobacco tax accounted for 32% of the overall retail price of 200 cigarettes in both May 2014 and February 2016). Both tobacco tax increases were simply adjustments for inflation in the price of cigarettes. The Ontario government plans to continue to increase the provincial tobacco tax annually at the rate of inflation for the next five years starting June 1, 2017.[53] Overall, federal and provincial tobacco and sales taxes account for 65.1% of the retail price of a carton of cigarettes in Ontario. The tobacco tax increase was not sufficient to place Ontario in the highest scoring category for taxation in the MPOWER model (75% of the retail price). Ontario continues to have the second lowest total taxes on tobacco ($63.14) of any Canadian province or territory (Table 3-1, Prevention Chapter).

Interventions to Build Knowledge and Awareness

Health promotion campaigns can increase knowledge of commercial tobacco harm and awareness of cessation supports among smokers. The main province-wide interventions that address this path are described below.

The Aboriginal Tobacco Program

Operating within the Aboriginal Cancer Control Unit at Cancer Care Ontario, the Aboriginal Tobacco Program (ATP) aims to reduce the high smoking rates among the First Nations, Inuit and Métis (FNIM) populations, and strives to deliver concrete results by enhancing FNIM knowledge, skills, capacity and behaviour by delivering programming that is aligned with the Prevention Priority of the third Aboriginal Cancer Strategy. This involves working to address commercial tobacco prevention, cessation and protection with and for FNIM people in Ontario. Key activities include:

- Working directly with FNIM communities to develop campaigns and workshops tailored for specific age and gender groups (e.g., Ultimate Frisbee and commercial smoking cessation/prevention workshops for youth in grades 5 – 9).
- Facilitating/co-facilitating cessation seminars aimed at building capacity of care providers to provide community based cessation support.
- Engaging FNIM communities throughout Ontario to foster the development of smoking cessation, prevention and education programs and ensure that FNIM community partners and healthcare providers have access to culturally appropriate tobacco-related resources.
- Engaging with First Nation communities to begin the discussion on the development of smoke-free by-laws and/or policies, and supporting communities in developing smoke-free by-laws and/or policies upon request.
- Establishing cross-jurisdictional and organizational partnerships through the Aboriginal Tobacco Partnership Table.

Reach and Effect: The result of the ATP's sustained, respectful engagement is an increasing amount of requests by communities to provide prevention and cessation workshops to community members and healthcare providers, distribution of culturally appropriate resources, as well as increasing requests by their organizational partners to collaborate and provide insight into engaging FNIM communities. ATP workshops, programming and engagement ensure that:[iv]

- FNIM community members receive in-depth, culturally appropriate information about the hazards of using commercial tobacco (utilizing both traditional and western

[iv] Richard Steiner, Group Manager, Aboriginal Cancer Control Unit/Aboriginal Tobacco Program. Personal communication, February 1, 2017.

methods toward cessation).

- FNIM communities are supported in their efforts to decrease commercial smoking rates, and that capacity is built to sustain these efforts.
- FNIM youth are given age appropriate information and engage in discussions around smoking cessation, protection and prevention.
- There is increased prevention and cessation support available to community members.
- There is increased collaboration amongst partners working to address FNIM commercial tobacco use, using culturally appropriate resources and supports to address smoking cessation and prevention (e.g., reaching out to high schools).
- The ATP is able to provide tobacco cessation and support to a greater number of FNIM people through collaborations with FNIM organizations and agencies.
- By sharing information and increasing collaboration, the ATP is able to better align the Aboriginal Tobacco Partnership Table member activities.

Leave The Pack Behind

Across 44 colleges and universities, Leave The Pack Behind (LTPB) delivers four coordinated social and digital marketing campaigns through multiple communication channels (e.g., peer-to-peer programming, traditional promotional channels, social media platforms, and linkages with other on-campus partners). Leave The Pack Behind collaborates with a wide range partners, including all 36 public health units, Cancer Care Ontario's Tobacco Wise program, Ontario Federation of Indigenous Friendship Centres, and Smokers' Helpline, to ensure selected campaigns and interventions are available to all young adults aged 18 to 29 in Ontario.

In 2015/16, LTPB ran four coordinated age-tailored social and digital marketing campaigns:

- Party Without the Smoke (fall) was a prevention campaign aimed at discouraging the use of any tobacco/nicotine product while socializing and the escalation of use among social tobacco/nicotine product users aged 18 to 29.
- wouldurather… contest (fall/winter) was a six week quit smoking contest designed for all young adults aged 18 to 29. The cessation part of the contest aimed to have smokers pledge to quit smoking, to reduce smoking by 50%, or to refrain from smoking when drinking alcohol. Tailored promotional materials were developed to reach special population groups (e.g., LGBTQ, Indigenous, parents, trades workers and minority

groups).

- Stress Happens: Don't Cave to the Crave (spring) was a relapse prevention campaign in which smokers and recent quitters were encouraged to respond to cravings in positive ways by choosing to eat healthy, be active, or engage in relaxation techniques instead of smoking.
- Make It Memorable: Holiday Quit Campaign (spring/summer/fall) was developed to encourage young adult smokers to make a quit attempt on specific holidays including: Victoria Day, Aboriginal Day, Canada Day, Labour Day and Thanksgiving. Smokers were encouraged to order free NRT to assist with their quit attempt. Tailored digital promotional ads were developed to reach special population groups (e.g., LGBTQ, Indigenous).[54]

Reach: LTPB student teams hosted a total of 2,968 face-to-face outreach events (e.g., display tables, presentations, smoking area "walkabouts", etc.) to promote each of the campaigns at 32 of 44 post-secondary institutions in 2015/16. In total, 74, 265 post-secondary students (or 10% of the entire student population) were reached during the outreach events (21,082 post-secondary students for the Party Without the Smoke campaign; 34,297 post-secondary students for the wouldurather… campaign, and 22,185 post-secondary students for the Don't Crave the Crave campaign). Over 22,000 Holiday Quit Campaign palm cards were distributed by community partners.

Social Marketing Campaigns

In general, principles of social marketing guide many of the cessation interventions mentioned in this chapter. These campaigns have centred on both provincial and local initiatives.

The Ontario Ministry of Health and Long-Term Care created a new campaign that ran January through March 2016. This campaign targeted regular smokers aged 35-44 years old by encouraging them to keep trying to quit smoking if their first attempts to quit were not successful. One television ad showed a father unsuccessfully building a bunk bed and another ad showed a man unsuccessfully fixing bathroom plumbing, both on their first attempt. Digital and social media ads contained similar messaging. No evaluation data on the campaign are publically available.

Over the last several years, a number of social marketing interventions/campaigns have run regionally on an ad hoc or intermittent basis. These campaigns have included providing broad support for smoke-free policies, targeting smokers' knowledge of the harmful effects of tobacco use and promoting services to aid in smoking cessation. No evaluative information is available.

Clinical Cessation Interventions to Increase Quit Attempts

The Strategy funds several clinical smoking cessation programs and services dedicated to encouraging people to quit smoking and help them in their quit attempts (Figure 4-1). In this section we report responder quit rates[v] where available, as a measure of each intervention's effects. New methodological thinking suggests that the previously reported intention-to-treat quit rates may be inappropriate for service delivery programs (this rate has been used in randomized control trials).[55,56] The responder quit rates listed in the following section should be interpreted with caution, as they might not be representative of the total cessation service program population due to the often low response rate to follow-up surveys.

Leave The Pack Behind

Leave The Pack Behind promotes and distributes free, full-course treatments of nicotine patch/gum to all young adult smokers aged 18 to 29 in Ontario. Promotion of the free nicotine replacement therapy (NRT) is integrated into social marketing campaigns and outreach on campus, in the community and in a variety of health care settings. In addition, medical staff at all 44 colleges and universities offer counselling to students seeking help in quitting smoking.

Reach: In 2015/16, 1,701 smokers (434 students and 1,267 community young adults) ordered an 8-week course of treatment of nicotine patches or gum through LTPB's online platform representing 0.4% of the 395,900 young adult smokers in Ontario (Table 4-1). Although a decrease in reach compared to the 5,900 courses of treatment distributed in 2014/15, LTPB distributed all treatment courses of NRT that were available in 2015/16. About 2,000 students accessed on-campus health professional cessation counselling representing an increase from the 1,500 students who accessed counselling in 2014/15. For additional information on other

[v] The responder quit rate is defined as all participants who report having quit using tobacco divided by all those who completed the follow-up survey/evaluation.

LTPB programs, go to the Interventions to Build Knowledge and Awareness and Other Cessation Interventions to Increase Quit Attempts sections in this Chapter and the LTPB section in the Prevention Chapter.

Effects: In 2015/16, it is estimated that of the 1,426 smokers who received the *Smoke/Quit* booklets and advice from a health professional, 163 (or 11.4%) were expected to quit smoking. (These outcomes are based on empirically derived 7-day point prevalence intention-to-treat quit rates for *Smoke/Quit* booklets/health professional counselling calculated from a randomized control trial. No responder quit rates were reported).[57]

It is estimated that 119 of the 1,701 (or 7%) smokers who received free NRT through LTPB's online platform and 40 of the 572 (or 7%) smokers who received health professional counselling and free NRT were expected to quit smoking. (These outcomes are based on LTPB's rigorous evaluation using an intention-to treat sample. No responder quit rates were reported).

Table 4-1: Leave The Pack Behind Participants by Clinical Program or Service, 2015/16

Program or Service	No. of Participants/Recipients
Online NRT distribution to all Ontario young in the community and on-campus	1,701
Health Professional Cessation Counselling plus nicotine patch/gum	572
Health Professional Cessation Counselling plus SMOKE|QUIT booklets	1,426
Health Professional Cessation Counselling plus referral to Smokers' Helpline Proactive Counselling Services	55
TOTAL	3,754

Ontario Drug Benefit and Pharmacy Smoking Cessation Programs

As of August 2011, the Ontario Government funds counselling and prescriptions for smoking cessation medications through the Ontario Drug Benefit (ODB) program, an initiative that covers seniors, MOHLTC programs (Long-Term Care, Home Care and Homes for Special Care), Ministry of Community and Social Services (Ontario Disability Support Program and Ontario Works) and the Trillium Drug Plan. ODB recipients are eligible for up to 12 weeks of treatment with bupropion (Zyban™) and varenicline (Champix™) per calendar year. Effective September 1, 2011, ODB recipients also have access to smoking cessation counselling provided by community pharmacists through the Pharmacy Smoking Cessation program.

As part of the program, community pharmacists provide one-on-one smoking cessation

counselling sessions over the course of a year, including a readiness assessment, first consultation meeting and follow-ups. Each point of contact between the pharmacist and the patient is documented for the purposes of counselling, billing and evaluation. Pharmacists are required to have training in smoking cessation, specifically in motivational interviewing and quit smoking planning in order to deliver the program.

Reach: In 2015/16, a total of 24,735 ODB clients received cessation medication, such as Zyban™ and Champix,™ or counselling. The majority of ODB clients received smoking cessation medication (24,065), while 2,679 received counselling (drug and counselling numbers do not equal the combined total ODB clients enrolled in the cessation program, as clients receiving both programs are counted only once). The number of ODB clients reached in 2015/16 decreased from the previous year; however the number of clients reached in 2015/16 remained higher than the first year the program was offered (Table 4-2). As of March 2016, 87% of clients enrolled in the counselling program had participated in the first consultation meeting, half (51%) had attended the primary follow-up counselling sessions (visits 1-3) within 3 weeks of enrollment, and 32% had attended the secondary follow-up sessions (visits 4-7) within 30 to 365 days of enrollment.

Table 4-2: Number of Smokers Reached by the Ontario Drug Benefit and Pharmacy Smoking Cessation Programs, Ontario, 2011/12 to 2015/16

	Program		
Fiscal Year	Drugs	Counselling	Drugs or Counselling[a]
2011/12	23,503	2,515	24,053
2012/13	31,044	4,227	31,958
2013/14	27,358	4,074	28,309
2014/15	24,852	3,073	25,660
2015/16	24,065	2,679	24,735

[a] Numbers do not represent the combined totals for Drugs and Counselling, as clients receiving both programs are counted only once.
Source: Ontario Ministry of Health and Long-Term Care

Overall, approximately 60% of clients were from Ministry of Community and Social Services programs (Ontario Disability Support Program or Ontario Works) and 33% were seniors.[58]

Ontarians from across the Province enrolled in ODB drug or counselling programs, with the Hamilton Niagara Haldimand Brant Local Health Integration Network (LHIN) garnering the most clients (3,866; Table 4-3).

Table 4-3: Unique Ontario Public Drug Program Clients, by LHIN, 2015/16

	Program		
Local Health Integrated Network	Drugs	Counselling	Drugs or Counselling[a]
Erie St. Clair	1,956	386	1,997
South West	2,179	210	2,232
Waterloo Wellington	1,272	144	1,316
Hamilton Niagara Haldimand Brant	3,696	485	3,866
Central West	714	64	736
Mississauga Halton	816	67	835
Toronto Central	1,793	217	1,873
Central	1,438	128	1,468
Central East	2,486	279	2,574
South East	1,705	94	1,722
Champlain	2,606	191	2,646
North Simcoe Muskoka	1,067	127	1,085
North East	1,826	214	1,863
North West	485	55	495
Total	24,065	2,679	24,735

[a] Numbers do not represent the combined totals for Drugs and Counselling, as clients receiving both programs are counted only once.
Source: Ministry of Health and Long-Term Care

Effects: Quit rates from clients enrolled the ODB cessation program in 2015 and 2016 are currently not available. A recent study examined administrative data to assess reported quit rates among ODB clients enrolled in the counselling program between September 2011 and September 2013.[59] However very few of the clients had a recorded quit status during the 6-month and 12-month follow-up periods (7% and 12%, respectively), levels that are too low to provide reasonable estimates.

Ottawa Model for Smoking Cessation

The University of Ottawa Heart Institute's Ottawa Model for Smoking Cessation (the Ottawa Model) is a clinical smoking cessation program designed to help smokers quit smoking and stay smoke-free. The overall goal of the program is to reach tobacco users who are accessing healthcare organizations with effective, evidence-based tobacco dependence treatments delivered by health professionals. Systematically identifying and documenting the smoking status of all patients, providing evidence-based cessation interventions—including counselling and pharmacotherapy—and conducting follow-up with patients after discharge accomplishes this.

Hospital and Specialty Care Sites

Reach: As of March 2016, 83 Ontario hospital and ambulatory care settings had implemented the Ottawa Model and 8 were working on implementation. In 2015/16, Ottawa Model partners provided smoking cessation support to 14,114 smokers (Table 4-4). This is slightly lower than the number reached in 2014/15, yet over five times the number reported in 2006/07. According to data from a large subsample of patients (n=11,616) who participated in the Ottawa Model program, smokers were on average 56.4 (± 15.6) years of age, more likely to be male (54.7%), had long smoking histories (34.9 ±16.2 years) and smoked, on average, 17.6 (±12.2) cigarettes per day.[vi]

Table 4-4: Number of Smokers Reached by the Ottawa Model for Smoking Cessation (Hospitals and Specialty Care), Ontario, 2006/07 to 2015/16

Fiscal Year	No. of Smokers Reached
2006/07	2,733
2007/08	5,514
2008/09	6,410
2009/10	7,086
2010/11	8,609
2011/12	9,721
2012/13	11,940
2013/14	13,815
2014/15	15,726
2015/16	14,114

Source: The Ottawa Model for Smoking Cessation

Effects: At six month follow-up, the responder-quit rate[vii] for Ottawa Model hospital and specialty care patients receiving smoking cessation follow-up support in 2015/16 was 51% (7-day point prevalence for abstinence; 41% response rate for follow-up).

Primary Care Organizations

Reach: In 2015/16, the Ottawa Model partnered with seven new primary care organizations,

[vi] Kerri-Anne Mullen, Program Manager, Ottawa Model for Smoking Cessation Network, Personal communication, September 14, 2016.

[vii] The responder rate is defined as all participants who report having quit using tobacco divided by all those who completed the follow-up survey/evaluation.

bringing their total partnerships to 90 primary care organizations representing a total of more than 175 primary-care sites since 2010.[60] During 2015/16, a total of 7,501 patients expressing an interest in quitting smoking were referred to one-on-one smoking cessation counselling appointments (Quit Plan Visits) with trained cessation counsellors (Table 4-5). Of the patients who received Quit Plan visits, 1,458 agreed to be referred to an automated telephone/email follow-up program delivered by SHL in which the patient receives five contact cycles over a 2 month period around the patient's chosen quit date.

Table 4-5: Number of Smokers Reached by the Ottawa Model for Smoking Cessation (Primary Care), Ontario, 2010/11 to 2015/16

Fiscal Year	No. of Smokers Referred to Quit Plan Visits
2010/11	538
2011/12	2,155
2012/13	3,418
2013/14	5,115
2014/15	6,168
2015/16	7,501

Source: Ottawa Model for Smoking Cessation

Effects: In 2015/16, 57% of Ottawa Model primary care patients who received automated telephone/email follow-up support remained smoke-free 30 days following their quit date (responder quit rate;[viii] 43% response rate for follow-up).

Public Health Units

Local Boards of Health are mandated under the Ontario Public Health Standards to ensure the provision of tobacco use cessation programs and services for priority populations. In approaching this requirement, the majority of PHUs reported that they directly provide tobacco use cessation programs and services (31/36 PHUs) and nicotine replacement therapy (NRT) distribution (30/36 PHUs).

[viii] The responder quit rate is defined as all participants who report having quit using tobacco divided by all those who completed the follow-up survey/evaluation.

Reach: In 2016, PHUs across the Province provided tobacco use cessation counselling programs and services to 8,270 smokers and free NRT (excluding STOP on the Road programming) to 4,917 smokers. A broad range of populations were targeted by PHUs for tobacco use cessation programs and services including the general adult population, low socio-economic status populations, pregnant and post-partum women, and young adults (Table 4-6).

Table 4-6: Populations Targeted by Public Health Unit Tobacco Use Cessation Programs and Services, 2016

	# of PHUs that targeted population	% of PHUs that targeted population
General adult population	28	78%
Low socio-economic status	25	69%
Pregnant and post-partum women	21	58%
Young adults (19 to 29 years)	21	58%
Mental health and addictions	20	56%
Blue collar workers	16	44%
Dental patients	15	42%
Hospital patients	14	39%
Youth (under the age of 19 years)	13	36%
Aboriginal	11	31%
LGBTQ communities	9	25%

Source: Online survey of PHUs conducted by OTRU January 24 - February 2, 2017.

Currently, systematic evaluative data on the effects of PHU cessation activity is not available.

Smokers' Helpline (Phone Support)

The Canadian Cancer Society's province-wide Smokers' Helpline (SHL) is a free, confidential smoking cessation service that provides support to individuals who want to quit, those who are thinking about quitting, have quit but want support, continue to smoke and do not want to quit and those who want to help someone else quit smoking.

SHL phone support is provided by trained quit coaches. They assist callers to create a quit plan, support them throughout the quitting process, provide them with printed materials and referrals to local programs and services and make follow-up calls.

Reach: In the 2015/16 fiscal year, the SHL phone support reached 7,161 smokers (equivalent to

0.38% of adult smokers aged 18 years and older in Ontario),[ix] which is a decrease from 7,467 reached in 2014/15 (Table 4-7). Overall, the number of reactive callers[x] was down compared to 2014/15 (6,801 vs. 7,233) as were the number of referral contacts (3,575 vs. 4,006). The decrease in numbers may be attributed to a delay in funding received by SHL which in turn impacted service delivery.[61,xi]

Table 4-7: Smokers' Helpline Reach, 2005/06 to 2015/16

Fiscal Year	No. of New Clients[a]	Proportion of Ontario Smokers Reached, %[b]
2005/06	6,127	0.30
2006/07	6,983	0.35
2007/08	7,290	0.35
2008/09	6,464	0.32
2009/10	5,820	0.30
2010/11	6,844	0.34
2011/12	7,964	0.39
2012/13	10,217	0.51
2013/14	7,934	0.41
2014/15	7,467	0.40
2015/16	7,161	0.38

[a] New clients calling for themselves regardless of smoking status + completed referrals. Administrative data provided by SHL.
[b] Estimates of the total population of smokers aged 18+ from 2005/06 to 2015/16 were calculated based on CCHS 2005 to 2014 (TIMS data).

The current reach in 2015/16 is lower than the median reach of quitlines in Canada in 2012 (0.48%; most recent data available) and is considerably lower than the median reach of quitlines in the US as reported by North American Quitline Consortium at 0.93% in 2015.[xii] This rate also falls far short of the reach of leading quitlines in individual US jurisdictions, such as Vermont (17.0%) and Montana (3.91%)[62] that have been successful in achieving higher smoker

[ix] Measure of reach is based on the definition used by North American Quitline Consortium and reflects the number of new callers (not including repeat or proactive calls) contacting the Helpline divided by the total number of smokers aged 18 and over in Ontario.
[x] Reactive callers represent new clients calling for themselves.
[xi] The number of reactive callers and referral contacts includes repeat contacts therefore the two numbers combined do not equal the total number of new callers.
[xii] Maria Rudie, Research Manager, North American Quitline Consortium. Personal communication, December 12, 2016.

penetration as a result of increased paid media and/or distribution of free cessation medication.

The majority of SHL callers in 2015/16 were female (53%), an average age of 49.6 years, and identified as white (90%). Smokers who self-identified as First Nations, Inuit or Métis comprised 6% of all new callers.

Effects: No evaluative data are available about the effects of the SHL phone support on smokers' quitting behaviour in 2015/16. The most recent evaluation of the Ontario SHL phone support was conducted as part of the evaluation of the Pan-Canadian toll-free quitline initiative. In that evaluation, 7-month follow-up surveys were conducted with Ontario smokers between January 1, 2013 and April 30, 2014. Among respondents who were still smoking at the time of the follow-up survey during this period, 92% had taken at least one action toward quitting after their first contact with the SHL (response rate for follow-up not reported). This proportion was higher than what was reported in 2011/12 (89.0%). The most frequently reported actions included reducing cigarette consumption (72%), quitting for 24 hours (63%) and setting a quit date (55%).[63] Responder quit rates[xiii] at the 7-month follow-up were as follows: 31% (7-day point prevalence absence) and 28% (30-day point prevalence; Table 4-8).

Table 4-8: Smokers' Helpline 7-Month Follow-up Responder Quit Rates, 2006/07 to 2013/14

Fiscal Year	7-day PPA %	30-day PPA %	6-month prolonged abstinence %
2006/07	15.9	13.2	7.0
2007/08	15.0	13.0	5.4
2008/09	17.0	14.6	7.6
2009/10	20.2	16.8	6.9
2010/11	22.7	18.8	11.4
2011/12[a]	25.1	23.0	14.4
2013 – 2014	31.0	28.0	-
Mean US Quitline Quit Rates (2015)[64]	--	30.3	-

PPA = Point prevalence abstinence

[a] Based on follow-up data collected in the first half of 2011/12 fiscal year.

[xiii] The responder quit rate is defined as all participants who report having quit using tobacco divided by all those who completed the follow-up survey/evaluation.

From 2006 to 2014, the SHL saw a 15 percentage-point increase in the proportion of users reporting 7-day and 30-day point prevalence abstinence (Table 4-8). The proportion of 6-month abstainers doubled between 2006 and 2012 (6-month abstainer rate not reported in 2013-2014). Furthermore, the 30-day quit rates achieved in 2013-2014 compares favourably with the same cessation indicators reported in studies of US quitlines that did not provide cessation medication (e.g., NRT) as part of their quitline counselling services.

Smoking Cessation by Family Physicians

In 2006, the MOHLTC introduced a set of billing codes to promote smoking cessation intervention by family physicians. These codes were assigned for cessation counselling services, including initial and follow-up counselling. Physicians are encouraged to use the 5A's Model (Ask, Advise, Assess, Assist and Arrange) for brief smoking cessation intervention when delivering counselling services to patients. During the initial counselling, physicians are expected to inquire about patients' smoking status, determine their readiness to quit, help them set a quit date and discuss quitting strategies. Follow-up counselling sessions are designed to assess patients' progress in quitting, discuss reasons for relapse and strategies to prevent relapse in the future, revise the quit plan and quitting strategies. Physicians are allowed to bill for one initial counselling session per patient over the 12 month period in conjunction with a specific set of primary care services (e.g., general practice service, primary mental healthcare, psychotherapy, prenatal care, chronic care). Follow-up counselling must be billed as an independent service and physicians are entitled to reimbursement for a maximum of two follow-up counselling sessions in the 12 months following the initial counselling. In 2008, the billing codes were modified and extended to include all family physicians.

Reach: In 2015/16, a total of 195,344 patients in Ontario received initial cessation counselling from a physician. This is up from the 190,136 patients reached in 2014/15 (Table 4-9). Since 2006, the largest number of patients served was in 2008/09 (214,461) which may be attributable to the expansion of the eligibility criteria for billing to all primary care physicians in that year. In comparison with population-level estimates, the number of patients that received initial cessation counselling in 2015/16 represented 14% of smokers who reported visiting a physician.

Table 4-9: Reach of Initial Cessation Counselling Compared to Number of Patients Who Visited a Physician, Ages 15+, 2006/07 to 2015/16

Year	Number of Recipients of Initial Cessation Counselling[a]	Recipients of Initial Counselling, as a Proportion of Ontario Smokers Who Visited a Physician, %[b]
2006/07	124,814	8
2007/08	140,746	9
2008/09	214,461	14
2009/10	201,121	14
2010/11	201,522	14
2011/12	203,063	14
2012/13	192,536	13
2013/14	188,838	13
2014/15	190,136	14
2015/16	195,344	14

[a] Source: Ontario Health Insurance Plan
[b] Estimates based on number of smokers (at present time) aged 15+ who visited a physician, using CCHS 2005 to 2014 data.

A total of 36,018 patients received one or more follow-up counselling sessions in 2015/16 representing 18% of recipients of initial counselling (Table 4-10). The proportion initial counselling recipients who received follow-up counselling has not changed since 2011/12.

Table 4-10: Reach of Follow-up Cessation Counselling Compared to Initial Counselling Estimates, Ages 15+, 2007/08 to 2015/16

Year	Number of Recipients of Follow-up Counselling[a]	Recipients of Initial Counselling Who Received Follow-Up Counselling, %
2007/08	4,144	3
2008/09	29,686	14
2009/10	31,526	16
2010/11	34,142	17
2011/12	36,233	18
2012/13	35,382	18
2013/14	33,604	18
2014/15	35,003	18
2015/16	36,018	18

[a] Source: Ontario Health Insurance Plan

Effects: No information is available on patients' cessation outcomes.

The Smoking Treatment for Ontario Patients Program

The Smoking Treatment for Ontario Patients (STOP) program is a province-wide initiative coordinated by the Centre for Addiction and Mental Health that uses the existing healthcare infrastructure as well as new and innovative means to provide smoking cessation support to smokers in Ontario.

In 2015/16, the STOP Program continued to implement the following program models:

- STOP on the Road offers smokers a psycho-educational group session (two - three hours) and a 5-week kit of NRT. The initiative is implemented in various locations across Ontario in collaboration with local healthcare providers (e.g., PHUs), where smoking cessation clinics are not easily accessible.
- Participating organizations in the STOP with Family Health Teams (FHTs), STOP with Community Health Centres (CHCs), STOP with Addiction Agencies and STOP with Nurse Practitioner-Led Clinics (NPLCs) continue to provide up to 26 weeks access to free NRT and counselling. Organizations may choose from a variety of program delivery models that suit their capacity or interest, including: one-on-one counselling or psycho-educational group session or a combination of both. Some STOP with Addictions Agencies also offer a 10-week kit mail-out option if they are unable to dispense on site. STOP program staff also provides knowledge exchange sessions twice monthly to practitioners offering the program.
- STOP with Aboriginal Health Access Centres (AHACs) works collaboratively with the STOP program to develop sustainable smoking cessation intervention programs and aim to provide knowledge exchange regarding smoking cessation interventions specific to the Aboriginal population.

Reach: A total of 26,024 smokers were reached by various STOP models in 2015/16. A majority of participants were enrolled through the STOP with FHTs (n=14,405).[xiv] Demographic and smoking characteristics of the STOP program participants are summarized in Table 4-11.

[xiv] Laurie Zawertailo, Co-Principal Investigator, STOP Program, Personal communication, August 16, 2016.

Table 4-11: STOP Program Participants, by Select Characteristics, 2015/16

Program Model	No. of Participants	Male %	Female %	Age Mean	20+ Cigarettes per day, %
STOP on The Road VII	3,011	45	55	50.0	62.7
STOP with FHTs	14,405	46	53	51.3	54.3
STOP with CHCs	3,563	47	52	49.5	56.8
STOP with Addictions Agencies	4,084	59	41	42.9	56.7
STOP with NPLCs	600	46	54	47.0	55.0
STOP with AHACs	361	N/A	N/A	N/A	N/A

Note: Demographic and smoking characteristics were not available for participants in the STOP with AHACs program.
Source: STOP program.

Effects: In 2015/16, at six months post-treatment, the self-reported 7-day point prevalence responder quit rates[xv] ranged from 29% for STOP with CHCs to 38% for STOP with FHTs (Table 4-12; follow-up response rates ranged from 15% to 50% across the STOP program models).

Table 4-12: STOP Program 7-Day Point Prevalence Responder Quit Rates, 2015/16

Program Model	Responder Quit Rate %
STOP on The Road VII	33.6
STOP with FHTs	38.2
STOP with CHCs	29.2
STOP with Addictions Agencies	29.8
STOP with NPLCs	30.5
STOP with AHACs	N/A

Note: Quit rates were not calculated for the STOP with AHACs due to the lack of follow-up survey. Follow-up survey response rates for each STOP program were as follows: STOP on the Road VII (15%), STOP with FHTs (49%), STOP with CHCs (44%), STOP with Addiction Agencies (37%) and STOP with NPLCs (50%).
Source: STOP program.

Other Cessation Interventions to Increase Quit Attempts

First Week Challenge Contest

In January 2016, the Canadian Cancer Society launched the First Week Challenge Contest (FWCC) to replace the Driven to Quit Contest. The main objectives of the contest are to encourage quit

[xv] The responder quit rate is defined as all participants who report having quit using tobacco divided by all those who completed the follow-up survey/evaluation.

attempts, increase tobacco users' awareness of cessation resources and encourage tobacco users to seek help through Smokers' Helpline. The contest is open to all Ontario residents over the age of 19 who currently use tobacco products or quit within three months of the contest period, and have used tobacco 100 times in their lifetime. Participants register online or by telephone by the last day of the month and must refrain from using tobacco products for the first week of the following month to be eligible for the monthly $500 prize draw.

Reach: In 2015/16, the FWCC ran in February and March where over 1,500 smokers registered to participate in the contests.

Effects: No information is available on participants' cessation outcomes.

Leave The Pack Behind

LTPB has adopted a comprehensive approach and uses evidence-based, age-tailored tobacco control strategies to reduce tobacco use among young adults across Ontario. In 2015/16, LTPB's key strategies to achieve this goal included:

1. Promoting and hosting the annual wouldurather… contest to encourage young adults to quit or reduce their smoking or to pledge to stay smoke-free for a chance to win cash.
2. Distributing age-tailored, evidence-based self-help quit smoking booklets to young adults on-campus (by clinicians in health services and peer-to-peer outreach) and in the community (online and in PHUs).
3. Promoting the services of Smokers' Helpline, the Crush The Crave smart-phone app, peer-to-peer support and an online running program (QuitRunChill).

Reach: In 2015/16, LTPB programs and services were available on-campus in all 44 public colleges and universities in Ontario and in the community through 36 PHUs. In 2015/16, at least 26,686 smokers (7% of all 395,900 young adult smokers in Ontario) accessed any of LTPB non-clinical programs or services (Table 4-13). For additional information on other programs, go to the Interventions to Build Knowledge and Awareness and Clinical Cessation Interventions to Increase Quit Attempts sections above and the LTPB section in the Prevention Chapter).

Table 4-13: Leave The Pack Behind Participants by Non-Clinical Program or Service, 2015/16

Program or Service	No. of Participants/Recipients
SMOKE|QUIT self-help booklets distributed by student teams	18,225
One Step at a Time booklets (for mature students) distributed by student teams	14
Public Health distribution of self-help books (e.g., Hey, Something's Different)	4,811
Registration to quit or cut back in the *wouldurather…* contest	3,344
Registration for online personalized health program Quit*Run*Chill	61
Crush the Crave smart phone app	231
TOTAL	26,686

Effects: In 2015/16, it is estimated that of the 18,225 smokers who received the *Smoke/Quit* booklets, 2,078 (or 11.4%) were expected to quit smoking at 3-month follow-up. (These outcomes are based on empirically derived 7-day point prevalence intention-to-treat quit rates for *Smoke/Quit* booklets/health professional counselling. No responder rates were reported.)

It is also estimated that of the 3,344 smokers who registered to quit or cut back in the wouldurather… contest, 520 were expected to quit smoking. (This outcome is based on empirically derived 7-day point prevalence intention-to-treat quit rates of 8.9% to 19.8%—depending on contest category—at 3-month follow-up. No responder rates were reported.)[65,66] Due to the multi-faceted nature of LTPB interventions and the challenges presented by collecting data from a highly transient target population, overall data on participants' demographic and smoking characteristics are not presented.

Public Health Units

In addition to providing counselling and nicotine replacement therapy, PHUs across the Province offer other forms of smoking cessation services. In 2016, the majority of PHUs offered self-help resources (92%) followed by the SHL fax referral program (75%) and information sessions, workshops and seminars (72%; Table 4-14). Less than half of PHUs offered youth cessation programming (44%), online or web-based support (42%), telephone hotline (39%), and PHU-specific quit smoking challenges (8%).

PHUs are also required to link members of the population with community resources for tobacco

use cessation. In 2016, nearly all PHUs were referring clients to SHL (97%) and to local Family Health Teams, Community Health Centres, Nurse Practitioner-Led Clinics (94%). Other referral organizations included Leave the Pack Behind (89%), STOP (81%), and Aboriginal Health Access Centres (33%).

Table 4-14: Non-Clinical Tobacco Use Cessation Services Offered by Public Health Unit, 2016.

	# of PHUs that offered service	% of PHUs that offered service
Self-help resource material	33	92%
Smokers' Helpline fax referral program	27	75%
Information sessions, workshops and seminars	26	72%
Youth Cessation Programming	16	44%
Online or web-based support	15	42%
Telephone/Hotline	14	39%
PHU specific quit smoking challenges	3	8%

Source: Online survey of PHUs conducted by OTRU January 24 - February 2, 2017.

Estimates of reach and systematic evaluative data on the effects of PHU non-clinical tobacco use cessation services are not available.

Smokers' Helpline Online

The Canadian Cancer Society's province-wide Smokers' Helpline Online (SHO) is an online resource that offers 24/7 access to cessation resources (e.g., Quit Meter and Cravings Diary), a self-directed cessation program and an online community that is moderated by quit coaches. Registrants can also opt to receive evidence-based inspirational emails that include helpful tips, reminders and motivation.

Reach: In 2015/16, more than 3,100 smokers registered for SHO. This is the lowest number of registrants since the launch of the program in 2005/06 and half the number of registrants from 2014/15 (Table 4-15). The SHO reached an estimated 0.17% of the smoking population in 2015/16. The SHO reported the decrease in registrations was largely due to the fact that the Driven to Quit

Challenge was not run in 2015/16.[xvi]

There is no information about the demographic characteristics of tobacco users who accessed the SHO in 2015/16. Nor is there evaluative information on the effects of the SHO on participants' quitting behaviour over this period.

Table 4-15: Smokers' Helpline Online Registration, 2005/06 to 2015/16

Fiscal Year	No. of Registrants	Proportion of Ontario Smokers Reached, %[a]
2005/06	3,365	0.17
2006/07	7,084	0.35
2007/08	7,692	0.37
2008/09	5,724	0.29
2009/10	9,539	0.50
2010/11	6,909	0.34
2011/12	8,640	0.43
2012/13	7,257	0.36
2013/14	4,593	0.24
2014/15	6,400	0.34
2015/16	3,117	0.17

[a] Estimates of the total population of smokers aged 18+ from 2005/06 to 2015/16 were calculated based on CCHS 2005 to 2014 (TIMS data).

Smokers' Helpline Text Messaging

The Canadian Cancer Society's province-wide Smokers' Helpline Text Messaging (SHL TXT) offers registrants support, advice and information through text messages on their mobile device. Automated messages are sent to the registrants for up to 13 weeks based on their quit date and preferences. Registrants can also text key words to SHL to receive additional support on an as-needed basis

Reach: In 2015/16, over 1,100 smokers registered to receive text messages. This represents an increase from the 400 registrants in 2014/15, but still falls below the high number of registrants in 2012/13 (Table 4-16).

[xvi] Sharon Lee, Senior Coordinator, Canadian Cancer Society. Personal communication, September 15, 2016.

Table 4-16: Smokers' Helpline Text Service Registration, 2009/10 to 2015/16

Fiscal Year	No. of New Registrants
2009/10	218
2010/11	583
2011/12	839
2012/13	1,666
2013/14	1,645
2014/15[a]	400
2015/16	1,111

[a] The low number of new registrants observed in 2014/15 is due to the service only being available from December 2014 to March 2015.

There is no information about the demographic characteristics of tobacco users who accessed the SHL TXT in 2015/16. Nor is there evaluative information on the effects of the SHL TXT on participants' quitting behaviour over this period.

Youth Advocacy Training Institute N-O-T on Tobacco

In 2015/16, YATI concluded Phase III of piloting the American Lung Association's N-O-T on Tobacco (NOT) Youth Smoking Cessation Program, a voluntary school-based program for teens who want to quit smoking. The NOT program occurs over 10 sessions and aims to assist youth in understanding why they smoke and assist them in developing the skills, confidence, and support needed to quit. NOT also addresses such topics as: how to control your weight after quitting, stress management, and how to communicate effectively. The program is designed specifically for youth. The NOT program employs several different strategies to assist youth: small group discussion, writing in journals and hands on activities.

Reach: In 2015/16, YATI completed 6 offerings of NOT program (10 in-school sessions each) for a total of 60 sessions. Approximately, 61 youth completed the program.

Effects: No information is available on participants' cessation outcomes. OTRU is currently evaluating the NOT pilot.

Overall Reach of Ontario's Cessation Programs

In the 2015/16 fiscal year, Strategy smoking cessation interventions in Ontario directly engaged 324,225 smokers, or about 17% of Ontario smokers[xvii] (Table 4-17. Note: this number is a maximum assuming that all clients are smokers and that they use only one of the services). Of these smokers, 15.6% engaged in some sort of clinical intervention, whereas 1.7% engaged in a non-clinical intervention such as a contest.

Table 4-17: Smokers Enrolled in Ontario Smoking Cessation Interventions[a] in 2015/16

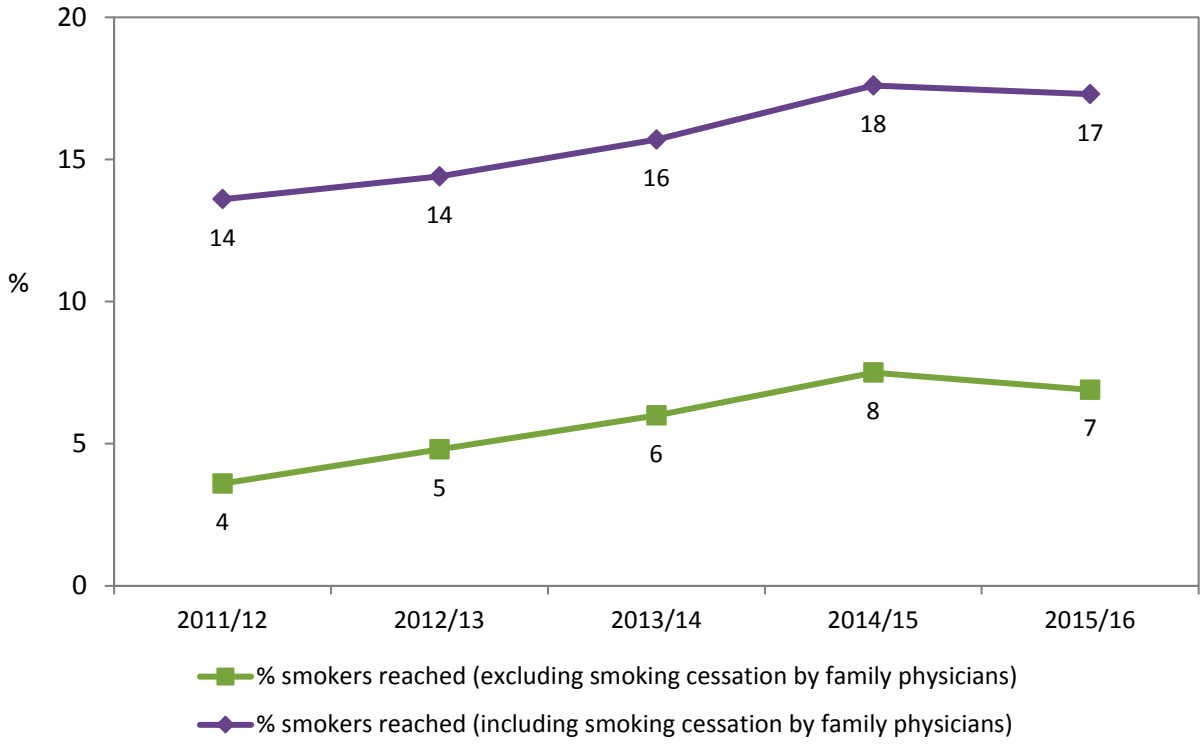
Program	Clinical Reach	Intervention Reach
Smokers' Helpline Phone Support	7,161	
The STOP Program	26,024	
Ottawa Model for Smoking Cessation (hospital sites)	14,044	
Ottawa Model for Smoking Cessation (primary care sites' quit plan visits)	7,501	
Pharmacy Smoking Cessation Program	24,735	
Public Health Unit cessation counselling and NRT distribution	13,187	
Smoking Cessation by Family Physicians	195,344	
Leave The Pack Behind (Health professional cessation counselling and NRT distribution)	3,754	
Smokers' Helpline Online		3,117
Smokers' Helpline Text Messaging		1,111
Leave The Pack Behind Programs (excluding counselling and NRT distribution)		26,686
Not-On-Tobacco Smoking Cessation		61
First Week Challenge Contest		1,500
Sub-Total	291,750	32,475
Total (Clinical and Intervention Reach)	324,225	

Note: Reach is calculated as total number of people in program. Only Smokers' Helpline is available to all Ontario smokers, with the other programs serving sub-populations. Comparisons among programs should not be made, as they provide varying services to different populations of smokers.

[xvii] The population of current smokers in Ontario in 2014, aged 18 years and older is 1,870,600 (based on CCHS data, TIMS estimate).

The overall reach of the Ontario smoking cessation interventions has steadily increased in recent years. However decreases in program reach by a number of cessation interventions lead to a slight decrease in overall reach in 2015/16 compared to 2014/15 (17% vs. 18% of smokers, respectively). Figure 4-2 presents the proportion of Ontario smokers reached by the cessation interventions over time with and without the Smoking Cessation by Family Physicians clinical reach included in the calculation. This presentation format is to facilitate interpretation of the overall cessation program reach since the Smoking Cessation by Family Physician program accounts for approximately two-thirds of the smokers reached by Ontario cessation interventions.

Figure 4-2: Proportion of Smokers Reached by Ontario Smoking Cessation Interventions, 2011/12 to 2015/16



Note: Full data table for this graph provided in the Appendix (Table 4A-1)

Cessation Outcomes: Population-Level

The long-term goals of the cessation system are to lower the rate of current smoking and to increase the duration of smoking abstinence among quitters. In working toward these desired outcomes, the more immediate objectives of the Strategy are to increase program uptake, decrease cigarette consumption (for example, transitioning smokers to non-daily smoking), increase the proportion of smokers intending to quit and increase the prevalence and actual number of quit attempts.

Strategy programs offering cessation assistance have reached approximately 17% of all smokers in the Province. Although responder quit rates for some SFO clinical interventions are quite high (in the range of 30% and more), relapse rates are high with long-term quit rates reported to range from 6% to 12% for those undergoing cessation treatment,[67] it may be that only 19,500 to 38,900 of these smokers wishing to quit go on to have a long-term successful smoking abstinence. Furthermore, clinical programs tend to reach more addicted smokers than more population based programs, which makes it hard to have a large impact on smoking prevalence rates in the Province through cessation assistance alone. Population-level data show considerable more progress than this. The difference between program participant and the general population numbers is explained in part by the relative number of smokers who go on to quit smoking using no formal mechanism, interventions taking place outside formal Strategy channels and indirect interventions including tobacco tax and smoke-free spaces. Next, we discuss a variety of cessation indicators from a population-level perspective, with an emphasis on overall cessation rates.

Long-Term Outcomes

Desired long-term cessation outcomes include increasing the duration of smoking abstinence among quitters and reducing the overall prevalence of tobacco use.

Former Smokers

Annualized (Recent) Quit Rate

According to the 2014 CCHS,[xviii] 7.9% of past-year smokers reported that they had quit for 30 days or longer when interviewed. Applying a relapse rate of 79% (derived from OTRU's Ontario Tobacco Survey), it is estimated that 1.7% of previous-year smokers remained smoke-free for the subsequent 12 months (Table 4-18). During the period 2007-2014, there has been only slight change and no substantial increase in the recent quit rate among Ontarians aged 12 years and older.

Table 4-18: Annualized (Recent) Quit Rate among Past-Year Smokers, by Duration of Quit, Ontario, 2007 to 2014

Year	Recent Quit Rate (95% CI)	Adjusted Quit Rate
2007	8.6 (7.4, 9.8)	1.8
2008	10.3 (8.5, 12)	2.2
2009	7.2 (6.0, 8.4)	1.5
2010	6.4 (5.4, 7.4)	1.3
2011	7.4 (6.1, 8.7)	1.6
2012	7.6 (6.1, 9.2)	1.6
2013	7.9 (6.0, 9.2)	1.7
2014	7.9 (6.3, 9.5)	1.7

Source: Canadian Community Health Survey 2007- 2014.

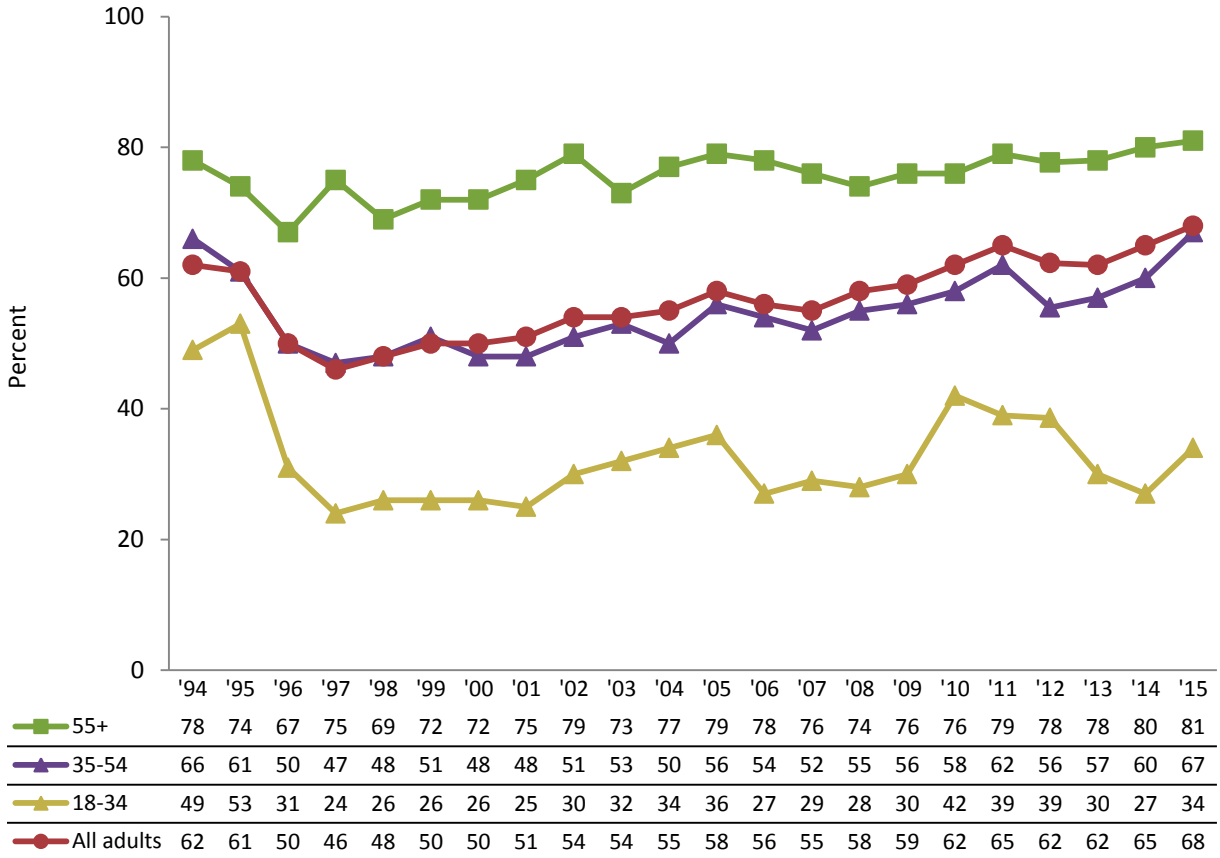
Lifetime Quit Ratio

The lifetime quit ratio is the percentage of ever smokers (that is, former and current smokers) who have successfully quit smoking (based on 30-day abstinence) and is derived by dividing the number of past 30-day former smokers by the number of ever smokers in a population.

- In 2014, 68% of adults who had ever smoked had quit for at least 30 days at time of interview (Figure 4-3).
- Adults aged 18 to 34 had the lowest ratio of quitting (34%) among all ever smokers.
- In recent years, there has been significant change in quit ratios.

[xviii] The 2015 Canadian Community Health Survey was unexpectedly delayed and was not available when this report was released.

Figure 4-3: Quit Ratio (Former Smokers as a Proportion of Ever Smokers), by Age, Ontario, 1994 to 2015



	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15
55+	78	74	67	75	69	72	72	75	79	73	77	79	78	76	74	76	76	79	78	78	80	81
35-54	66	61	50	47	48	51	48	48	51	53	50	56	54	52	55	56	58	62	56	57	60	67
18-34	49	53	31	24	26	26	26	25	30	32	34	36	27	29	28	30	42	39	39	30	27	34
All adults	62	61	50	46	48	50	50	51	54	54	55	58	56	55	58	59	62	65	62	62	65	68

Source: Centre for Addiction and Mental Health Monitor 1994–2015.
Note: Full data table for this graph provided in the Appendix (Table 4A-2)

Quit Duration

- In 2015, 6% of former smokers (or 180,243 people) reported quitting between one and 11 months ago, 15% of former smokers quit between one and five years ago and 78% quit smoking more than five years ago (CAMH Monitor 2015, data not shown). This is unchanged in recent years.

Short and Intermediate-Term Outcomes

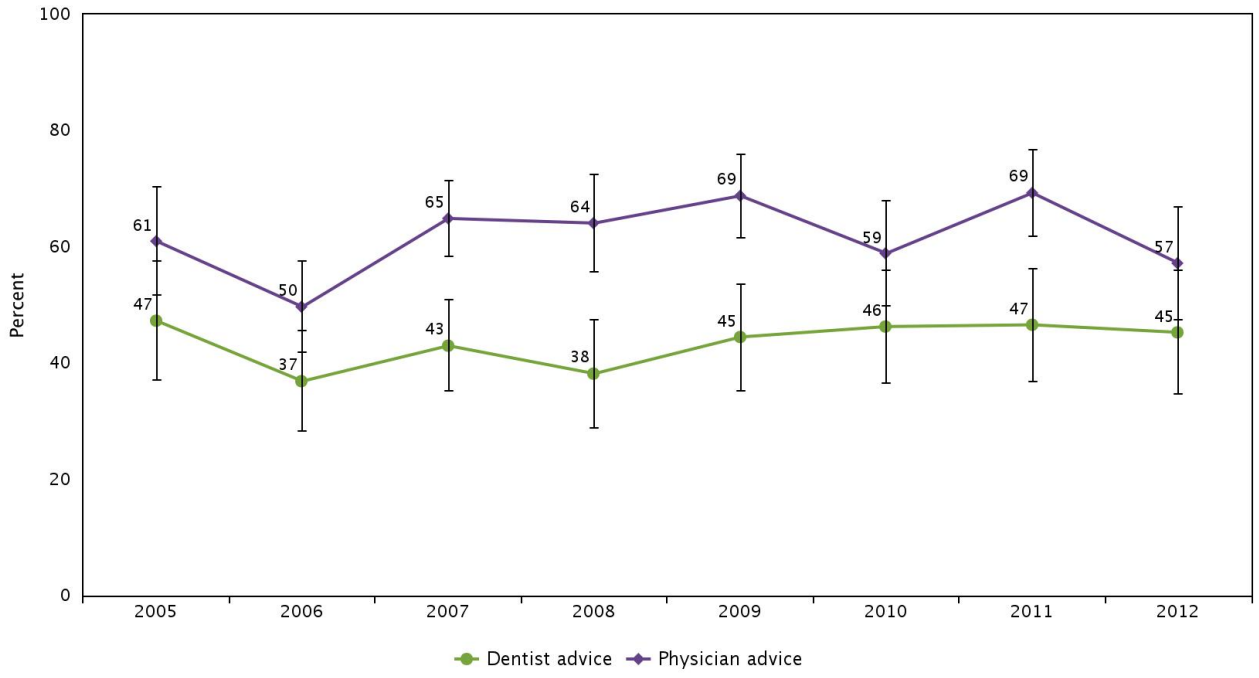
As suggested by the Path Logic Model (Figure 4-1), to reach desired cessation outcomes, the Strategy must increase the awareness and use of evidence-based cessation initiatives, decrease cigarette consumption, increase the proportion of smokers intending to quit and increase the prevalence and actual number of quit attempts.

Advice, Awareness and Use of Quit Aids

Health Professional Advice

- In 2012, six in ten survey respondents over the age of 18 who smoked (57%) and had visited a physician in the past year had been advised to quit smoking (Figure 4-4). This is unchanged in recent years (CTUMS). (Note: More recent data is not currently available.)
- Of current smokers in Ontario in 2012 who had visited a dentist in the past year, 45% reported that their dentist or dental hygienist had advised them to quit smoking (Figure 4-4). This is unchanged in recent years.
- Among those advised to quit by a physician, 57% received information on quit smoking aids such as the patch; a product like Zyban™, Wellbutrin™, or Champix™; or a counselling program in 2012 (data not shown).

Figure 4-4: Health Professional Advice to Smokers, by Occupation, Ages 18+, Ontario, 2005 to 2012

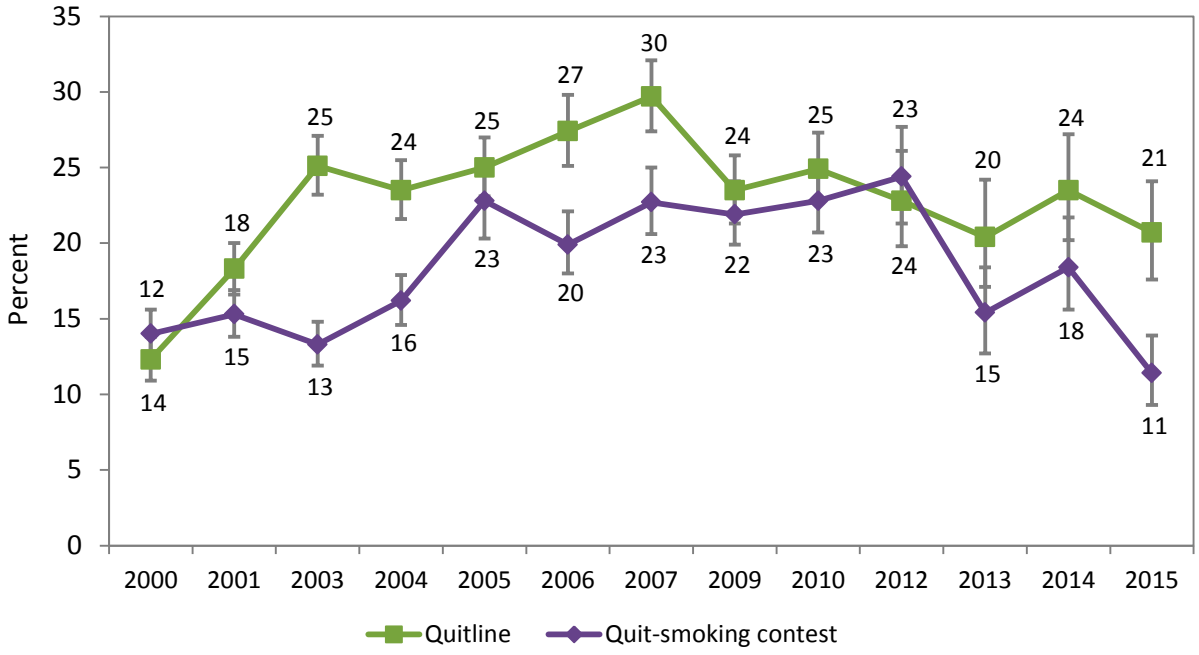


Note: Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 4A-3).
Source: Canadian Tobacco Use Monitoring Survey 2005-2012.

Awareness of Quit Programs

- In 2015, 21% of Ontarians 18 years and older were aware of a 1-800 quitline. The level of awareness was similar to what was reported in 2014 (24%), but significantly lower than the level of awareness reported in 2010 (25%; Figure 4-5).
- Awareness of a quitline differed by smoking status in 2015: 57% of current smokers were aware compared to 18% of former smokers and 14% of never-smokers (CAMH Monitor; data not shown).
- Among Ontarians aged 18 years or over in 2015, 11% reported being aware of a quit-smoking contest, which is lower than the level of awareness reported in 2014 (18%) and 2010 (23%; Figure 4-5).
- Awareness of a quit-smoking contest was the same among current smokers, former smokers and never smokers in 2015 (14%,[xix] 10% and 11%, respectively) (CAMH Monitor; data not shown).

Figure 4-5: Awareness of a 1-800 Quitline (Past 30 Days) and Awareness of a Quit Smoking Contest (Past 30 Days), Ages 18+, Ontario, 2000 to 2015



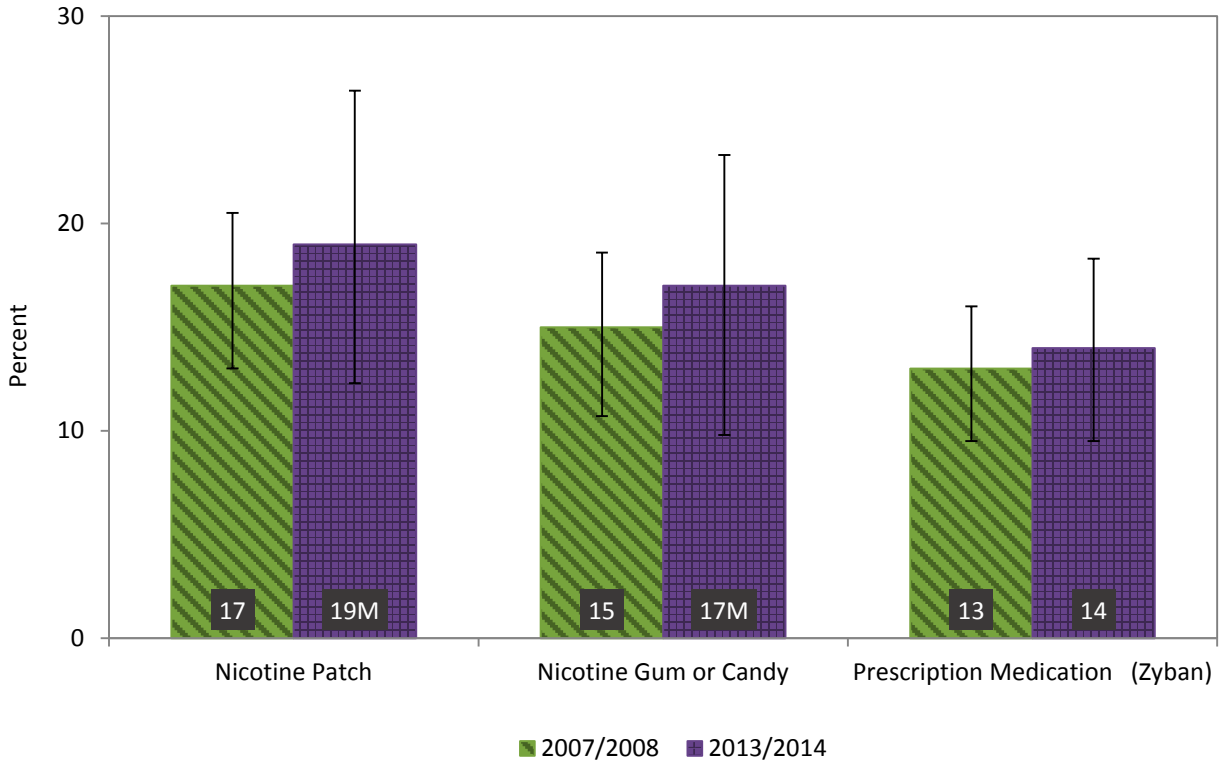
Note: Vertical lines represent 95% confidence intervals. Survey question not asked uniformly over reporting period. Full data table for this graph provided in the Appendix (Table 4A-4) and (Table 4A-5).
Source: Centre for Addiction and Mental Health Monitor 2000, 2001, 2003-2007, 2009, 2010, 2012-2015.

[xix] Interpret with caution: Subject to moderate sampling variability.

Use of Quit Aids

- In recent years, there has been no change in the use of nicotine gum (17% in 2013/2014 vs. 15% in 2007/2008) or the nicotine patch (19% in 2013/2014 vs. 17% in 2007/2008) among former smokers who quit within the past year (CCHS data; Figure 4-6).
- In 2013/2014, 14% of recent quitters in Ontario aged 18 years and older representing 21,700 former smokers used a product such as Zyban,™ similar to the 13% reported in 2007/2008 (Figure 4-6). (Note: 13% of eligible smokers (or 24,065) received Zyban™ or Champix™ through the ODB Pharmacy program in 2015/16.)

Figure 4-6: Use of Smoking Cessation Aids (Past Year), Ages 18+, Ontario, 2007/08 and 2013/14



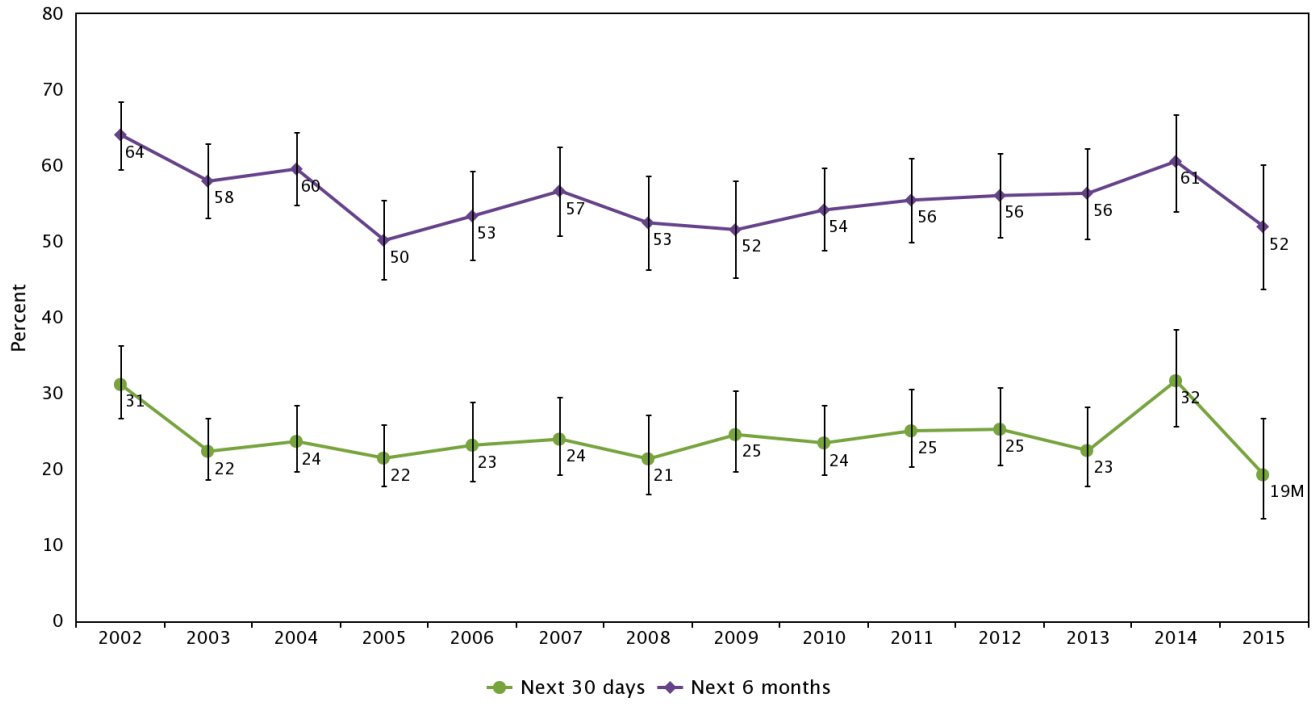
Note: M = Interpret with caution: subject to moderate sampling variability. Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 4A-6).
Source: Canadian Community Health Survey 2007, 2008, 2013, 2014.

Quitting Behaviour

Intentions to Quit

- In 2015, more than half of all smokers intended to quit in the next six months (52%); which is unchanged compared to 2014 (61%) and 2011 (56%; CAMH Monitor data; Figure 4-7).
- The prevalence of 30-day quit intentions among Ontario smokers in 2015 was 19%, which is statistically similar to what was reported in 2014 (32%) and 2011 (25%), though the trend appears to have decreased due to small sample sizes.

Figure 4-7: Intentions to Quit Smoking in the Next Six Months and Next 30 Days, Ages 18+, Ontario, 2002 to 2015

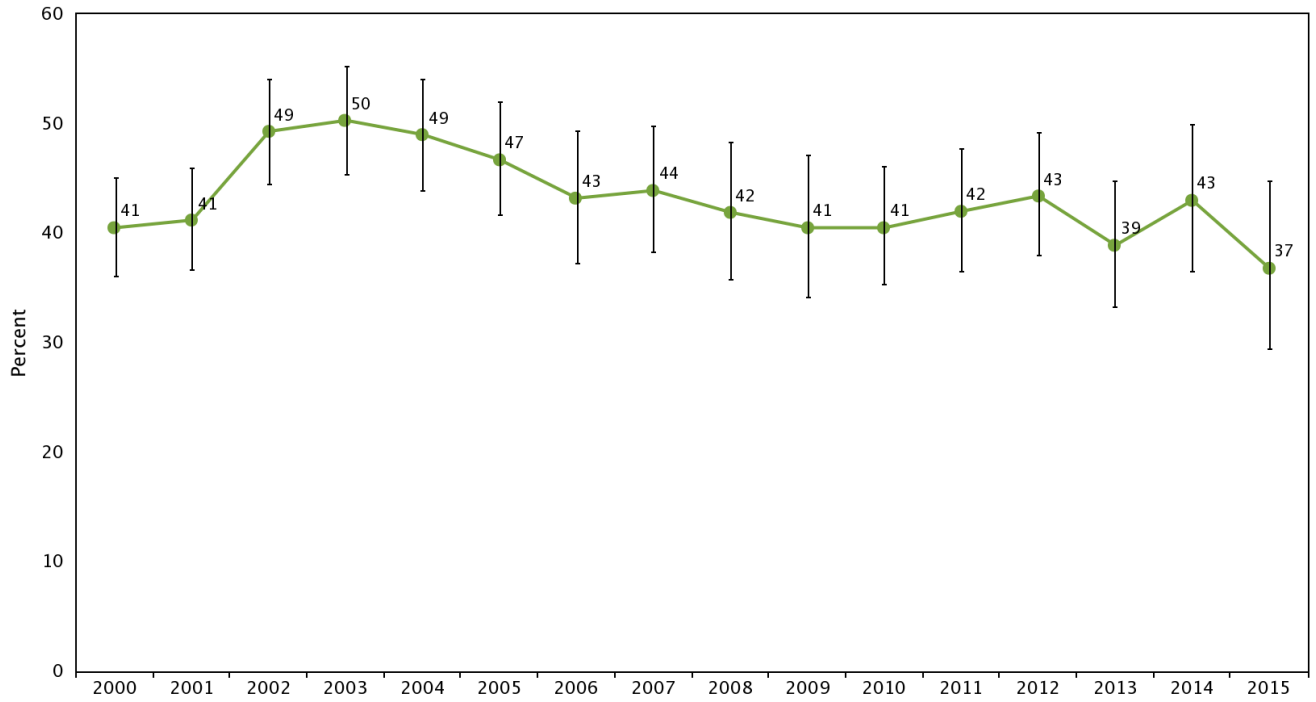


Note: M = Interpret with caution: subject to moderate sampling variability. Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 4A-7) and (Table 4A-8).
Source: Centre for Addiction and Mental Health Monitor 2002–2015.

Quit Attempts

- In 2015, four in ten smokers (37%) made one or more serious quit attempt in the past year (CAMH Monitor data; Figure 4-8).
- Over the last decade, there has been no statistically significant change in the proportion of adult smokers making quit attempts.

Figure 4-8: One or More Quit Attempts in the Past Year, Current Smokers, Ages 18+, Ontario, 2000 to 2015



Note: Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 4A-9).
Source: Centre for Addiction and Mental Health Monitor 2000-2015.

MPOWER Comparison with Ontario: Cessation

Eight MPOWER indicators[68] relate to Cessation: Monitoring, Smoking Prevalence, Cessation Programs, Health Warning Labels, Mass Media Campaigns, Tobacco Advertising Bans, Compliance with Advertising Ban and Taxation (Table 4-19).

Table 4-19: Assessing Smoking Cessation: MPOWER Indicators Applied to Ontario

MPOWER Indicator	Highest MPOWER Requirement	Situation in Ontario
Monitoring	Recent, representative and periodic data for both adults and youth	Meets the requirement for the highest score
Smoking prevalence	Daily smoking, age-standardized rate, <15%, among 15 years and older	Daily smoking, age-standardized rate, 13.3% among 12+, 2014 (Note: Compared to MPOWER definition, the age used here for Ontario is slightly lower (12 vs. 15), which contributes to a slightly lower rate of smoking)
Cessation programs	National quitline, both NRT and some cessation services cost-covered	Cost of NRT and other medications not covered for all smokers
Health warning labels on cigarette packages	Large health warning labels (e.g., over 50% of package panel, graphic, rotate, specific health warnings)	Meets the requirement for the highest score
Mass media campaigns	Campaign part of a comprehensive tobacco control programme; Research to gain a thorough understanding of the target audience; Campaign materials were pre-tested with target audience; Air time (radio and television) and/or placement (billboards, print ad) was purchased using organization internal resources or external media planner/ agency; Worked with journalists to gain campaign publicity/news coverage; Process evaluation to assess effectiveness; Outcome evaluation to assess campaign impact; Campaign aired on television and/or radio.	The 'Don't quit quitting' campaign (January to March 2016) included six of the eight characteristics outlined by MPOWER, meeting the second highest score.
Tobacco advertising bans	Ban on all forms of direct and indirect advertising	Direct mail to adult readership, non-tobacco goods and services with tobacco brand names and appearance of tobacco products in TV and/or films are allowed in Ontario (and Canada)
Advertising ban compliance	Complete compliance	Meets the requirement for the highest score
Taxation	Tobacco tax > 75% of the retail price	Tobacco tax at 64% of the retail price in Ontario in 2015

Scientific Advisory Committee: Overview of Cessation Goals and Recommendations

The 2010 Scientific Advisory Committee (SAC)[xx] goal for Cessation is: "To reduce the health and economic burden from tobacco industry products, at an individual and societal level, through cessation interventions." The 2010 SAC report includes several recommendations to achieve this cessation goal including a media campaign, tobacco-user support system, direct support, cessation in other settings, cessation training, engagement of pharmaceutical companies and innovative approaches (summary below).[69] Work has progressed in many of these areas, but effort is needed to address several shortcomings (e.g., an integrated tobacco-user support system) and to increase intensity (e.g., a sustained and intensive media campaign to encourage smokers to quit).

2010 Scientific Advisory Committee Recommendations

Media Campaign

SAC Recommendation 7.1: Implement a sustained and intensive mass media campaign to encourage smokers to quit, either on their own or with help.

Current Status: The 'Don't Quit Quitting 'campaign targeted regular smokers aged 35-44 years and encouraged smokers to keep trying to quit smoking if their first attempts to quit were not successful. The campaign ran for three months (January – March 2016) on TV and was also distributed through digital and social media ads.

Tobacco-User Support System

SAC Recommendation 7.2: Create a Tobacco-User Support System to operationalize the concept that there is "no wrong door" for access to cessation support services. The system will reach out to tobacco users, understand, support and address their needs and improve interventions through its various components.

[xx] Upon request of the Ministry of Health Promotion and Sport, a committee of lead tobacco control researchers in Ontario was convened to provide scientific and technical advice and recommendations to the Government of Ontario to inform the comprehensive tobacco control strategy renewal for 2010-2015.

Current Status: Currently in the Province, there is a collection of cessation services, with collaboration among these services in its infancy. Developmental meetings are underway by partners to enhance the collaborative possibilities for Ontario's cessation services.

Direct Support

SAC Recommendation 7.3: Enhance systems of telephone, text messaging and Internet-based cessation support services that would entail: [a] Integration with the overall Tobacco-User Support System. [b] Integration with the cessation mass media campaign. [c] Capability for continual engagement with smokers.

Current Status: There are systems of telephone, text messaging and internet-based cessation support services in the Province, but there is not yet full integration with a Tobacco-User Support System, integration with cessation mass media and only slight capability for continual engagement with smokers.

SAC Recommendation 7.4: Provide free direct-to-tobacco-user smoking cessation medication in combination with varying amounts of behavioural support where indicated and appropriate.

Current Status: There is no province-wide program for free smoking cessation medication. However, there are some notable instances of free smoking cessation medications within certain populations.

The Ontario Government funds counselling and prescriptions for smoking cessation medications through the Ontario Drug Benefit (ODB) program, an initiative that covers seniors, MOHLTC programs (Long-term Care, Home Care and Homes for Special Care), Ministry of Community and Social Services (Ontario Disability Support Program and Ontario Works) and the Trillium Drug Plan. ODB recipients are now eligible for up to 12 weeks of treatment with Zyban™ and Champix™ per calendar year. Effective September 1, 2011, ODB recipients also have access to smoking cessation counselling provided by community pharmacists through the Pharmacy Smoking Cessation program.

STOP with Family Health Teams (FHTs), STOP with Community Health Centres (CHCs), STOP with Addiction Agencies, STOP with Nurse Practitioner-Led Clinics (NPLCs) and STOP with Aboriginal

Health Access Centres (AHACs) provides support to smokers willing to quit by providing access to free NRT and counselling.

The Ottawa Model provides support to smokers admitted to participating hospitals by offering free NRT and brief counselling.

Leave The Pack Behind provided select post-secondary students and community-living young adults with free NRT (as well as cessation counselling from a health professional for select users).

Cessation in Other Settings

SAC Recommendation 7.5: Systematize, expand, support and tailor cost-effective and evidence-based cessation policies, services and supports across health care and public health settings such as primary health care, hospitals and long-term care homes.

Current Status: Initiatives include STOP and the Ottawa Model; OHIP billing and the Ontario Drug Benefit and Pharmacy Smoking Cessation Programs.

SAC Recommendation 7.6: Create accountability mechanisms to ensure that smokers are asked, advised and assisted to quit at every point of contact with the health care system (local health integration networks, hospitals, primary care providers, specialty care, home care, etc.).

Current Status: This recommendation has been under discussion.

SAC Recommendation 7.7: Provide free smoking cessation medications for individuals on Ontario Drug Benefit, with the dose and duration determined by the presence of co-morbidity and end organ damage as assessed by their health care provider.

Current Status: The Ontario Government funds counselling and prescriptions for smoking cessation medications through the Ontario Drug Benefit (ODB) program, an initiative that covers seniors, MOHLTC programs (Long-term Care, Home Care and Homes for Special Care), Ministry of Community and Social Services (Ontario Disability Support Program and Ontario Works) and the Trillium Drug Plan. ODB recipients are now eligible for up to 12 weeks of treatment with Zyban™ and Champix™ per calendar year. There is no dose and duration policy in regards to clients with co-morbidity and end organ damage.

SAC Recommendation 7.8: Target sub-populations that are at high risk for tobacco related disease or have decreased access to tobacco cessation services in order to provide services that address their specific needs. Sub-populations may include people in addiction and mental health treatment settings including those struggling with problematic gambling.

Current Status: The Ministry's Health System Research Fund funded one project that addressed tobacco use in Aboriginal populations.

The STOP program reaches clients of Addiction Agencies and Aboriginal Health Access Centres.

Cessation Training

SAC Recommendation 7.9: Support and enhance training and professional development for all tobacco control practitioners through existing resources such as the Program Training and Consultation Centre (PTCC) and the Training Enhancement and Applied Cessation Counselling and Health (TEACH) program.

Current Status: Continuing

Pharmaceutical Companies

SAC Recommendation 7.10: Engage pharmaceutical companies to better understand their potential contribution to a tobacco-use cessation system for Ontario.

Current Status: Unknown

Innovative Approaches

SAC Recommendation 7.11: Support research and development of innovative social-ecological approaches to smoking cessation in various settings, including work place and community-based organizations.

Current Status: MOHLTC funded research into a Workplace-based Cessation Demonstration Project Initiative and a Hospital Demonstration Project; provides funding to STOP and the Ottawa Model, that work in various settings.

Chapter Summary

There are close to two million smokers in Ontario. The proportion of Ontario's smokers who successfully quit each year (defined here as 12-month abstinence) is estimated to be 1.7%. While 8% of Ontario's smokers report quitting for 30 days or more at some point in the past year, Ontario data suggest that 79% of these recent quitters relapse during the year. In order to achieve a five percentage-point decrease in the prevalence of smoking over five years (with past 30-day prevalence currently at 16%), the proportion of smokers who successfully quit needs to at least double.

Evidence indicates that population-level policy interventions can be highly effective in achieving cessation outcomes. As previously mentioned, price is one of the most effective policy tools to promote cessation. Despite a tobacco tax increase in 2016, tobacco taxes in Ontario remain among the lowest in Canada and are below even the highest level of tobacco taxation recommended by MPOWER. Restricting smoking in public and workplaces is also an effective policy tool for promoting quitting. It is likely that since restrictions were already in place for some 90% of Ontarians before the *Smoke-Free Ontario Act* in 2006,[70] we have already achieved most of the short-term benefits of this policy tool in regard to quitting behaviour. Nevertheless, increased compliance with indoor and recent outdoor bans will undoubtedly positively impact some smokers in these settings to become nonsmokers.

Progress is being made on some key 2010 SAC directions for cessation, including: developmental meetings to support an integrated support system; direct support (telephone, text and internet); provision of free NRT or prescription medications and counselling to some high risk populations (Aboriginal, those with co-morbidities and ODB recipients); and ongoing cessation training (provided by PTCC, TEACH, OTRU, RNAO).

Nevertheless, Ontario continues to fall short on four cessation system policies recommended by SAC:

1. Universal provision of free NRT and stop-smoking medications.
2. Creation of accountability mechanisms to ensure that smokers are asked, advised and assisted to quit at every point of contact with the health care system.

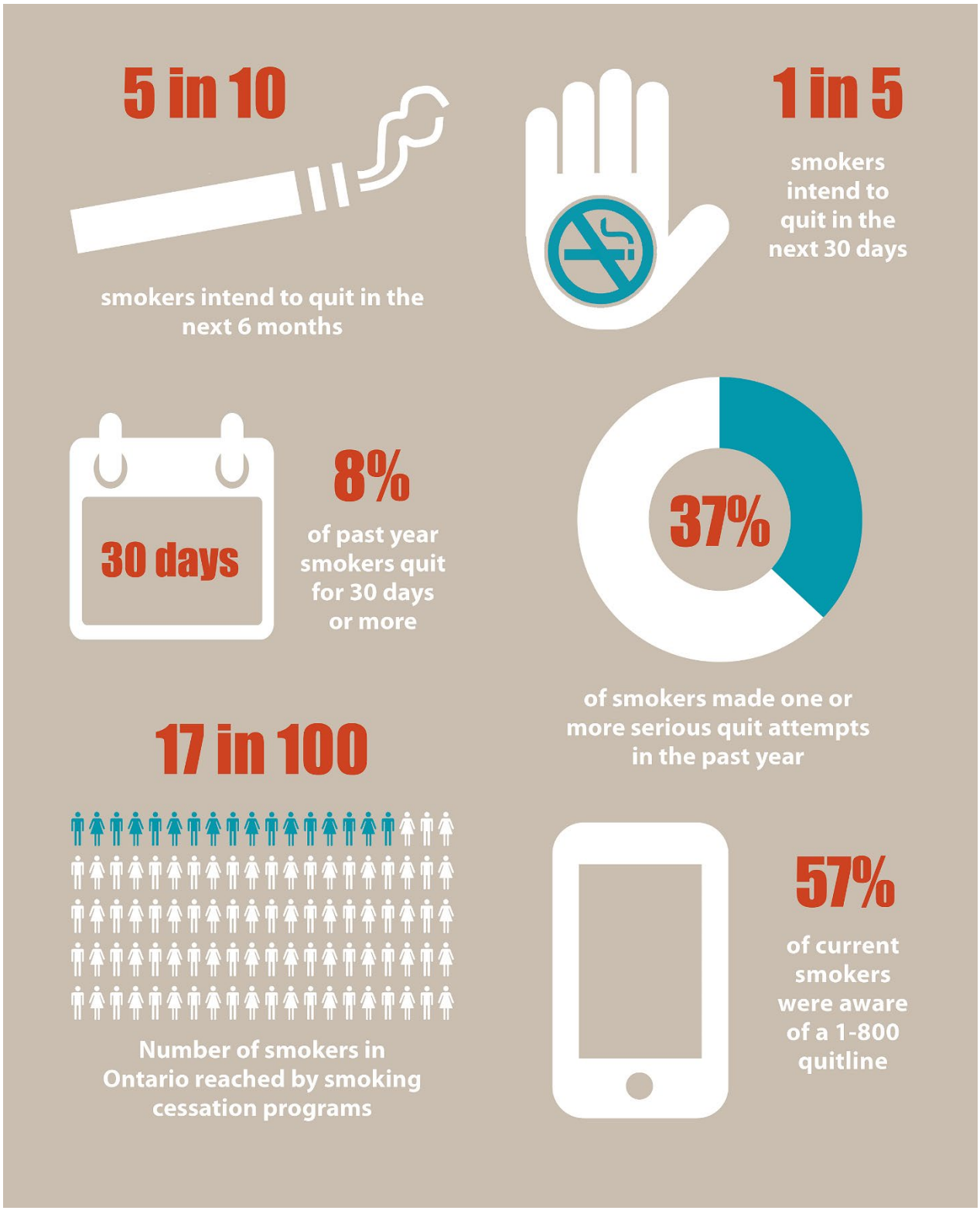
3. Creation of a Tobacco-User Support System to operationalize the concept that there is "no wrong door" for access to cessation support services.
4. Enhancement of systems of telephone, text messaging and Internet-based cessation support services that would entail: a) integration with the overall Tobacco-User Support System, b) integration with the cessation mass media campaign and c) capability for continual engagement with smokers.

Ongoing, comprehensive social marketing campaigns are a vital ingredient for promoting quit intentions and quit attempts.[71] Over recent years, Ontario has begun investing more in marketing campaigns, starting with the Quit the Denial campaign in 2013 followed by the 2016 Don't Quit Quitting campaign. Neither campaign met the highest requirements recommended by MPOWER. Future province-wide campaigns should be sustained over longer time periods to maximize the impact of quit attempts among smokers in the Ontario population.

It appears that only a small proportion of the 57% of smokers who were advised by physicians to stop smoking and the 45% who were advised to do so by dentists in 2012 took any action to obtain formal support.

Provincial cessation support services (Smokers' Helpline, the STOP Program, LTPB, the Ottawa Model, the Ontario Drug Benefit program, YATI's NOT program, and the First Week Challenge Contest) reach approximately 17% of smokers annually, with only a small proportion of these participants likely to succeed in quitting in the long term. This is consistent with existing evidence that smokers make multiple quit attempts and only a few of them go on to successfully quit, with relapse being a typical outcome in a quitting attempt.

Visual Summary of Key Cessation Indicators



Appendix: Data Tables

Table 4A-1: Proportion of Smokers Reached by Ontario Smoking Cessation Interventions, 2011/12 to 2015/16

Year	Excluding Smoking Cessation by Family Physicians		Including Smoking Cessation by Family Physicians	
	Number of Smokers Reached	Proportion of Smokers Reached (%)	Number of Smokers Reached	Proportion of Smokers Reached (%)
2011/12	73,605	4	276,668	14
2012/13	95,351	5	287,887	14
2013/14	116,152	6	304,990	16
2014/15	139,431	8	329,567	18
2015/16	128,881	7	324,225	17

Note: Data table is for Figure 4-2.

Table 4A-2: Quit Ratio (Former Smokers as a Proportion of Ever Smokers), by Age, Ontario, 1994 to 2015

Year	55+ (%)	35-54 (%)	18-34 (%)	All Adults (%)
1994	78	66	49	62
1995	74	61	53	61
1996	67	50	31	50
1997	75	47	24	46
1998	69	48	26	48
1999	72	51	26	50
2000	72	48	26	50
2001	75	48	25	51
2002	79	51	30	54
2003	73	53	32	54
2004	77	50	34	55
2005	79	56	36	58
2006	78	54	27	56
2007	76	52	29	55
2008	74	55	28	58
2009	76	56	30	59
2010	76	58	42	62
2011	79	62	39	65
2012	78	56	39	62
2013	78	57	30	62
2014	80	60	27	65
2015	81	67	34	68

Source: Centre for Addiction and Mental Health Monitor 1994-2015.
Note: Data table is for Figure 4-3.

Table 4A-3: Health Professional Advice to Smokers, by Occupation, Ages 18+, Ontario, 2005 to 2012

	Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Dentist Advice	2005	460,400	47.3	37.1	57.5
	2006	342,200	36.9	28.2	45.6
	2007	514,800	43.0	35.2	50.8
	2008	405,800	38.2	28.9	47.6
	2009	425,900	44.5	35.3	53.7
	2010	473,800	46.3	36.5	56.1
	2011	519,600	46.6	36.8	56.3
	2012	519,100	45.3	34.7	56.0
Physician Advice	2005	646,400	61.0	51.6	70.3
	2006	578,600	49.7	41.9	57.5
	2007	904,600	64.9	58.4	71.5
	2008	788,700	64.1	55.6	72.6
	2009	824,600	68.8	61.6	76.0
	2010	726,900	58.9	49.9	68.0
	2011	941,300	69.3	61.9	76.8
	2012	755,100	57.2	47.5	66.8

Source: Canadian Tobacco Use Monitoring Survey 2005–2012.
Note: Data table is for Figure 4-4.

Table 4A-4: Awareness of a 1-800 Quitline (Past 30 Days), Ages 18+, Ontario, 2000 to 2015

Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2000		12.3	10.9	13.8
2001		18.3	16.6	20.0
2003		25.1	23.2	27.1
2004		23.5	21.6	25.5
2005		25.0	23.1	27.0
2006		27.4	25.1	29.8
2007		29.7	27.4	32.1
2009		23.5	21.3	25.8
2010		24.9	22.7	27.3
2012	2,313,900	22.8	19.8	26.1
2013	1,914,800	20.4	17.1	24.2
2014	2,415,700	23.5	20.2	27.2
2015	2,124,500	20.7	17.7	24.1

Source: Centre for Addiction and Mental Health Monitor 2000, 2001, 2003-2007, 2009, 2010, 2012, 2013, 2015.
Note: Data table is for Figure 4-5.

Table 4A-5: Awareness of a Quit Smoking Contest (Past 30 Days), Ages 18+, Ontario, 2000 to 2015

Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2000		14	12.6	15.6
2001		15.3	13.8	16.9
2003		13.3	11.9	14.8
2004		16.2	14.6	17.9
2005		22.8	20.3	25.5
2006		19.9	18	22.1
2007		22.7	20.6	25
2009		21.9	19.9	24.1
2010		22.8	20.7	25.2
2012	2,470,000	24.4	21.3	27.7
2013	1,440,300	15.4	12.7	18.4
2014	1,893,200	18.4	15.6	21.7
2015	1,171,400	11.41	9.3	13.93

Source: Centre for Addiction and Mental Health Monitor 2000, 2001, 2003-2007, 2009, 2010, 2012-2015.
Note: Data table is for Figure 4-5.

Table 4A-6: Use of Smoking Cessation Aids (past year), Ages 18+, Ontario, 2007/08 and 2013/14

	Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Nicotine Patch	2007/2008	33,500	16.7	13.0	20.5
	2013/2014	30,200	19.4[M]	12.3	26.4
Nicotine Gum or Candy	2007/2008	29,400	14.7	10.7	18.6
	2013/2014	25,900	16.6[M]	9.8	23.3
Prescription Medication (Zyban)	2007/2008	25,500	12.7	9.5	16.0
	2013/2014	21,700	13.9	9.5	18.3

Note: M = Interpret with caution: subject to moderate sampling variability. Data table is for Figure 4-6.
Source: Canadian Community Health Survey 2007, 2008, 2013, 2014.

Table 4A-7: Intentions to Quit Smoking in the Next Six Months, Ages 18+, Ontario, 2002 to 2015

Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2002		64.1	59.4	68.5
2003		58.0	53.1	62.8
2004		59.6	54.7	64.4
2005		50.2	45.1	55.4
2006		53.4	47.5	59.2
2007		56.7	50.8	62.4
2008		52.5	46.2	58.7
2009		51.6	45.2	58.0
2010		54.2	48.8	59.6
2011		5.5	49.8	61.0
2012	918,200	56.1	50.6	61.5
2013	936,900	56.4	50.4	62.2
2014	884,300	60.6	54.0	66.7
2015	705,900	52.0	43.7	60.2

Source: Centre for Addiction and Mental Health Monitor 2000, 2001, 2003-2007, 2009, 2010, 2012-2015
Note: Data table is for Figure 4-7.

Table 4A-8: Intentions to Quit Smoking in the Next 30 Days, Ages 18+, Ontario, 2002 to 2015

Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2002		31.2	26.6	36.3
2003		22.4	18.7	26.7
2004		23.7	19.6	28.3
2005		21.5	17.7	25.8
2006		23.2	18.5	28.8
2007		24.0	19.2	29.5
2008		21.4	16.6	27.1
2009		24.6	19.6	30.3
2010		23.5	19.3	28.3
2011		25.1	20.4	30.5
2012	414,500	25.3	20.6	30.7
2013	373,200	22.5	17.7	28.1
2014	462,300	31.7	25.6	38.4
2015	261,400	19.3	13.6	26.6

Source: Centre for Addiction and Mental Health Monitor 2000, 2001, 2003-2007, 2009, 2010, 2012-2015.
Note: Data table is for Figure 4-7.

Table 4A-9: One or More Quit Attempts in the Past Year, Current Smokers, Ages 18+, Ontario, 2000 to 2015

Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2000		40.5	36.1	45.0
2001		41.2	36.7	45.9
2002		49.3	44.5	54.1
2003		50.3	45.3	55.2
2004		49.0	43.9	54.0
2005		46.7	41.6	51.9
2006		43.2	37.2	49.3
2007		43.9	38.3	49.8
2008		41.9	35.8	48.3
2009		40.5	34.2	47.1
2010		40.5	35.3	46.0
2011		42.0	36.5	47.7
2012	700,600	43.4	38.0	49.1
2013	637,800	38.9	33.3	44.8
2014	623,800	43.0	36.5	49.9
2015	488,900	36.8	29.4	44.8

Source: Centre for Addiction and Mental Health Monitor 2000-2015.
Note: Data table is for Figure 4-8.

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UNITÉ DE RECHERCHE SUR LE TABAC DE L'ONTARIO

Generating knowledge for public health

Smoke-Free Ontario Strategy Monitoring Report:

Protection

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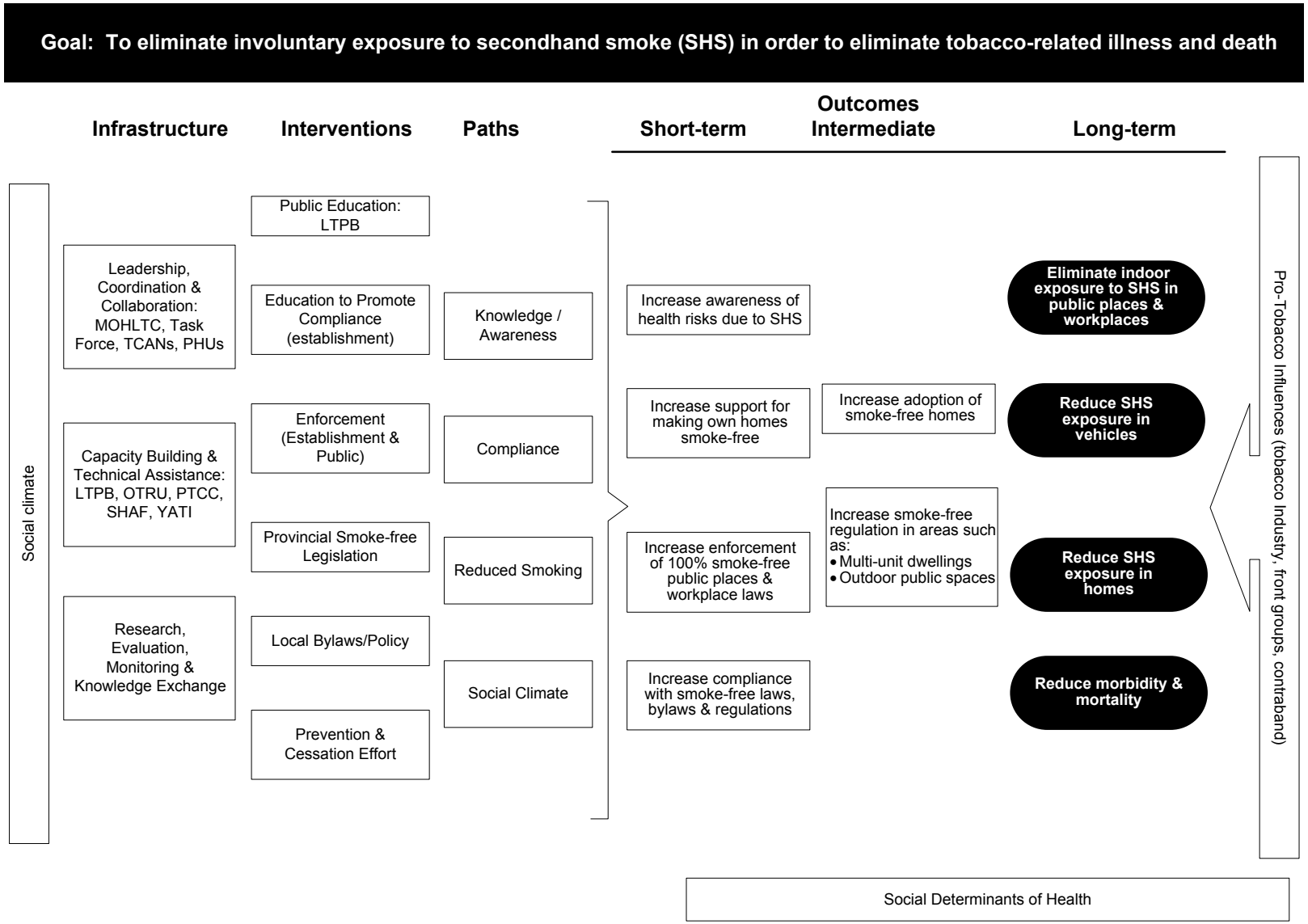
Protection: Smoke-Free Ontario Strategy Components

An important goal of tobacco control is to protect the population from exposure to secondhand smoke. Desired outcomes include eliminating nonsmokers' exposure to secondhand smoke in public places, workplaces, vehicles in which children are present and in the home. In Ontario, the protection component of the Smoke-Free Ontario (SFO) Strategy is the main avenue by which progress toward these desired outcomes is expected to be achieved (Figure 5-1). A secondary desired outcome of the protection goal is to reduce nonsmokers' social exposure to tobacco use (visual and sensory cues associated with the use of tobacco products).[1]

In this chapter, we provide a brief overview of the protection component of the Strategy including infrastructure and intervention components. We follow with an examination of key outcome indicators measuring progress toward protection objectives.

Figure 5-1: Protection Path Logic Model



Protection Infrastructure

Ontario Tobacco Research Unit

In 2015/16, the Ontario Tobacco Research Unit (OTRU) provided rapid scientific consulting to the Ministry of Health and Long-Term Care, Health Protection Policy and Programs Branch and SFO partners. OTRU also responded to 75 knowledge and evaluation support requests from SFO partners. Protection-focused knowledge and evaluation support requests included evaluations of Essex Region Conservation Area's smoke-free policy, Toronto's amended smoke-free bylaws, the Pan Am/Parapan Am Games smoke-free policy and Ontario's new outdoor smoke-free regulations.[2,3,4,5] OTRU's online course , Tobacco and Public Health: From Theory to Practice, is a further resource on protection that provides evidence-based knowledge on what is currently known about secondhand smoke, its effects on health, and the creation of smoke-free environments. The course is available to public health personnel and health professionals across the Province. In 2015/16, a total of 1089 people enrolled in the protection module of the online course. OTRU staff are also actively involved in the Protection and Enforcement Task Force, Communities of Practice and other provincial committees relevant to the SFO Strategy.

Program Training and Consultation Centre

In 2015/16, a portion of the Program Training and Consultation Centre's (PTCC) work centered on supporting protection initiatives of the Strategy. PTCC provided several training and capacity-building initiatives to support the development and implementation of protection initiatives. In regards to enforcement, the PTCC continued to offer a multi-day training course on the foundations of tobacco control enforcement. This course is offered in collaboration with the Ministry of Health and Long-Term Care (MOHLTC) as it is a required training for any public health unit employee enforcing the *Smoke-Free Ontario Act*. PTCC also offered conflict resolution training for tobacco enforcement officers. In November 2015, the PTCC collaborated with the MOHLTC to plan and implement a special two-day enforcement training event to prepare tobacco enforcement officers for the January 1, 2016 implementation of the *Electronic Cigarette Act* and the amendments to the *Smoke-Free Ontario Act*. Several Tobacco Control Area Networks were also supported in hosting regional tobacco enforcement knowledge exchange forums through PTCC's special request training process.

PTCC continued to convene a Community of Practice addressing tobacco-free policy, which encourages and supports the use of evidence in the development, implementation and enforcement of comprehensive tobacco control policies at community and organizational levels. Some examples of policy addressed by the Community of Practice include outdoor tobacco-free policy, and smoke-free policies in workplaces, multi-unit housing and post-secondary campuses. In partnership with the Propel Centre for Population Health Impact, the PTCC also completed a documentation of the indoor smoke-free space movement.[6]

PTCC Health Promotion Specialists and Media and Communications Specialist also provided consultation support to help advance local policy efforts including smoke-free multi-unit housing, 100% smoke-free grounds, and e-cigarettes.

Program Reach: In 2015/16, the PTCC delivered 43 training events on all aspects of tobacco control, which reached over 1284 clients. Training events included 21 workshops, 12 webinars and 10 special request workshops. A portion of these training events were related to protection. PTCC's training programs were attended by staff of Ontario's 36 Public Health Units, Community Health Centres, the health care sector (e.g., hospitals), non-governmental organizations and government. A total of 226 public health practitioners and researchers were actively engaged across three provincial Communities of Practice. In addition, 462 consultations were delivered by PTCC Health Promotion Specialists and Media and Communication Specialist.[i]

Public Health Units and Tobacco Control Area Networks

Under the Ontario Public Health Standards,[7] public health units (PHUs) are required to do a number of activities related to the area of protection, including: educating the public, workers, workplaces and retail establishments about the dangers of secondhand smoke; working with local workplaces and municipalities to influence and support the development of smoke-free policies; increasing public awareness through communication strategies; and implementing and enforcing the *Smoke-Free Ontario Act* and the *Electronic Cigarette Act.*

[i] Steven Savvaidis, Senior Manager, Program Training and Consultation Centre, Personal Communication, September 19, 2016.

The seven Tobacco Control Area Networks (TCANs), regional groupings of one to nine neighbouring PHUs, have a mandate to provide leadership, coordination and collaborative opportunities centered on protection (as well as other Strategy goals). PHU and TCAN staff are actively involved in the Protection and Enforcement Task Force, Communities of Practice and committees to represent the local level in the planning of protection policy and interventions. Please refer to the Interventions Section for information about local PHU initiatives.

Smoking and Health Action Foundation

In 2015/16, Smoking and Health Action Foundation (SHAF) supported developments in municipal legislation related to protection with an emphasis on policy analysis provisions to further develop tobacco control policies in the Province (e.g., multi-unit housing, waterpipe use). The online Smoke-free Laws Database, which includes the identification of leading edge bylaws and bylaws that exceed the *Smoke-Free Ontario Act*, received 70,500 visits in 2015/16. SHAF also maintained a comprehensive list of no-smoking policies implemented by all types of housing providers in Ontario.[8]

SHAF contributed to building protection capacity in 2015/16. Five workshops and 82 consultations were held on issues related to protection including smoke-free multi-unit housing, smoke-free outdoor spaces and concerns about e-cigarettes and waterpipes. As the Chair of Smoke-Free Housing Ontario—a coalition of partners (PHUs, health agencies)—SHAF maintained and regularly updated the Smoke-Free Housing Ontario website, which had 64,600 visits in 2015/16. In addition, SHAF responded to 149 Ontario-specific inquiries from the general public regarding secondhand smoke in multi-unit housing, in workplaces and other public places.

Youth Advocacy Training Institute

The Ontario Lung Association's Youth Advocacy Training Institute (YATI) provides training to youth and adults—including skill-building, resources and tools—to empower these groups to positively affect change in their communities by promoting tobacco-free and healthy lifestyles. In 2015/16, YATI training sessions included information on policy development, advocacy and creating effective health promotion campaigns, all of which could be applied to smoke-free initiatives. In total, 35 general trainings and 11 partnership trainings were conducted in 2015/16 reaching 546 youth and 606 adults.[9]

Protection Interventions

Smoke-Free Ontario Act

Much of the activity in protection is centered on the *Smoke-Free Ontario Act (SFOA)*, a key piece of legislation in the Province's protection strategy that contributes to the knowledge/awareness and compliance paths of the protection logic model.

On May 31, 2006, the smoke-free provisions of the *SFOA* came into force, prohibiting smoking[ii] in workplaces and enclosed public places such as restaurants, bars, casinos and common areas of multi-unit housing. The *SFOA* bans indoor designated smoking rooms and designated smoking areas with some exceptions.

Before the *SFOA* came into force, nine out of ten Ontarians were covered by local smoke-free restaurant and bar bylaws (91% and 87%, respectively).[10] However, more than half of these bylaws (54%) allowed for designated smoking rooms.

The *SFOA* permits smoking exceptions for residents of residential-care, psychiatric and veterans' facilities where controlled smoking rooms are established. The *SFOA* entitles home healthcare workers to request no smoking in clients' homes while providing healthcare.

In an amendment to the *SFOA,* Ontario banned smoking in vehicles with children under the age of 16 effective January 21, 2009, with a fine of $125 for each offence.

Additional regulations banning smoking on all restaurant and bar patios, within 20 metres of playgrounds and within 20 metres of publically-owned sports fields and surfaces (e.g., areas for basketball, baseball, soccer or beach volleyball, ice rinks, tennis courts, etc.) went into effect January 1, 2015.[11] The new smoking prohibitions compliment the patchwork of municipal-level patio, playground and recreation field policies across the Province. Before the new outdoor regulations came into force, two-thirds of Ontarians were covered by local smoke-free playground, sports and recreational field bylaws (67% each) and 10% of Ontarians were covered

[ii] Regulations extend to the smoking of tobacco in waterpipes.

by a complete smoke-free restaurant and bar patio local bylaw.[iii]

Further regulations banning smoking on the outdoor grounds of all hospitals and psychiatric facilities and within nine metres of entranceways to Ontario Government office buildings came into effect January 1, 2016. A provision allowing an outdoor designated smoking shelter on hospital grounds until January 1, 2018 was included in the regulations. Smoking continues to be banned 9 metres from the entranceways of long-term care facilities and independent health facilities. [12]

SFOA Enforcement

The MOHLTC's Tobacco Compliance Protocol applies a continuum of progressive enforcement actions—starting with education and progressing from warnings to increasingly more serious charges to match the nature and frequency of contraventions under the *SFOA*.[13]

The Province's 36 PHUs actively enforce the smoke-free provisions of the *SFOA* through complaint-driven inspections of enclosed workplaces and public places and outdoor public places. In 2015, enforcement staff conducted 12,716 enclosed workplace and public place inspections, 6,267 restaurant and bar inspections, 1,037 playground inspections, and 708 sports field inspections across the Province. At the time of the inspection, compliance was highest for restaurant and bar patios (96%), followed by enclosed workplace and public places (78%), sports fields (70%) and playgrounds (64%).[14]

Electronic Cigarettes Act

In May 2015, Ontario passed the *Electronic Cigarettes Act* (*ECA*) that extends the current tobacco smoking prohibitions in the *Smoke-Free Ontario Act* to e-cigarette use. This legislation is not yet proclaimed. When proclaimed, the use of an e-cigarette will be prohibited in enclosed public places, vehicles with children under the age of 16 present, enclosed workplaces and work vehicles, and on restaurant and bar patios, children's playground, sporting surfaces and outdoor hospital grounds.[15,16]

[iii] Municipalities with playground, sports and recreational field and restaurant/bar patio bylaws were identified through the Non-Smoker's Rights Association Smoke-Free Laws Database. Population estimates for the identified municipalities were obtained from Statistics Canada 2011 Census Profiles. The proportion of the Ontario population covered by a pre-existing local bylaw was calculated by dividing the total municipal population estimates by the 2011 Ontario population.

Local Policy Initiatives

Local jurisdictions have the ability to extend protection beyond provincial legislation to other settings and the use of other forms of tobacco, including:

- Beaches
- Transit shelters
- Outdoor events
- Buffer zones around doorways and windows
- Trails
- Multi-unit housing
- Waterpipes
- E-cigarettes

As of November 2016, 61 jurisdictions had strengthened smoke-free municipal bylaws beyond settings and tobacco products covered by the *SFOA* or *ECA* (Appendix, Table 5A-1 lists jurisdictions).

Regarding waterpipes, establishments are in contravention of the *SFOA* if tobacco is used in the waterpipe, otherwise use is permitted (for instance, with flavoured herbal shisha). Determining the tobacco content of the shisha being smoked in waterpipes onsite can be difficult. Through amendments to the *SFOA*, PHU enforcement staff have the power to remove a sample of the shisha from an establishment to send for laboratory testing to assess tobacco content. In a recent study conducted in Toronto, air quality levels hazardous to human health were observed in indoor waterpipe venues regardless of whether tobacco or other non-tobacco shisha was being smoked.[17]

Nineteen jurisdictions have stepped up implementation and enforcement of regulations related to indoor and outdoor waterpipe use. Settings where waterpipe use is prohibited varies by jurisdiction, including:

- Enclosed workplaces and public places (Barrie, Bradford West Gwillimbury, Chatham-Kent, Orillia, Ottawa, Peel, Peterborough)

- Nine metres from doorways to public buildings (Chatham-Kent, Englehart, Kingsville, Niagara Region, Orillia, Renfrew County, Tecumseh, Town of Lasalle)
- Municipally-owned property (Casselman, Chatham-Kent, East Zorra-Tavistock, Mississauga, Ottawa, Peterborough, Renfrew County, Town of Essex)
- Outdoor recreation fields (Chatham-Kent, East Zorra-Tavistock, Hamilton, Niagara Region, Orillia, Ottawa, Peel, Tecumseh, Town of Lasalle)
- Parks (Cassleman, Chatham-Kent, East Zorra-Tavistock, Hamilton, Kingsville, Niagara Region, Ottawa, Peterborough, Tecumseh, Town of Lasalle)
- Playgrounds (Casselman, Chatham-Kent, East Zorra-Tavistock, Hamilton, Niagara Region, Peel, Orillia, Ottawa);
- Licensed premises (Toronto)
- Licensed outdoor patios (Ottawa, Peel, Peterborough, Toronto)
- Outdoor markets (Ottawa)
- Beaches (Ottawa)
- Transit stops (Chatham-Kent, Niagara Region, Tecumseh)

All of the listed jurisdictions ban the use of waterpipes containing tobacco. However, the majority of the municipalities have further extended the waterpipe ban to include waterpipes containing any non-tobacco/nicotine substance (Barrie, Bradford West Gwillimbury, Casselman, Chatham-Kent, East Zorra-Tavistock, Kingsville, Orillia, Ottawa, Peel, Peterborough, Tecumseh, Toronto, Town of Essex, and Town of Lasalle).[18]

Other Local Interventions

Multi-Unit Housing

Some health units have focused attention on the issue of smoke-free multi-unit housing. As of November 2016, 239 multi-unit dwellings or non-profit housing corporations across 96 municipalities in Ontario had adopted or were in the process of adopting a 100% smoke-free policy.[19]

Beginning in 2015, the East TCAN began planning and implementing a young adult multi-unit housing social marketing campaign. The campaign aims to raise awareness and increase the demand for smoke-free housing amongst the young adult population in Eastern Ontario.

The campaign's website presents facts about secondhand smoke exposure in multi-unit housing, includes a petition to show support for increased smoke-free housing options, and a link to the smoke-free housing Ontario website with more information about how to take action if secondhand smoke is entering your apartment.[iv]

2015 PanAm/Parapan Am Games

In the summer of 2015, Toronto hosted over 8,000 athletes for the international sporting event Pan Am/Parapan Am Games. Toronto Public Health worked closely with the organizing committee on the successful implementation of a smoke-free policy that banned the use of cigarettes, e-cigarettes, hookahs, snuff and chewing tobacco.[v]

Post-Secondary Campus Policies

In 2015/16, Leave The Pack Behind (LTPB) worked with campuses to improve policy strength and enforcement centred on protection goals. The aim of this initiative, based on empirical evidence and past experience, is to achieve more obvious and consistent enforcement of smoking restrictions and bans through actions such as:

- Educating all students on tobacco policies
- Encouraging self- and peer-to-peer regulation
- Disseminating enforcement cards to smokers who fail to observe smoking restrictions[20]
- Establishing concrete, actionable approaches for policy enforcement by appropriate campus personnel[21]

All campuses were engaged in some aspect of these actions, with advocacy work on five campuses directed toward stronger smoking restrictions.

LTPB's 2015/16 annual environmental scan of Ontario's 44 public universities and colleges revealed that all institutions banned smoking indoors (including residences) and about three-

[iv] Andrea Kruz, Manager, Chronic Disease and Injury Prevention, Kingston, Frontenac and Lennox & Addington Public Health, Personal Communication, January 30, 2017.
[v] Suzanne Thibault, Manager, Toronto Tobacco Control Area Network, Toronto Public Health, Personal Communication, November 17, 2016.

quarters (n=32/44) restrict smoking to specific outdoor designated areas positioned at least nine metres away from a building entrance.[22] However, it appears that very few institutions formally address policy enforcement practices.

In 2015/16, LTPB continued to work with interested colleges and universities to develop, adopt and enforce progressive tobacco control policies. Humber College, Centennial College, University of Toronto (Mississauga and Scarborough) and Western University began work to enforce or enact designated smoking areas on campus. Sheridan College continued to work towards being 100% tobacco-free at all locations. Sheridan College also amended the current policy to restrict the use of e-cigarettes indoors and in undesignated areas. Niagara College also continues to explore the possibility of going tobacco-free. Currently there are no post-secondary schools in Ontario that completely ban smoking indoors and outdoors on campus.

Prevention and Cessation Interventions Contributing to Protection

Progress toward Strategy prevention and cessation goals is expected to result in fewer smokers in the Province.[23,24,25,26] Reduced smoking can result in less exposure to secondhand smoke for nonsmokers and less social exposure to smoking. The Prevention and Cessation chapters of this report detail interventions and outcomes related to these Strategy goals.

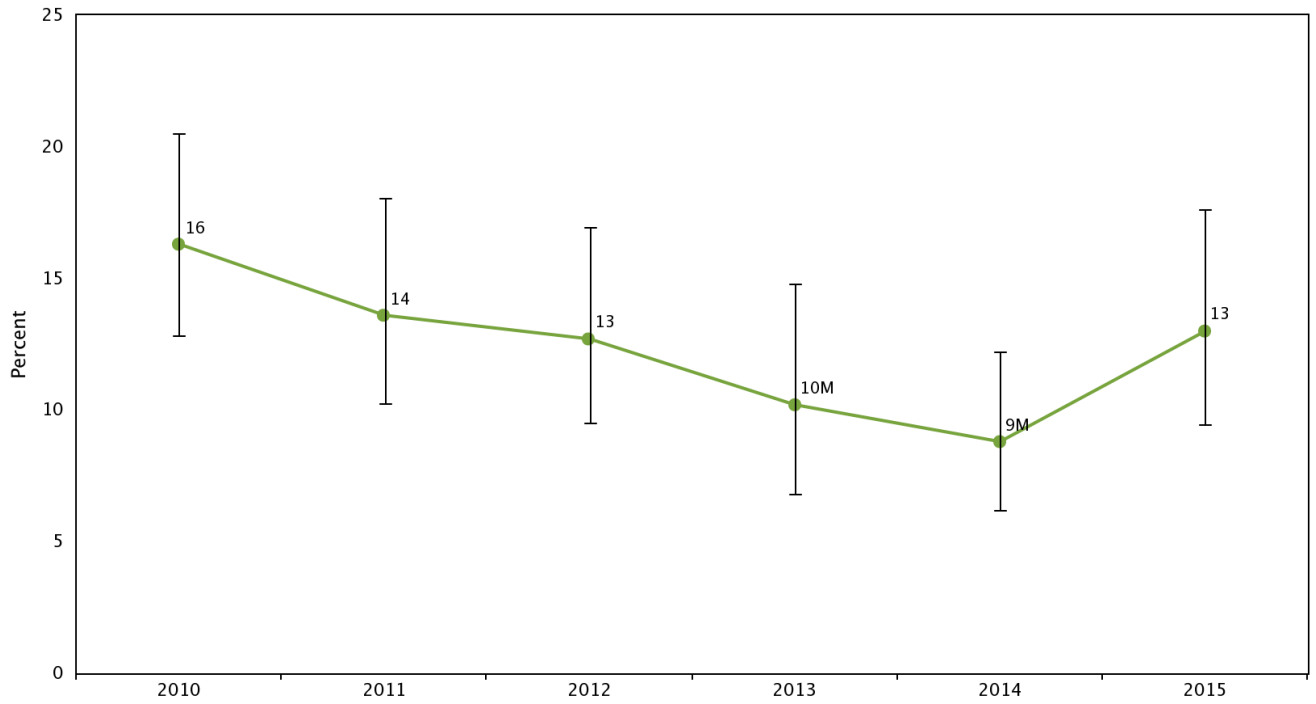
Protection Outcomes: Population Level

Workplace Exposure

The Strategy aims to eliminate indoor exposure to secondhand smoke. Smoking in enclosed workplaces has been banned since May 1, 2006.

- In 2015, 13% (or 843,200) of adult workers (aged 18 years or older) were exposed to secondhand smoke indoors at work or inside a work vehicle for five or more minutes in the past week (CAMH Monitor data), which is unchanged from 2014 (9%) and recent years (Figure 5-2).

Figure 5-2: Workplace Exposure (Past Week) Indoors or Inside a Work Vehicle, Ages 18+, Ontario, 2010 to 2015



Note: M = Interpret with caution: subject to moderate sampling variability. Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 5A-2)
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2010 –2015.

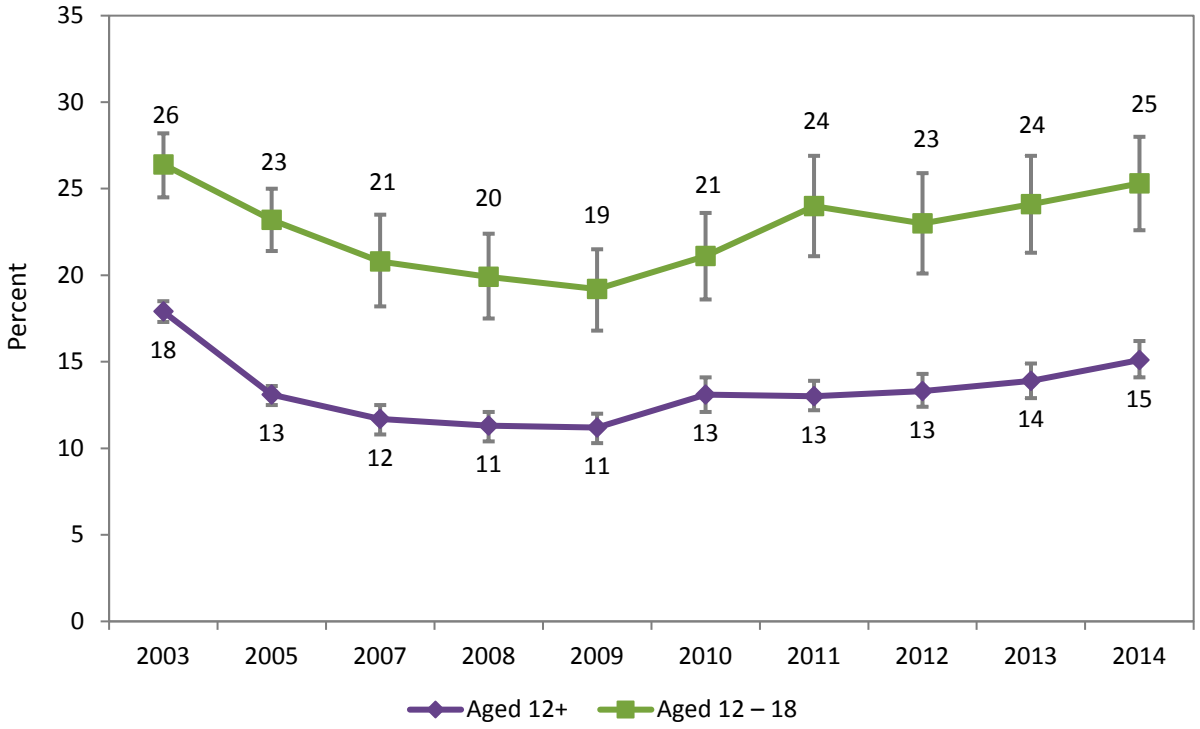
Exposure in Public Places

The Strategy aims to eliminate secondhand smoke exposure in enclosed public places and increase smoke-free regulation in outdoor public places. Smoking in enclosed public places has been banned since May 1, 2006. New *SFOA* outdoor regulations banning smoking on restaurant and bar patios, within 20 metres of publically-owned outdoor playgrounds, sports fields and surfaces came into effect January 1, 2015.

- In 2014,[vi] 15% (or 1,442,000) of Ontarians aged 12 years and over were exposed to secondhand smoke every day or almost every day in public places (e.g., restaurants, bars, shopping malls and arenas) over the past month, which is similar to the level of exposure reported in 2013 (14%). The 2014 estimate represents a slight increase compared to the level of exposure reported in 2010 (13%; Figure 5-3; CCHS data).
- Among young nonsmokers aged 12 to 18, 25% (or 237,800) were exposed to secondhand smoke in public places in 2014, similar to what was reported both in 2013 (24%) and in 2010 (21%; Figure 5-3).
- Exposure among 12 to 18 year olds was significantly higher in 2014 compared to all Ontarians aged 12 years and older (25% vs. 15%).
- In 2013/14, exposure to secondhand smoke in public places among nonsmoking Ontarians aged 12 years and over ranged across the Province from a low of 8% in Chatham-Kent Health Unit to a high of 19% in Peel Regional Health Unit (Appendix, Table 5A-4).

[vi] The 2015 Canadian Community Health Survey was unexpectedly delayed and was not available when this report was released.

Figure 5-3: Nonsmokers' Exposure to Secondhand Smoke in Public Places[a] (Every Day or Almost Every Day), by Age, Ontario, 2003 to 2014



[a] Exposure to secondhand smoke in public places, such as restaurants, bars, shopping malls, arenas, bingo halls and bowling alleys.

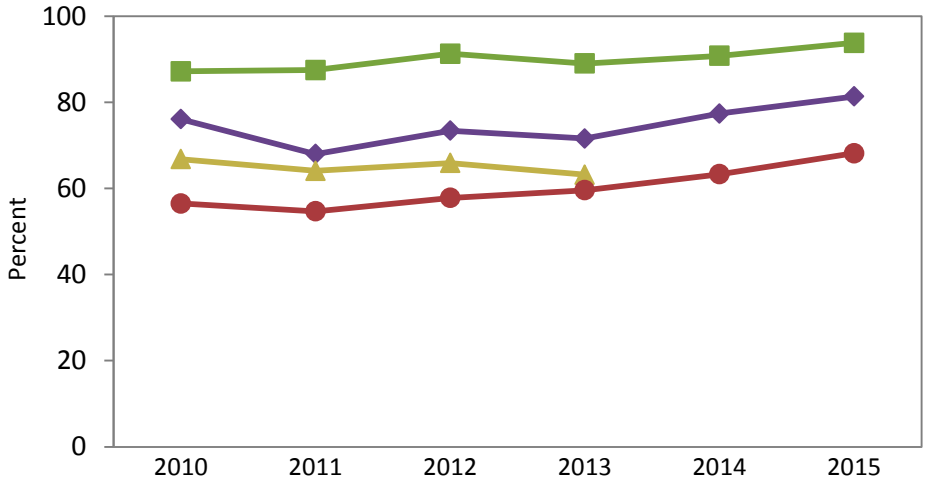
Note: Vertical lines represent 95% confidence intervals. X-axis scale (Year) not uniform—interpret with caution. Full data table for this graph provided in the Appendix (Table 5A-3)

Source: Canadian Community Health Survey 2003, 2005, 2007-2014.

Public Opinion about Smoking in Outdoor Public Places

- Among the general population, support for smoking bans in public parks and on beaches, at outdoor recreational facilities and outdoor playgrounds was unchanged from 2014 estimates; however support was significantly higher in 2015 compared to five years before in (2011)(Figure 5-4; CAMH Monitor data).
- Similar to 2014, fewer current smokers agreed in 2015 that smoking should be banned in public parks and on beaches (37%) or near outdoor recreation facilities (such as sports fields, stadiums and entrances to arenas, 60%) compared to former smokers (64% and 82%, respectively) and never-smokers (77% and 86%, respectively; Figure 5-5).
- Support for banning smoking at outdoor children's playgrounds and wading pools was high at 94% among all respondents (Figure 5-4). Similar levels of support were reported among never smokers (95%), former smokers (95%) and current smokers in 2015 (84%; Figure 5-5).

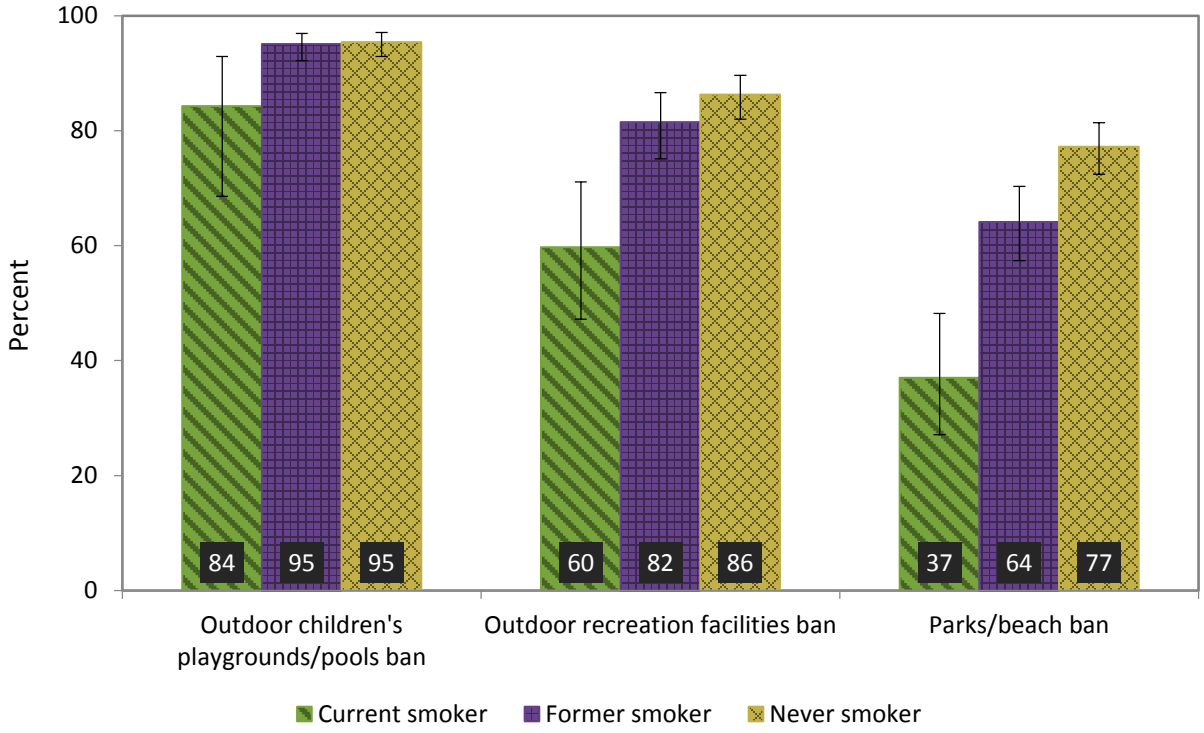
Figure 5-4: Agreement that Smoking Should be Banned in Playgrounds, Recreation Facilities, Outdoor Special Events and Parks, Ages 18+, Ontario, 2010 to 2015



	2010	2011	2012	2013	2014	2015
Outdoor children's playgrounds/pools ban	87	88	91	89	91	94
Outdoor recreation facilities ban	76	68	73	72	77	81
Outdoor special events ban	67	64	66	63		
Parks/beach ban	57	55	58	60	63	68

Note: Public opinions related to smoking bans at outdoor special events were not collected in 2014 and 2015. Full data table for this graph provided in the Appendix (Table 5A-5)
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2010-2015.

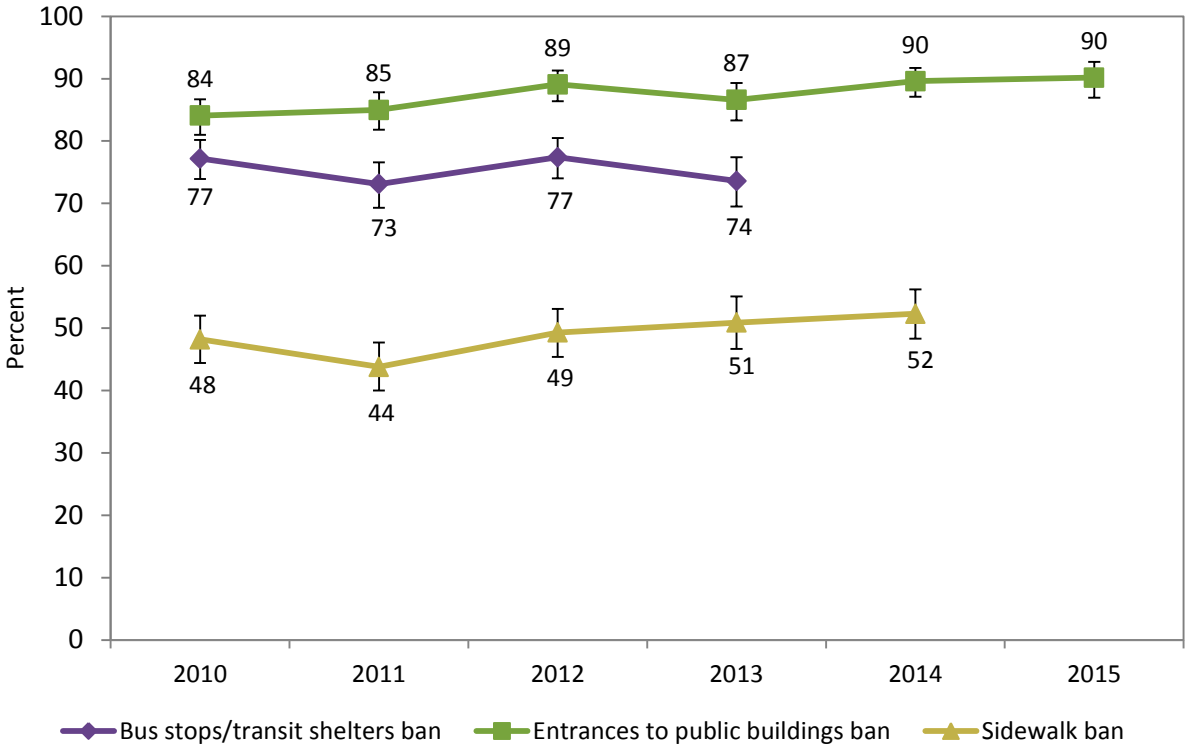
Figure 5-5: Agreement that Smoking Should be Banned in Playgrounds, Recreation Facilities and Parks, by Smoking Status, Ages 18+, Ontario, 2015



Note: Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 5A-6)
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2015.

- In 2015, public support for smoking bans at entrances to public buildings was similar to 2014 estimates, yet the 2015 estimates were significantly higher compared to 2011 (90% in 2015 vs. 85% in 2011). In contrast, public support for smoking bans on public sidewalks and bus stops/transit shelters has remained unchanged since 2011 (sidewalks: 52% in 2015 vs. 44% in 2011; bus shelters 74% in 2013 vs. 73% in 2011; Figure 5-6; CAMH Monitor data).
- In 2015, fewer current smokers agreed that smoking should be banned at entrances to public buildings (74%) compared to former smokers (91%) or never-smokers (94%; data not shown).

Figure 5-6: Agreement that Smoking should be Banned on Sidewalks, Entrances and Bus Stops, Ages 18+, Ontario, 2010 to 2015



Note: Vertical lines represent 95% confidence intervals; Public opinions related to smoking bans at bus stops and transit shelters were not collected in 2014 and 2015; Public opinions related to smoking bans on sidewalks were not collected in 2015. Full data table for this graph provided in the Appendix (Table 5A-7)
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2010-2015.

Public Opinion about Smoking on Restaurant and Bar Patios

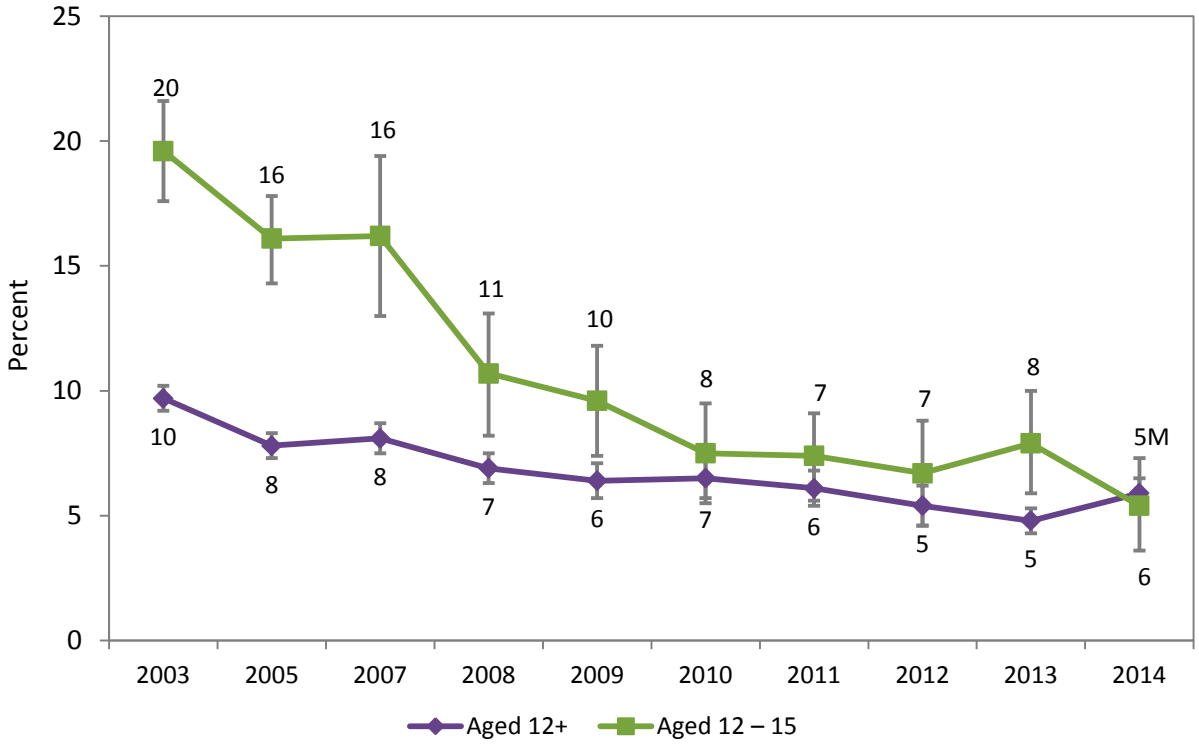
- In 2015, 72% of Ontario adults (including 81% of never-smokers) agreed that smoking should be banned on outdoor patios of restaurants and bars. This is unchanged from 2014 levels (67%), but significantly higher than in 2011 (57%; CAMH Monitor data, data not shown). Ontario's regulation banning smoking on patios came into effect in 2015.

Exposure in Vehicles

The Strategy aims to reduce secondhand smoke exposure in vehicles, with particular emphasis on protecting children and youth. Since January 2009, smoking in vehicles with children under the age of 16 has been banned.

- Among nonsmoking Ontarians aged 12 years and over, exposure to secondhand smoke every day or almost every day in vehicles over the past month was significantly higher in 2014 (6% or 561,700 Ontarians) than in 2013 (5%; Figure 5-7; CCHS data).
- In 2014, exposure to secondhand smoke in vehicles among young nonsmokers aged 12 to 15 was 5% (or 32,600 Ontarians), unchanged from 2013 (8%) and five years earlier in 2010 (8%; Figure 5-7).
- Exposure among youth 12 to 15 years old was similar to all Ontarians aged 12 years and older in 2014 (5% vs. 6%).
- In 2013/14, exposure to secondhand smoke in private vehicles among nonsmoking Ontarians aged 12 years and over ranged across the Province from a low of 4% in Elgin-St. Thomas Health Unit to a high of 14% in Huron County Health Unit (Appendix, Table 5A-9)

Figure 5-7: Nonsmokers' Exposure to Secondhand Smoke in Vehicles (Every Day or Almost Every Day), by Age, Ontario, 2003 to 2014



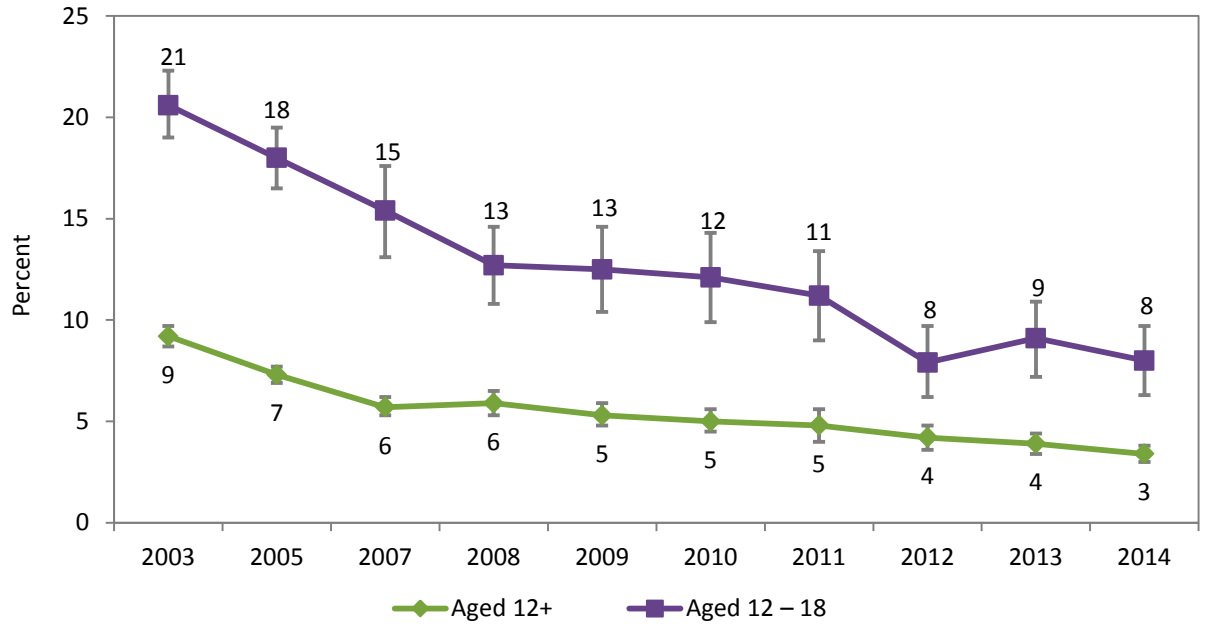
Note: M = Interpret with caution: subject to moderate sampling variability. Vertical lines represent 95% confidence intervals. X-axis scale (Year) not uniform—interpret with caution. Full data table for this graph provided in the Appendix (Table 5A-8)
Source: Canadian Community Health Survey 2003, 2005, 2007-2014.

Household Exposure

One general objective of tobacco control is to increase the adoption of voluntary policies to make homes smoke-free.

- In 2014, 3% (or 322,500) of nonsmoking Ontarians aged 12 years and older were exposed to secondhand smoke in their home every day or almost every day, which is unchanged from 2013 (4%). However this represents a significant decrease in level of exposure compared to 2010 (5%; Figure 5-8; CCHS data).
- Among 12 to 18 year old nonsmokers, 8% (or 86,900 Ontarians) were exposed to secondhand smoke in their home in 2014, which is more than double the exposure reported by all respondents aged 12 and over (3%). Respondents aged 12 to 18 had a similar level of exposure in 2013 (9%), but the 2014 level of exposure was significantly lower compared to levels reported in 2010 (12%).
- In 2013/14, exposure to secondhand smoke in the home among nonsmoking Ontarians aged 12 years and over ranged from a low of 2% in Halton Regional Health Department to a high of 9% in Huron County Health Unit (Appendix, Table 5A-11).

Figure 5-8: Nonsmokers' Exposure to Secondhand Smoke at Home (Every Day or Almost Every Day), by Age, Ontario, 2003 to 2014

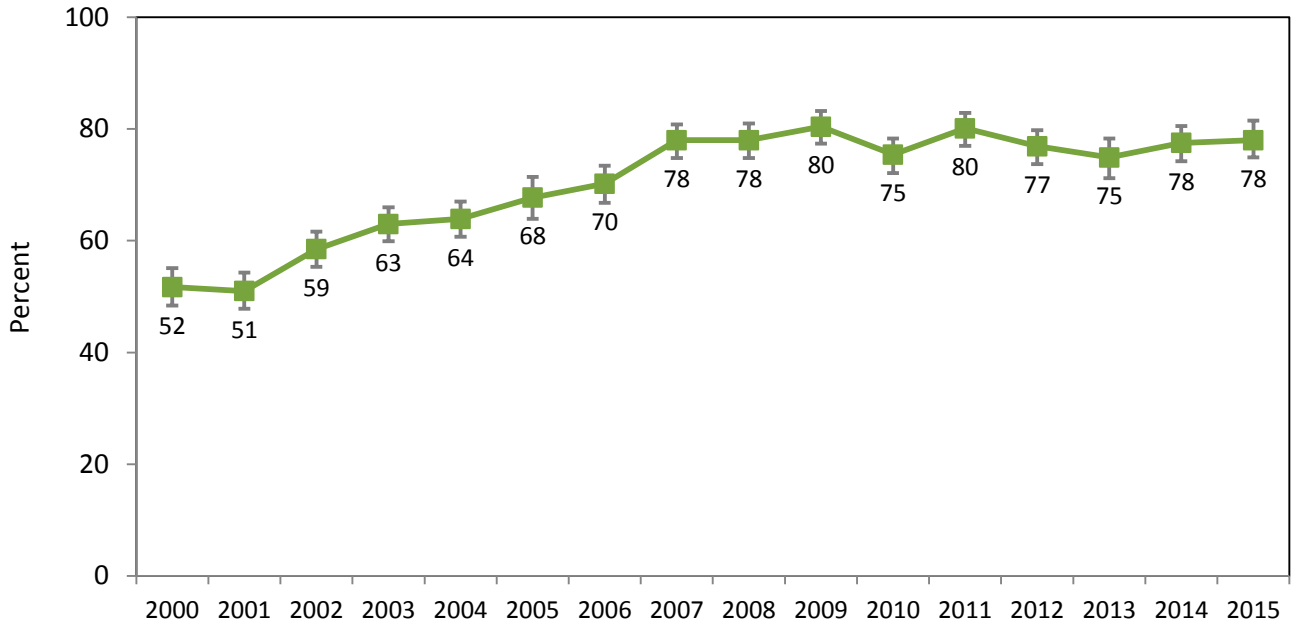


Note: Vertical lines represent 95% confidence intervals. X-axis scale (Year) not uniform—interpret with caution. Full data table for this graph provided in the Appendix (Table 5A-10)
Source: Canadian Community Heath Survey 2003, 2005, 2007-2014.

Public Opinion about Smoking in Homes with Children

- In 2015, three-quarters of respondents (78%) agreed that there should be a law that parents cannot smoke inside their home if children are living there. This rate has held steady since 2007 and is significantly higher than the level of agreement reported in 2006 (70%) and earlier (Figure 5-9; CAMH Monitor data).

Figure 5-9: Agreement That There Should Be a Law that Parents Cannot Smoke Inside their Home if Children are Living There, Ages 18+, Ontario, 2000 to 2015



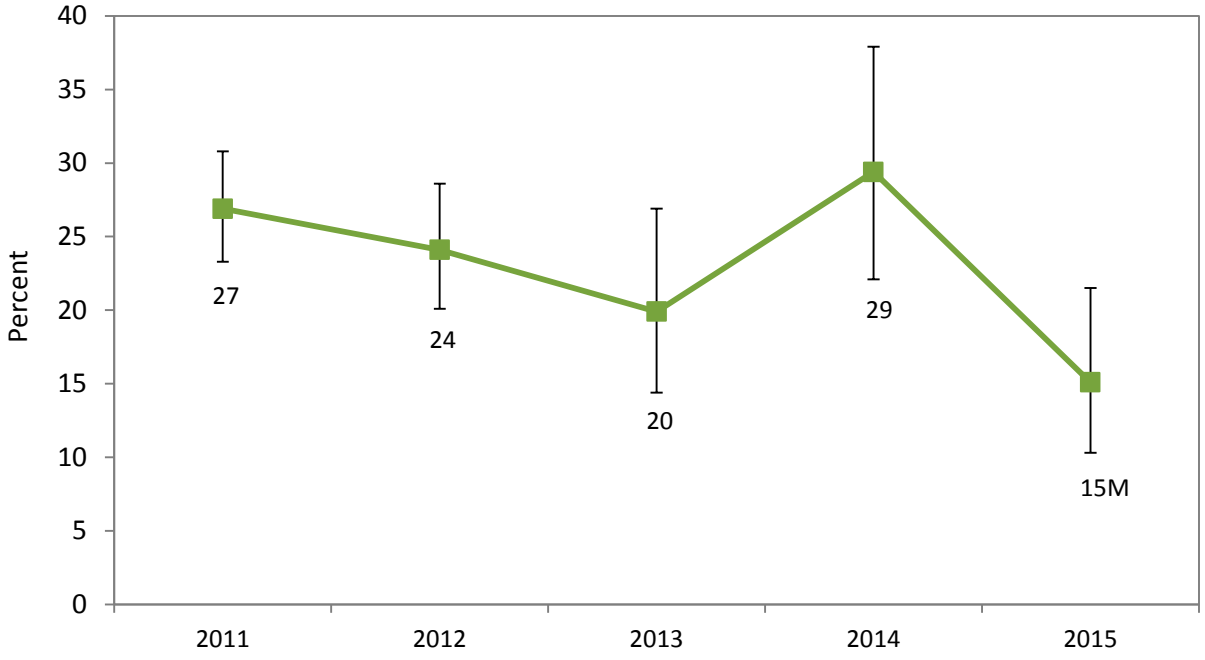
Note: Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 5A-12)
Source: Centre for Addiction and Mental Health Monitor 2000–2009 (half year sample); 2010-2015 (full year sample)

Exposure in Multi-Unit Housing

One general objective of tobacco control is to increase smoke-free regulation in multi-unit housing.

- In 2015, 15% of Ontario adults living in multi-unit dwellings (or 287,100) were exposed to secondhand smoke drifting between units at least once in the past month. In 2014, 29% of adults living in multi-unit dwellings (or 689,500) were exposed to secondhand smoke drifting between units at least once a month, similar to the proportion three years before (27% in 2011). The 2015 estimate is much lower (15%), but of questionable validity due to moderate sampling variability (Figure 5-10; CAMH Monitor data).

Figure 5-10: Exposure to Secondhand Smoke in Multi-Unit Dwellings (Past Month), 18+, Ontario, 2011 to 2015



Note: M = Interpret with caution: subject to moderate sampling variability. Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 5A-13)
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2011-2015

Public Opinion about Smoking in Multi-Unit Housing

- Four out of five adults in Ontario (83%) believed that smoking should not be allowed inside multi-unit dwellings including apartment buildings, rooming houses and retirement homes in 2015. The level of support has increased significantly since 2006 (83% vs. 73%, respectively; CAMH Monitor data, data not shown).

Risk Perception about Secondhand and Thirdhand Smoke

In 2015, 88% of adults in Ontario believed that exposure to secondhand smoke posed a moderate or great risk of physical or other harm, which is unchanged from 2014 (88%). Two-thirds of adults in Ontario (64%) believed thirdhand smoke posed a moderate or great risk of physical or other harm, representing a significant increase from 2014 (55%; CAMH Monitor data, data not shown).

MPOWER Comparison with Ontario: Protection

Three MPOWER indicators[27] relate to Protection: Monitoring, Smoke-Free Policies and Smoke-Free Policy Enforcement (Table 5-1).

Table 5-1: Assessing Protection: MPOWER Indicators Applied to Ontario

MPOWER Indicator	Highest MPOWER Requirement	Situation in Ontario
Monitoring	Recent, representative and periodic data for both adults and youth	Meets the requirement for the highest score
Smoke-free policies	All indoor public places completely smoke-free	Meets the requirement for the highest score
Smoke-free policy compliance	Complete compliance by experts' assessments	Meets the requirement for the highest score

Scientific Advisory Committee: Overview of Protection Goals and Recommendations

The Scientific Advisory Committee (SAC)[vii] goal for Protection is: "To protect Ontarians from all physical and social exposure to tobacco products." The 2010 SAC report includes several recommendations to achieve this protection goal including action on smoke-free policies, media and social marketing, social action, smoke-free compliance and enforcement, learning system and professional development (summary below). Progress has been made in many of these areas, but work remains to address several shortcomings (e.g., multi-unit housing) and to increase intensity of interventions (e.g., media and social marketing interventions and professional development activities that facilitate the protection of nonsmokers, especially children and pregnant women).

[vii] Upon request of the Ontario Ministry of Health Promotion and Sport, a committee of lead tobacco control researchers in Ontario was convened to provide scientific and technical advice and recommendations to the Government of Ontario to inform the comprehensive tobacco control strategy renewal for 2010-2015.

2010 Scientific Advisory Committee Recommendations

Smoke-free Policies

SAC Recommendation 6.1: Amend the *Smoke-Free Ontario Act* and Regulation to eliminate smoking of tobacco products and combustible water-pipe preparations in priority settings including: [a] Unenclosed restaurant and bar patios (including nine metres from the perimeter of the patio). [b] Not-for-profit MUDs. [c] Selected outdoor public places such as doorways to public and commercial buildings (within nine metres), transit shelters, provincially regulated parks and playgrounds, outdoor sports facilities, beaches, sidewalks and public events such as parades and outdoor entertainment venues. [d] Hotels, motels, inns and bed and breakfasts. [e] Vehicles that carry nonsmokers at any time.

Current Status: Comprehensive provincial legislation on protection exists; including new regulations that prohibit smoking on bar and restaurant patios, playgrounds, public sports fields and surfaces and outdoor grounds of hospitals. New provincial legislation will also prohibit the use of e-cigarettes in certain places where the smoking of tobacco is prohibited.

Other recommended priority settings not addressed at provincial level, including 9 metres perimeter from patios. Various smoke-free policies implemented at the local and regional level.

No action on protection from combustible waterpipe preparations.

Media and Social Marketing

SAC Recommendation 6.2: As part of a comprehensive tobacco control program, implement media and social marketing strategies that increase public awareness and knowledge of the health effects of exposure to secondhand smoke and social exposure to tobacco use and that influence social norms supportive of tobacco-free living.

Current Status: No provincial action.

Social Action

SAC Recommendation 6.3: Develop a province-wide program to enable implementation of grassroots local action initiatives (e.g., partnerships, community mobilization and innovative interventions) that address social norm change and protection from exposure to tobacco smoke.

Current Status: No province-wide program specific to protection. Various programs at the local and regional level.

Smoke-free Compliance and Enforcement

SAC Recommendation 6.4: Continue to promote, enforce and monitor compliance with the *Smoke-Free Ontario Act*. Consider enforcement approaches to maximize compliance and enforcement activities by setting (e.g., schools, bars, etc.) and additional policy promotion.

Current Status: Comprehensive legislation on protection promoted and enforced.

In 2015, enforcement was improved to address indoor use of tobacco in waterpipe bars and restaurants, to expand the seizure authority of *SFOA* inspectors and to update rights of entry for inspectors.

Learning System

SAC Recommendation 6.5: Continue to support research, surveillance, evaluation and monitoring of provincial and local initiatives, program and policy experiments related to protection from exposure to tobacco products and social norm change. Enhance the capacity to use findings to foster learning and innovation at the provincial, regional and local levels.

Current Status: Provincial monitoring conducted by OTRU.

Regional projects run by TCANs and PHUs, with OTRU providing knowledge and evaluation support.

Professional Development

SAC Recommendation 6.6: Develop, evaluate and implement guidelines, training programs and incentives to promote brief interventions by health professionals with their patients that aim to protect nonsmokers, especially children and pregnant women, from secondhand smoke.

Current Status: TEACH includes a training module on interventions to help women, including pregnant and post-partum, to quit smoking. This content includes information on protecting pregnant women and children from secondhand smoke. Otherwise, there has been no action to promote brief interventions designed to protect nonsmokers from secondhand smoke.

Chapter Summary

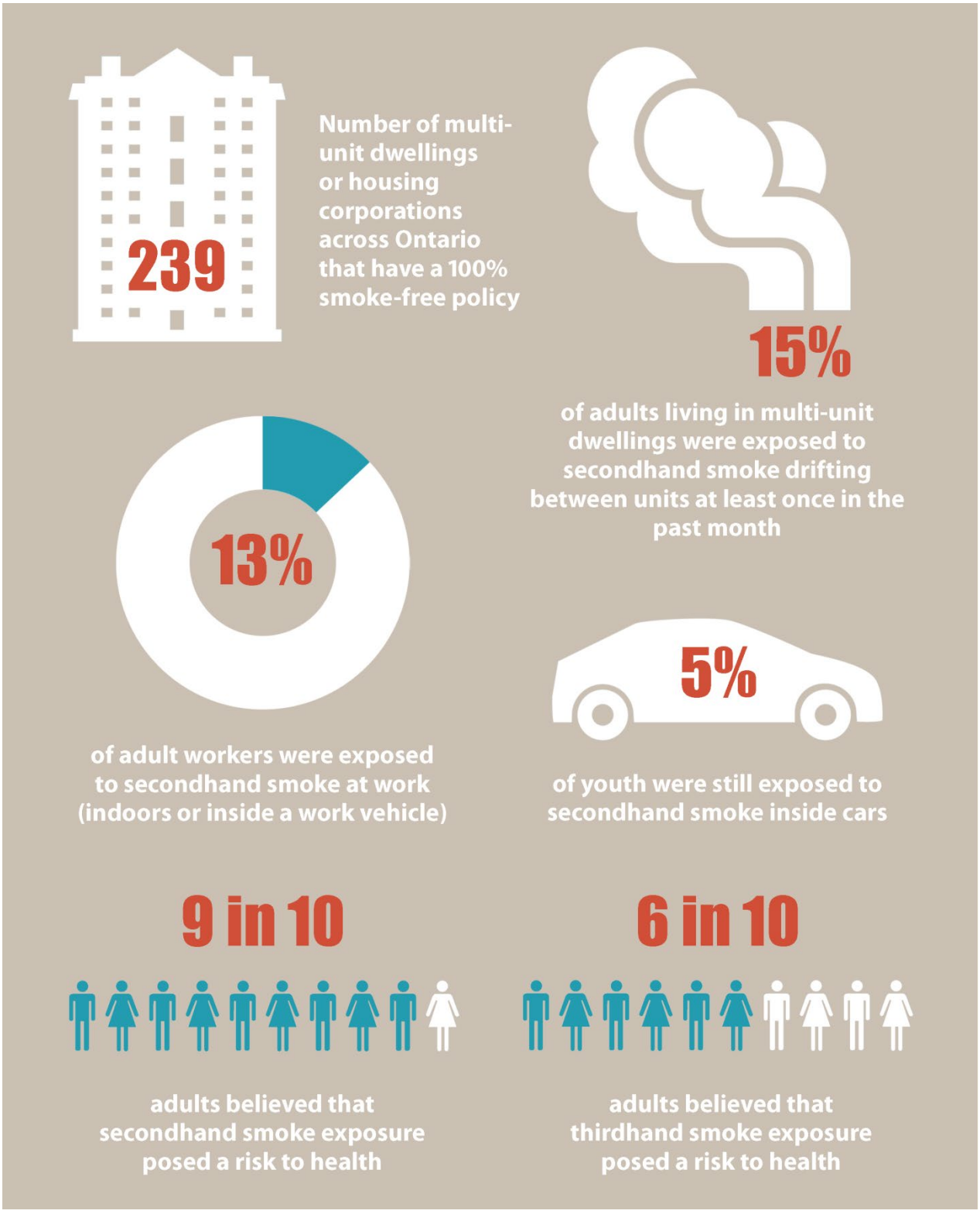
Ontario meets all of the requirements for the highest level of protection included in MPOWER, in that smoking tobacco is prohibited in all indoor public places and compliance is high. Yet, Ontarians continue to be exposed to secondhand smoke in a variety of settings. Fifteen percent of the population continues to be exposed in public places; 13% of workers are exposed to secondhand smoke indoors at work or inside a workplace vehicle; 8% of nonsmokers aged 12 to 18 are exposed in their home and 5% of nonsmokers aged 12 to 15 are exposed in vehicles.[viii]

The US Surgeon General's review of scientific evidence concluded that there is no risk-free level of exposure to secondhand smoke. In addition to the adverse health effects of secondhand smoke, exposure to other people smoking results in social exposure to tobacco use with ensuing normalization of tobacco use, triggering of initiation in youth and young adults through processes of social influence and modeling and encouragement of the continued use of tobacco among smokers and relapse among quitters.[28,29]

The 2010 Scientific Advisory Committee recommended possible next steps to offer further protection for Ontarians including eliminating smoking and the use of combustible waterpipe in priority settings, specifically unenclosed bar and restaurant patios, not-for-profit multi-unit housing and selected outdoor public settings (e.g., beaches, playgrounds, outdoor sports facilities, parks, transit shelters, doorways, etc.). Recent regulatory changes implemented by the Government of Ontario have closed many of the gaps in regulating outdoor smoking, while a growing number of municipalities have closed other gaps in outdoor smoking and waterpipe use in regulated areas. Further policy implementation is needed at the provincial level to protect all Ontarians from the remaining exposures to secondhand smoke.

[viii] The SFOA prohibits smoking or having lighted tobacco in a motor vehicle if children under the age of 16 are inside the vehicle.

Visual Summary of Key Protection Indicators



Appendix: Data Tables

Table 5A-1: NSRA's Smoke-Free Laws Database: Leading Edge Bylaws, Ontario (November 2016)

Name of Jurisdiction	Legislation and Bylaw Name	Date Passed (dd/mm/yyyy)	Date Last Amended
Arnprior	Bylaw No. 6076-12, Regulation of Smoking on Municipally-Owned Property & Public Places in the Town of Arnprior	09/04/2012	
Barrie	By-law 2013-143, A By-law of The Corporation of the City of Barrie to prohibit the use of waterpipes in enclosed public places and in enclosed workplaces.	26/08/2013	
Barrie	Bylaw No. 2009-086, A Bylaw to Prohibit Smoking Outdoors on City Owned Property Bylaw No. 2011-106, An amendment to Bylaw No. 2009-086, A Bylaw to Prohibit Smoking Outdoors on City Owned Property	11/05/2009	15/08/2011
Bradford West Gwillimbury	By-law 2013-87 - A By-law to Prohibit the Use of Waterpipes in Enclosed Public Places and in Enclosed Workplaces	03/09/2013	
Brighton	By-Law No. 007-2014, Being a By-Law to regulate and prohibit all tobacco use on municipally owned parkland property in the Municipality of Brighton	03/03/2014	
Brockville	By-law Number 093-2003, Being a By-law to Regulate Smoking in Public Places	22/07/2003	28/04/2015
Casselman	Smoking By-law within Municipal Properties 2016-030	10/05/2016	
Chatham-Kent	Bylaw 137-2014, being a by-law to regulate smoking of tobacco or tobacco-like products on lands within the Municipality of Chatham-Kent ("Smoke-Free Chatham-Kent By-law")	11/08/2014	
Cobalt	Bylaw No. 2012-003, Being a Bylaw to Regulate Smoking in the Town of Cobalt: Smoking on Municipal Property; and Smoking in Workplace Entrances and Exits; and the Sale of Tobacco Products through Licensing Requirements Also known as Bylaw No. 2012-003, Smoke-free and Tobacco Control Bylaw	10/01/2012	
Cobourg	By-law No.019-2015, a By-law to Prohibit Smoking and the Use of Tobacco Products in Public Places in the Town of Cobourg	23/02/2015	16/04/2015
Cochrane	Bylaw No. 989-2013, Being a bylaw to regulate smoking on Tim Horton's Event Centre property within the Town of Cochrane	10/12/2013	
Cramahe	By-law No. 2014-06, Being a By-law to prohibit smoking and the use of all tobacco products within Municipal Playgrounds or nine (9) meters of any entrance ways surrounding Municipal Buildings.	04/03/2014	
East Gwillimbury	By-Law 2012-029, Being a by-law to prohibit smoking and holding of lit tobacco products at all town playgrounds, sports fields, splash pads and other designated spaces	19/03/2012	
East Zorra-Tavistock, Township of	By-Law #2015-36, Being a By-Law to prohibit smoking at any township facility and to repeal By-law #2012-15	16/09/2015	
Elliot Lake	Bylaw No. 03-4, A Bylaw to Regulate Smoking in Public Places and Workplaces	11/05/2009	

Name of Jurisdiction	Legislation and Bylaw Name	Date Passed (dd/mm/yyyy)	Date Last Amended
Englehart	Bylaw No. 2012-06, Smoke-Free and Tobacco Control By-Law	23/04/2012	
Essa, Township of	Bylaw No. 2011-62, A Bylaw of the Corporation of the Town of Essa to prohibit smoking outdoors on Township owned property	19/10/2011	
Essex, Town of	By-Law Number 1228, being a by-law to prohibit smoking on any property owned or leased by the Town of Essex	06/10/2014	
Georgina	Bylaw No. 2012-0061 (Reg-1), Being a By-law to prohibit smoking and use of tobacco products at all designated Town of Georgina outdoor areas	25/06/2012	
Gravenhurst	Smoke Free Outdoor Spaces By-law 2012-149, Being a By-Law to prohibit smoking outdoors on property owned by the Town of Gravenhurst	18/12/2012	
Hamilton	By-law No. 11-080, To Prohibit Smoking within City Parks and Recreation Properties	09/03/2011	
Huron County	Bylaw No. 21, 2003, A Bylaw of the Corporation of the County of Huron to Regulate Smoking in Public Places and Workplaces in Huron County and to Repeal Bylaw No. 9, 2003.	04/09/2003	
Huron Shores	Bylaw No. 04-06, Being a Bylaw to Regulate Smoking in Public Places and Workplaces	11/02/2004	
Innisfil	By-Law 111-13, A By-Law of The Corporation of the Town of Innisfil to Prohibit Smoking and Use of Tobacco Products at all designated Town of Innisfil Outdoor Sports and Recreational Spaces.	16/10/2013	
Kingston	Bylaw No. 2002-231, A Bylaw to Regulate Smoking in Public Places and Workplaces in the City of Kingston - as amended by Bylaw No. 2004-336 (Consolidated) By-Law No. 2012-150, A By-Law to Amend By-Law No. 2002-231, "A By-Law to Regulate Smoking in Public Places and Workplaces in the City of Kingston as Amended"	22/10/2002	06/11/2012
Kingsville, Town of	Bylaw 96-2016, Being a Bylaw to Prohibit Smoking in Public Places Within the Town of Kingsville	11/10/2016	
Kirkland Lake	Bylaw 13-072, Being a Bylaw to Prohibit Smoking in Children's Playgrounds and on Joe Mavrinac Community Complex Property Within Town of Kirkland Lake	13/08/2013	
Lasalle, Town of	By-Law Number 7775, Being a By-Law to Prohibit Smoking within Town of Lasalle Owned Parks, Facilities, Playgrounds and Sports Fields	14/07/2015	
Mattawa	Bylaw No. 08-25, Smoke-free Hospital Bylaw Bylaw No. 09-20, Being a Bylaw to amend Bylaw No. 08-25 By-Law No. 13-22, Being a By-Law to Regulate Smoking in Public Places and Workplaces Smoke Free Hospital By-Law	10/11/2008	09/12/2013
Mississauga	The Corporation of The City of Mississauga Smoking By-Law 94-14 A bylaw to prohibit smoking tobacco-based products (including waterpipe) anywhere on Mississsauga Celebration Square. Amended by By-Law 180-15.	23/04/2014	24/07/2015
Napanee, Greater	By-Law No. 03-05, Being a By-law to Regulate Smoking in Public Places and Workplaces in the Town of Greater Napanee	24/02/2003	
Newmarket	Bylaw 2011-73, A Bylaw to prohibit smoking of tobacco products at all town playgrounds, sports and playing fields and other outdoor youth	28/11/2011	

Name of Jurisdiction	Legislation and Bylaw Name	Date Passed (dd/mm/yyyy)	Date Last Amended
	related spaces.		
Newmarket	By-Law Number 2009-24, A bylaw to prohibit smoking in Sunnyhill Park	30/03/2009	
Niagara Falls	A Consolidated Bylaw Being By-law No. 2011 - 51 as amended by: By-law No. 2011 - 152 (The Anti-Smoking Bylaw)	18/04/2011	
Niagara Region	By-law No. 112-2013, A regional by-law to protect children and vulnerable persons from exposure to outdoor second-hand smoke	13/10/2013	
North Bay	Bylaw No. 2012-97, A By-Law to Regulate Smoking in Public Places and Workplaces in the Corporation of the City of North Bay (and to Repeal By-Law No. 2003-05) Bylaw 2012-232, A By-Law to Amend By-Law No. 2102-97 (Schedules "A" and "D").	19/03/2012	02/07/2014
Orangeville	Bylaw No. 36-2012, A by-law to regulate and prohibit smoking at all municipally owned/operated public places (Smoke-Free Municipal Public Spaces Bylaw)	07/05/2012	
Orillia	Chapter 953, Smoking Regulation, Public Places and Workplaces Latest amending bylaw was Bylaw 2013-85.	17/12/2001	10/06/2013
Ottawa	Bylaw No. 2004-276, A by-law of the City of Ottawa to regulate and to promote responsible enjoyment and use of parks and facilities (Parks and Facilities Bylaw) Bylaw No. 2006-6, A Bylaw of the City of Ottawa to amend Bylaw No. 2004-276 respecting smoking in the vicinity of a City facility Bylaw No. 2012-86, A bylaw of the City of Ottawa to amend Bylaw No. 2004-276 to prohibit smoking in city parks and facilities	23/06/2004	27/06/2012
Ottawa	Bylaw No. 2012-47, A bylaw of the City of Ottawa to amend Bylaw No. 2008-449 to create smoke-free market stands in the ByWard Market	01/03/2012	
Ottawa	Waterpipes in Public Places and Workplaces Bylaw, a Bylaw to Amend Bylaw No. 2012-46, A bylaw of the City of Ottawa to amend Bylaw No. 2008-448 to create smoke-free market stands in the Parkdale Market	01/03/2012	31/08/2016
Ottawa	Water Pipes in Public Places and Workplaces Bylaw, A Bylaw to Amend Bylaw No. 2012-85, A bylaw of the City of Ottawa to amend Bylaw No. 2003-446 to prohibit smoking on outdoor patio encroachments and at café seating. Bylaw No. 2003-446, A by-law of the City of Ottawa to regulate encroachments on City highways.	02/04/2012	31/08/2016
Ottawa	The Water Pipes in Public Places and Workplaces Bylaw	31/08/2016	
Ottawa	Bylaw 2007-268, A bylaw of the City of Ottawa respecting public transit (Transit Bylaw)	13/06/2013	
Parry Sound	Bylaw No. 2009-5389, Being a bylaw to regulate smoking at the West Parry Sound Health Centre	01/10/2009	
Parry Sound	Bylaw No. 2012-6087, A By-law to prohibit smoking within nine (9) metres from any entrance or exit of a building owned or leased by the Town of Parry Sound and in or within 9 metres of any municipal outdoor public place. To repeal Bylaw 2011-5578.	20/03/2012	
Peel Region	Bylaw Number 30-2016 – A bylaw to regulate waterpipe smoking in the Regional Municipality of Peel	28/04/2016	

Name of Jurisdiction	Legislation and Bylaw Name	Date Passed (dd/mm/yyyy)	Date Last Amended
Petawawa	By-law 835/13 - Being a by-law to regulate and prohibit smoking on municipally owned property in the Town of Petawawa.	06/05/2013	
Peterborough	By-law Number 12-169, Being a by-law to prohibit the use of water pipes in enclosed public places and in certain other places in the City of Peterborough Also known as the "Water Pipe By-law".	10/12/2012	
Peterborough	By-Law Number 16-021, Being a By-Law to repeal By-Law 11-074 (as amended by 13-002) and By-Law 13-002 of the City of Peterborough and enact City of Peterborough Smoking By-Law Number 16-021	22/02/2016	
Peterborough, County of	Bylaw 2009-50, A By-law Respecting Smoking in Certain Public Places under the Jurisdiction of The County of Peterborough	03/06/2009	
Prince Edward County	Bylaw 2818-2011, Being a bylaw to prohibit smoking and tobacco use within 25 m surrounding playground structures, sport playing fields, park facilities, tennis courts, outdoor rinks, youth park, skate parks, and within 9 m of recreation facilities owned by the Corporation of the County of Prince Edward	08/03/2011	
Renfrew County	Bylaw No. 84-09, A Bylaw to Prohibit Smoking on the Property of Bonnechere Manor & Miramichi Lodge by Residents, Staff and the General Public.	24/06/2009	
Renfrew County	Bylaw 57-16, A Bylaw to Amend Bylaw 59-02 Corporate Policies and Procedures for the County of Renfrew to Approve a Smoking Policy on Designated County Properties (2016)	28/04/2016	
Sault Ste. Marie	Bylaw 2003-7, A by-law to regulate smoking in public places and city buildings in the City of Sault Ste. Marie (Consolidated as of February 21, 2012)	13/01/2003	21/02/2012
Scugog, Township of	The Corporation of the Township of Scugog By-Law Number 31-14 being a By-Law to regulate smoking in outdoor public places	02/06/2014	
Severn, Township of	By-law No. 2013-68 Being a By-law to prohibit smoking of tobacco in areas within the Township of Severn	05/09/2013	
Sioux Lookout	Bylaw No. 11-03, Smoke-Free Workplaces Bylaw	19/03/2003	
Smiths Falls	By-law No. 8482-12, A by-law to regulate smoking in public places	16/04/2012	
St. Thomas	Bylaw No. 111-2008, a Bylaw for the use, protection and regulation of Public Parks and Recreation Areas in the City of St. Thomas (Parks and Recreation Area Bylaw) Amended by Bylaw No. 163-2009, being a bylaw to provide for the use, protection and regulation of Public Parks and Recreation Areas in the City of St. Thomas	21/07/2008	02/11/2009
Stratford	Bylaw No. 174-2003, Being a By-law to regulate smoking in public places and work places in the City of Stratford and to repeal By-law 62-93 as amended Bylaw No. 105-2013, Being a By-law to amend Smoking in Public Places By-law 174-2003 as amended, to prohibit smoking outdoors in playground and recreation amenities, in municipal parks, at entrances and exits to municipal buildings, bus shelters and on hospital property.	22/09/2003	23/09/2013
Sudbury	By-law 2013-54 to Regulate Parks under the Jurisdiction of the City of Greater Sudbury	12/02/2013	

Name of Jurisdiction	Legislation and Bylaw Name	Date Passed (dd/mm/yyyy)	Date Last Amended
Tecumseh	By-law Number 2014-60, Being a bylaw to prohibit Smoking and the Use of Smokeless Tobacco in all public parks, sports fields and outdoor recreation facilities, and within nine (9) metres of a transit stop or any entrance of any building or structure under the control, supervision, ownership and/or operation of The Corporation of the Town of Tecumseh (aka The Smoke-free Outdoor Spaces By-law)	08/07/2014	
Thunder Bay	Bylaw No. 052-2010, A By-law to repeal the City's prior Smoking Prohibition By-law (Number 34-2004) and to enact a replacement by-law that contains only those prohibitions that are more restrictive than the ones set out in the Smoke Free Ontario Act, 1994 (S.O. 1994, c. 10, as amended). By-Law Number 110-2013, A by-law to Appoint Municipal Law Enforcement Officers for the purposes of enforcing the Smoking Prohibition By-law No. 052-2010 at the Thunder Bay Regional Health Sciences Centre	10/05/2010	21/10/2013
Tillsonburg	Bylaw Number 3596, To Prohibit Smoking In Certain Public Places Within The Town Of Tillsonburg	14/03/2012	
Timmins	Bylaw No. 2011-7123, Being a bylaw to repeal Bylaw 2003-5815 and amendments thereto and regulate smoking in Public Places and Workplaces Bylaw No. 2012-7250, Being a bylaw to amend Bylaw No. 2011-7123 to Prohibit Smoking at Timmins and District Hospital	14/11/2011	27/08/2012
Toronto	Bylaw No. 87-2009, To Amend City of Toronto Municipal Code Chapter 608, Parks, to prohibit smoking in playgrounds and other areas of City parks.	28/01/2009	
Toronto	Bill 1725, To amend City of Toronto Municipal Code Chapter 709, Smoking, to regulate and prohibit smoking at entrances and exits to public buildings and to repeal certain Articles. Bill 1726, To amend City of Toronto Municipal Code Chapter 608, Parks, to prohibit smoking in and around certain facilities within City parks.	13/11/2013	
Toronto	Toronto Transit Commission Bylaw No. 1	21/01/2009	
Toronto	Toronto Municipal Code Chapter 545, Licensing (Pertaining to Waterpipe)	03/11/2015	
Trent Hills	By-law 2012-75, to prohibit smoking and holding lighted tobacco products within defined Municipal-owned outdoor public spaces	17/07/2012	
Uxbridge	Bylaw No. 2015-055, Being a by-law to prohibit smoking within fifteen (15) metres of entrance ways of municipal buildings	27/04/2015	
White River	Bylaw 2012-03, Being a by-law to amend By-Law No. 2004-07, A Bylaw to regulate smoking in public places and workplaces in the Corporation of the Township of White River	11/03/2012	
Woodstock	Bylaw No. 8461-08, Smoke Free Workplaces and Public Places (consolidated with all amendments) Also known as Chapter 835 (of the Municipal Code), Smoke-free Workplaces and Public Places Bylaw No. 8978-15, A by-law to amend the City of Woodstock Municipal Code Chapter 835 Smoke Free Workplaces and Public Places.	05/06/2008	18/06/2015

Table 5A-2: Workplace Exposure (Past Week) Indoors or Inside a Work Vehicle, Ontario 2010 to 2015

Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2010		16.3	12.8	20.5
2011		13.6	10.2	18.0
2012	824,700	12.7	9.5	16.9
2013	626,300	10.2[M]	6.8	14.8
2014	544,000	8.8[M]	6.2	12.2
2015	843,200	13.0	9.4	17.6

Note: M = Interpret with caution: subject to moderate sampling variability. Data table is for Figure 5-2
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2010 –2015

Table 5A-3: Nonsmokers' Exposure to Secondhand Smoke in Public Places[a] (Every Day or Almost Every Day), by Age, Ontario, 2003 to 2014

	Aged 12+				Aged 12 – 18			
Year	Population Estimate	%	Lower 95% Confidence Limit	Lower 95% Confidence Limit	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2003	1,405,000	17.9	17.3	18.5	268,300	26.4	24.5	28.2
2005	1,077,600	13.1	12.5	13.6	247,300	23.2	21.4	25.0
2007	994,500	11.7	10.8	12.5	229,100	20.8	18.2	23.5
2008	983,000	11.3	10.4	12.1	219,700	19.9	17.5	22.4
2009	1,006,700	11.2	10.3	12.0	213,300	19.2	16.8	21.5
2010	1,176,300	13.1	12.1	14.1	228,600	21.1	18.6	23.6
2011	1,177,200	13.0	12.2	13.9	258,300	24.0	21.1	26.9
2012	1,227,200	13.3	12.4	14.3	254,400	23.0	20.1	25.9
2013	1,308,800	13.9	12.9	14.9	254,600	24.1	21.3	26.9
2014	1,442,000	15.1	14.1	16.2	273,800	25.3	22.6	28.0

[a] = Exposure to secondhand smoke in public places, such as restaurants, bars, shopping malls, arenas, bingo halls and bowling alleys
Note: Data table is for Figure 5-3
Source: Canadian Community Health Survey 2003, 2005, 2007-2014

Table 5A-4: Nonsmokers' Exposure to Secondhand Smoke in Public Places[a] (Every Day or Almost Every Day), by Public Health Unit, Ages 12+, Ontario, 2007/08, 2009/10, 2011/12, 2013/14

	Exposure to Secondhand Smoke in Public Places			
Public Health Unit	**2007/08**	**2009/10**	**2011/12**	**2013/2014[b]**
Chatham-Kent	11.6	4.6[M,Y]	5.7[M]	8.0[M]
Huron County	5.2[M]	9.1[M,+Y]	8.7[M]	8.4[M]
Peterborough County-City	9.7	15.4[+Y]	7.0[M,Y]	9.4[M]
Perth District	12.2	10.8[M]	10.3	9.5
Haliburton, Kawartha, Pine Ridge District	7.8	9.3[M]	9.6	10.1
Elgin-St. Thomas	16.3	13.5[M]	11.5[M]	10.3[M]
Kingston, Frontenac and Lennox and Addington	6.7	10.9[+Y]	11.4[M]	10.4
Timiskaming	F	8.4[M]	9.2[M]	10.4[M]
Wellington-Dufferin-Guelph	13.2	11.1	12.6	11.0
Thunder Bay District	8.1	7.6	12.4[+Y]	11.5
Middlesex-London	9.5	12.3	11.8	11.9
Grey Bruce	8.7	9.9[M]	8.6	12.1
Windsor-Essex County	7.8	6.8	11.0[+Y]	12.1
Northwestern	10.3[M]	8.4[M]	9.1[M]	12.2[M]
North Bay Parry Sound District	9.9[M]	10.6[M]	9.4[M]	12.5
Leeds, Grenville and Lanark District	9.0	8.2[M]	11.0	12.6
Niagara Regional Area	12.1	10.5	10.8	12.8
District of Algoma	17.3	13.8	11.5[M]	12.9
City of Hamilton	12.5	12.1	12.1	13.0
Sudbury and District	11.7	11.9	15.0	13.0
Oxford County	3.7[M]	6.7[M]	10.4	13.3[M]
Simcoe Muskoka District	13.2	12.2	14.9	13.5
Brant County	8.9[M]	9.5[M]	10.7	13.8
Lambton	5.2[M]	9.0[+Y]	12.7	13.9
York Regional	12.4	10.6	13.3	14.4
Eastern Ontario	8.6	9.4[M]	14.3[+Y]	14.5
Halton Regional	12.3	11.2	12.8	14.6
City of Toronto	14.9	15.3	13.7	14.7
Waterloo	6.4	8.9	11.5	15.0
Porcupine	11.9[M]	10.5[M]	11.3[M]	15.2
Durham Regional	13.5	16.4	18.0	15.3
Haldimand-Norfolk	10.2	9.1[M]	14.7[+Y]	16.0
Renfrew County and District	9.2[M]	10.5[M]	12.2[M]	16.1[M]
Hastings and Prince Edward Counties	6.9[M]	7.4	9.7	16.7[+Y]
City of Ottawa	8.7	13.2[+Y]	18.5[+Y]	18.1[M]
Peel Regional	11.0	12.7	13.2	18.6[+Y]
Ontario	**11.5**	**12.1**	**13.2[+Y]**	**14.5[+Y]**

[a] = Exposure to secondhand smoke in public places, such as restaurants, bars, shopping malls, arenas, bingo halls, and bowling alleys
[b] = Ordered by 2013/14 exposure (lowest to highest)
[M] = Marginal. Interpret with caution: subject to moderate sampling variability
[F] = not reportable due to a small sample size
[Y] = Significantly lower than the previous year
[+Y] = Significantly higher than the previous year

Source: Canadian Community Health Survey 2007/08, 2009/10, 2011/12 and 2013/14 (from the Canadian Socio-economic Information Management System [CANSIM]) Table 105-0502. Health indicator profile, two year period estimates, by age group and sex, Canada, provinces, territories, health regions (2012 boundaries) and peer groups.

Table 5A-5: Agreement that Smoking Should be Banned in Playgrounds, Recreation Facilities, Outdoor Special Events and Parks, Ages 18+, Ontario, 2010 to 2015

	Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Outdoor children's playgrounds/pools ban	2010		87.2	84.5	89.4
	2011		87.5	84.3	90.0
	2012	9,258,800	91.3	88.8	93.2
	2013	8,350,800	89.0	86.0	91.4
	2014	9,326,400	90.8	88.4	92.8
	2015	9,629,000	93.8	91.2	95.7
Outdoor recreation facilities ban	2010		76.1	72.8	79.1
	2011		68.0	64.1	71.7
	2012	7,443,300	73.4	69.8	76.7
	2013	6,714,900	71.6	67.5	75.4
	2014	7,929,200	77.4	73.9	80.5
	2015	8,350,300	81.4	77.7	84.5
Outdoor special events ban	2010		66.8	63.2	70.3
	2011		64.1	60.2	67.8
	2012	6,683,700	65.9	62.1	69.5
	2013	5,923,800	63.2	58.9	67.2
Parks/beach ban	2010		56.5	52.7	60.2
	2011		54.7	50.7	58.6
	2012	5,861,200	57.8	54.0	61.5
	2013	5,594,000	59.6	55.4	63.7
	2014	6,498,100	63.3	59.4	67.0
	2015	6,996,200	68.2	64.3	71.8

Note: Public opinions related to smoking bans at outdoor special events were not collected in 2014 and 2015. Data table is for Figure 5-4

Source: Centre for Addiction and Mental Health Monitor (Full Year) 2010-2015.

Table 5A-6: Agreement that Smoking Should be Banned in Playgrounds, Recreation Facilities and Parks, by smoking status, Ages 18+, Ontario, 2015

	Smoking Status	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Outdoor children's playgrounds/pools ban	Current	1,176,300	84.3	68.6	92.9
	Former	2,668,900	95.1	92.2	96.9
	Never	5,783,800	95.4	92.9	97.1
Outdoor recreation facilities ban	Current	833,700	59.7	47.2	71.1
	Former	2,289,200	81.5	75.1	86.6
	Never	5,227,400	86.3	82.0	89.6
Parks/beach ban	Current	516,500	37.0	27.2	48.2
	Former	1,800,200	64.1	57.4	70.3
	Never	4,679,500	77.2	72.4	81.4

Note: Data table is for Figure 5-5
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2015.

Table 5A-7: Agreement that Smoking should be Banned on Sidewalks, Entrances and Bus Stops, Ages 18+, Ontario, 2010 to 2015

	Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Bus stops/transit shelters ban	2010		77.2	73.9	80.2
	2011		73.1	69.3	76.6
	2012	7,854,200	77.4	74.0	80.5
	2013	6,900,400	73.6	69.5	77.4
Entrances to public buildings ban	2010		84.1	81.0	86.7
	2011		85.0	81.8	87.8
	2012	9,036,400	89.1	86.4	91.3
	2013	8,118,700	86.6	83.3	89.3
	2014	9,204,700	89.6	87.1	91.7
	2015	9,255,800	90.2	86.9	92.7
Sidewalk ban	2010		48.2	44.4	52.0
	2011		43.8	40.0	47.7
	2012	4,996,600	49.3	45.4	53.1
	2013	4,773,900	50.9	46.7	55.1
	2014	5,365,100	52.3	48.3	56.2

Note: Public opinions related to smoking bans at bus stops and transit shelters were not collected in 2014 and 2015; Public opinions related to smoking bans on sidewalks were not collected in 2015. Data table is for Figure 5-6.
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2010-2015.

Table 5A-8: Nonsmokers' Exposure to Secondhand Smoke in Vehicles (Every Day or Almost Every Day), by Age, Ontario, 2003 to 2014

Year	Aged 12+				Aged 12 – 15			
	Population Estimate	%	Lower 95% Confidence Limit	Lower 95% Confidence Limit	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2003	761,500	9.7	9.2	10.2	125,000	19.6	17.6	21.6
2005	648,400	7.8	7.4	8.3	101,900	16.1	14.3	17.8
2007	688,900	8.1	7.5	8.7	105,700	16.2	13	19.4
2008	599,400	6.9	6.2	7.5	71,300	10.7	8.2	13.1
2009	574,200	6.4	5.7	7.1	62,400	9.6	7.4	11.8
2010	588,000	6.5	5.8	7.3	45,600	7.5	5.5	9.5
2011	549,600	6.1	5.4	6.8	44,600	7.4	5.6	9.1
2012	501,000	5.4	4.7	6.2	43,400	6.7	4.6	8.8
2013	450,800	4.8	4.2	5.3	44,700	7.9	5.9	10
2014	561,700	5.9	5.2	6.5	32,600	5.4[M]	3.6	7.3

Note: M = Interpret with caution: subject to moderate sampling variability. Data table is for Figure 5-7
Source: Canadian Community Health Survey 2003, 2005, 2007-2014

Table 5A-9: Nonsmokers' Exposure to Secondhand Smoke in Private Vehicles (Every Day or Almost Every Day), by Public Health Unit, Ages 12+, Ontario, 2007/08, 2009/10, 2011/12, 2013/14

	Exposure to Secondhand Smoke in Private Vehicles			
Public Health Unit	**2007/08**	**2009/10**	**2011/12**	**2013/2014[a]**
Elgin-St. Thomas	15.9	10.1[M,Y]	8.7[M]	3.7[M,Y]
Leeds, Grenville and Lanark District	8.1	6.4[M]	4.6[M]	3.8[M]
Oxford County	7.6[M]	6.8[M]	7.1[M]	3.8[M,Y]
City of Toronto	6.7	5.1	4.4[M]	3.9
Halton Regional	6.9[M]	5.6[M]	5.1[M]	4.0[M]
York Regional	5.6	5.9[M]	5.2[M]	4.0
Haliburton, Kawartha, Pine Ridge District	6.7[M]	6.3[M]	8.6[M]	4.4[M]
Niagara Regional Area	7.6	6.2[M]	5.7[M]	4.7[M]
Peel Regional	7.2	7.3	4.0[Y]	4.9
Middlesex-London	6.9	8.1	5.6[M]	5.0[M]
City of Ottawa	3.4[M]	4.3[M]	5.9[M]	5.1[M]
Kingston, Frontenac and Lennox and Addington	6.7	7.2[M]	6.5[M]	5.3[M]
Windsor-Essex County	7.2	8.7[M]	8.8[M]	5.4[M]
City of Hamilton	9.0	4.8[M,Y]	6.2	5.5[M]
Perth District	7.5[M]	9.3[M]	5.7[M]	5.7
Wellington-Dufferin-Guelph	8.0	8.0[M]	5.1[M]	5.8[M]
Simcoe Muskoka District	8.7	8.1	7.0	5.9
Thunder Bay District	8.0	7.2	9.8[M]	5.9[M,Y]
Chatham-Kent	9.9	6.6[M]	4.4[M]	6.0[M]
Peterborough County-City	7.9[M]	10.2[M]	4.8[M,Y]	6.0[M]
Waterloo	6.4	6.0	5.1[M]	6.2[M]
Hastings and Prince Edward Counties	12.2[M]	8.7	8.5	6.3[M]
Lambton	7.3[M]	7.7	5.4[M]	6.6[M]
Renfrew County and District	6.7[M]	7.3[M]	7.7[M]	6.6[M]
Timiskaming	7.1[M]	F	F	6.7[M]
North Bay Parry Sound District	10.7	6.2[M,Y]	7.2	6.8[M]
District of Algoma	13.8	5.8[M,Y]	4.1[M]	7.1[M]
Brant County	10.4	12.0[M]	7.2[M]	7.9[M]
Northwestern	8.8[M]	10.8	5.7[M,Y]	8.2[M]
Durham Regional	11.2	8.3	7.7[M]	8.5
Eastern Ontario	10.2	7.4[M]	12.9[M,+Y]	9.1[M]
Sudbury and District	11.9	6.0[M,Y]	9.8[M]	9.3
Haldimand-Norfolk	9.2[M]	7.8[M]	7.2[M]	9.8[M]
Grey Bruce	7.4[M]	6.2[M]	5.2[M]	9.9[M,+Y]
Porcupine	12.2	8.8[M]	11.0[M]	11.1[M]
Huron County	8.3[M]	8.8[M]	6.1[M]	14.4[M,+Y]
Ontario	**7.5**	**6.5[Y]**	**5.8**	**5.3**

[a] = Ordered by 2013/14 exposure (lowest to highest).
[M] = Marginal. Interpret with caution: subject to moderate sampling variability.
[F] = not reportable due to a small sample size.
[Y] = Significantly lower than the previous year.
[+Y] = Significantly higher than the previous year.

Source: Canadian Community Health Survey 2007/08, 2009/10, 2011/12 and 2013/14 (from the Canadian Socio-economic Information Management System [CANSIM]) Table 105-0502). Health indicator profile, two year period estimates, by age group and sex, Canada, provinces, territories, health regions (2012 boundaries) and peer groups.

Table 5A-10: Nonsmokers' Exposure to Secondhand Smoke at Home (Every Day or Almost Every Day), by Age, Ontario, 2003 to 2014

Year	Aged 12+				Aged 12 – 18			
	Population Estimate	%	Lower 95% Confidence Limit	Lower 95% Confidence Limit	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2003	724,700	9.2	8.7	9.7	210,200	20.6	19.0	22.3
2005	606,400	7.3	6.9	7.7	192,300	18.0	16.5	19.5
2007	487,600	5.7	5.3	6.2	169,000	15.4	13.1	17.6
2008	518,000	5.9	5.3	6.5	140,000	12.7	10.8	14.6
2009	481,100	5.3	4.8	5.9	139,400	12.5	10.4	14.6
2010	453,600	5.0	4.5	5.6	131,300	12.1	9.9	14.3
2011	434,500	4.8	4.0	5.6	120,500	11.2	9.0	13.4
2012	385,700	4.2	3.6	4.8	87,900	7.9	6.2	9.7
2013	364,800	3.9	3.4	4.4	95,800	9.1	7.2	10.9
2014	322,500	3.4	3.0	3.8	86,900	8.0	6.3	9.7

Note: Data table is for Figure 5-8
Source: Canadian Community Heath Survey 2003, 2005, 2007-2014.

Table 5A-11: Nonsmokers' Exposure to Secondhand Smoke in Homes (Every Day or Almost Every Day), by Public Health Unit, Ages 12+, Ontario, 2007/08, 2009/10, 2011/12, 2013/14

	Exposure to Secondhand Smoke in Homes			
Public Health Unit	**2007/08**	**2009/10**	**2011/12**	**2013/14** [a]
Halton Regional	5.4	3.4[M]	2.8[M]	2.2[M]
Oxford County	8.8	6.6[M]	6.4[M]	2.2[M,Y]
Middlesex-London	4.8	5.9[M]	4.0[M]	2.4[M]
Waterloo	6.2	5.5	2.9[M,Y]	2.5[M]
Peel Regional	3.7[M]	4.9	3.0[Y]	2.6
York Regional	2.9[M]	3.5[M]	3.2[M]	2.7[M]
District of Algoma	8.6	8.0[M]	4.7[M]	2.8[M]
Elgin-St. Thomas	7.6[M]	5.9[M]	3.5[M]	2.9[M]
Durham Regional	8.2	4.3[M,Y]	6.3[M]	3.1[M]
City of Ottawa	4.1	3.6[M]	3.2[M]	3.3[M]
Windsor-Essex County	6.9	5.2[M]	4.8	3.5[M]
City of Toronto	4.5	4.8	4.8[M]	3.5
Niagara Regional Area	7.6	5.5[M]	5.2[M]	3.6[M]
Renfrew County and District	6.3[M]	7.4[M]	5.3[M]	3.8[M]
Perth District	6.2[M]	6.2[M]	3.2[M]	3.9[M]
Leeds, Grenville and Lanark District	9.2	9.6	6.7[M]	4.1[M]
Peterborough County-City	5.9[M]	6.9[M]	2.1[M,Y]	4.1[M,+Y]
Thunder Bay District	7.6	7.6	4.7[M]	4.5[M]
Chatham-Kent	7.8[M]	7.0[M]	3.9[M]	4.6[M]
Sudbury and District	10.3	7.1[M]	7.4[M]	4.6[M]
Wellington-Dufferin-Guelph	6.0[M]	5.6[M]	5.0[M]	4.8[M]
Eastern Ontario	12.7	7.4[M,Y]	8.4	5.0[M]
Grey Bruce	7.5	3.8[M,Y]	5.2[M]	5.2[M]
Simcoe Muskoka District	7.5	4.5[M,Y]	5.0	5.3
Haldimand-Norfolk	9.6	8.7[M]	5.6[M]	5.4[M]
Porcupine	9.4[M]	7.4[M]	7.2[M]	5.4[M]
Brant County	8.3[M]	7.8[M]	4.2[M]	5.5[M]
Lambton	6.3[M]	7.9[M]	6.0[M]	5.5[M]
Kingston, Frontenac and Lennox and Addington	6.9[M]	5.9[M]	4.7[M]	5.7[M]
City of Hamilton	7.7	6.1[M]	5.5[M]	6.0[M]
Northwestern	8.1[M]	6.8[M]	5.6[M]	6.3[M]
Hastings and Prince Edward Counties	12.0	9.2[M]	8.1[M]	7.3[M]
Huron County	7.2[M]	5.3[M]	4.8[M]	9.4[M]
Haliburton, Kawartha, Pine Ridge District	8.6	6.8[M]	6.6[M]	F
North Bay Parry Sound District	8.3[M]	5.4[M]	5.4[M]	F
Timiskaming	10.7[M]	8.5[M]	9.4[M]	F
Ontario	**5.8[Y]**	**5.2[Y]**	**4.5[Y]**	**3.6[Y]**

[a] = Ordered by 2013/14 exposure (lowest to highest).
M = Marginal. Interpret with caution: subject to moderate sampling variability.
[F] = not reportable due to a small sample size.
[Y] = Significantly lower than the previous year.
[+Y] = Significantly higher than the previous year.

Source: Canadian Community Health Survey 2007/08, 2009/10, 2011/12 and 2013/2014 (from the Canadian Socio-economic Information Management System [CANSIM]) Table 105-0502). Health indicator profile, two year period estimates, by age group and sex, Canada, provinces, territories, health regions (2012 boundaries) and peer groups.

Table 5A-12: Agreement That There Should Be a Law that Parents Cannot Smoke Inside their Home if Children are Living There, Ages 18+, Ontario, 2000 to 2015

Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2000		51.7	48.4	55.1
2001		51.0	47.8	54.3
2002		58.5	55.3	61.6
2003		63.0	59.9	66.0
2004		63.9	60.7	67.0
2005		67.7	63.9	71.4
2006		70.2	66.8	73.4
2007		78.0	74.8	80.8
2008		78.0	74.8	81.0
2009		80.4	77.4	83.2
2010		75.4	72.1	78.3
2011		80.1	77.0	82.9
2012	7,780,300	76.9	73.7	79.8
2013	7,013,400	74.9	71.2	78.3
2014	7,955,100	77.5	74.2	80.5
2015	8,0.25,300	78.4	74.9	81.5

Note: Data table is for Figure 5-9
Source: Centre for Addiction and Mental Health Monitor 2000-2009 (half year sample); 2010-2015(full year sample).

Table 5A-13: Exposure to Secondhand Smoke in Multi-Unit Dwellings (Past Month), 18+, Ontario, 2011 to 2015

Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2011		26.9	23.3	30.8
2012	590,600	24.1	20.1	28.6
2013	441,800	19.9	14.4	26.9
2014	689,500	29.4	22.1	37.9
2015	287,100	15.1[M]	10.3	21.5

Note: M = Interpret with caution: subject to moderate sampling variability. Data table is for Figure 5-10
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2011-2015

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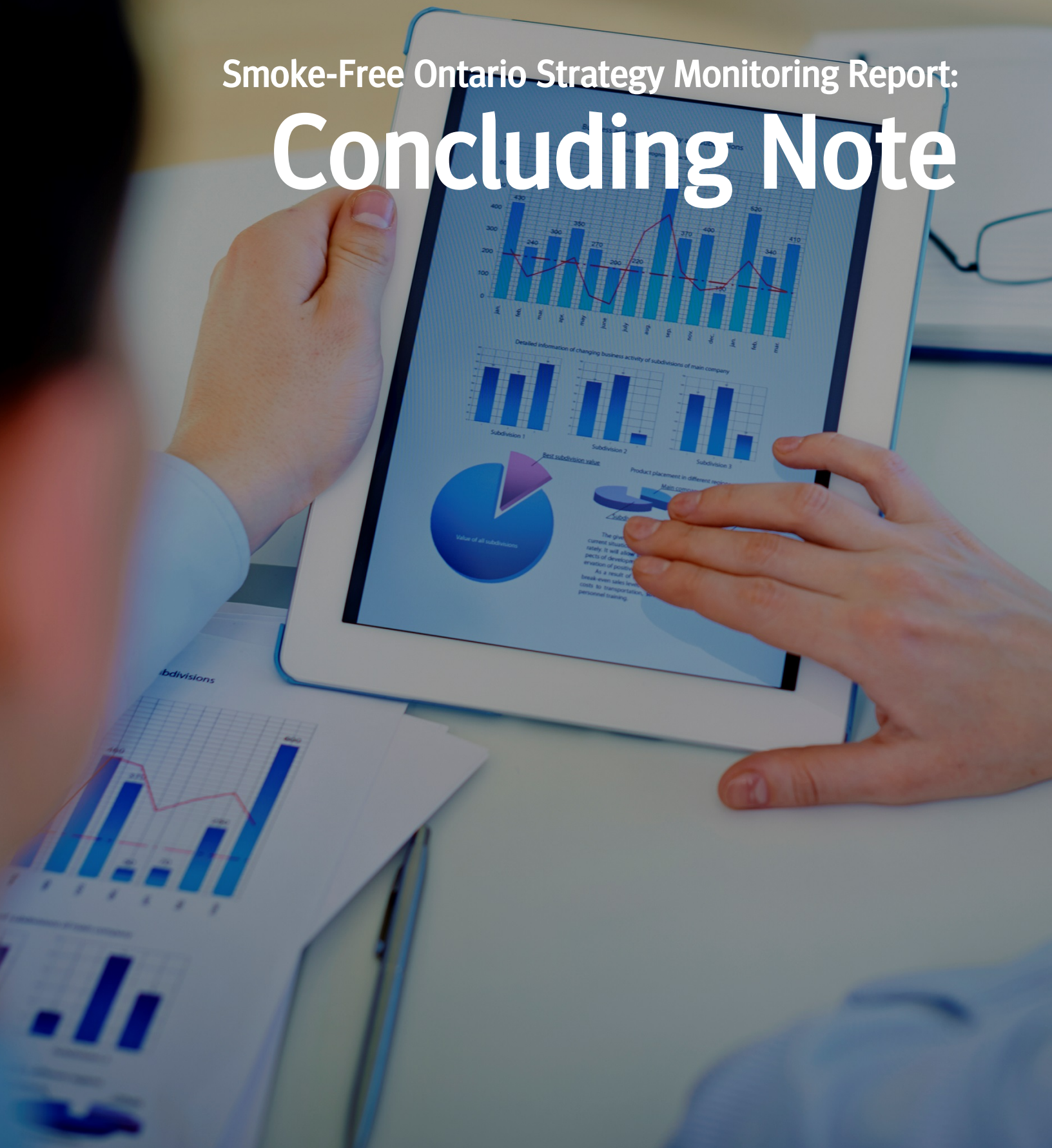

Smoke-Free Ontario Strategy Monitoring Report:

Concluding Note

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Concluding Note

Ontario aspires to become the Canadian jurisdiction with the lowest smoking rate. The Province continues to work diligently toward achieving this objective and progress is being made across the comprehensive goals of protection, cessation and prevention. Smoke-Free Ontario partners are supporting positive changes in the physical and social climates both to prevent and reduce tobacco use, which helps to create environments conducive to decreased initiation, increased cessation and ultimately, reduced smoking in Ontario.

Tobacco control efforts resulted in a 2.1 percentage point (statistically significant) decrease in the prevalence of smoking over the five-year period, 2010 to 2014. This falls short of the five-percentage point decrease over five years called for in 2010 by the Tobacco Strategy Advisory Group; and, the gap between Ontario and British Columbia–the Canadian jurisdiction with the lowest cigarette smoking rate–is still a significant four percentage points.

Looking back, tobacco control in Ontario has contributed to reducing smoking rates from well over 30% in the 1980s to less than 20% in 2014. This success leaves some people with the impression that 'tobacco is done', especially when few if any people in their social circles are tobacco users. Looking back over the past 20 years, adult tobacco use decreased from 25% in 1996 to 21% in 2005 and 18% in 2014. Given what is known about tobacco-caused morbidity and mortality, this rate of decline is viewed by many as unsatisfactory. In some occupations, one in every three people still smokes cigarettes. And university educated people are 2 to 3 times less likely to smoke cigarettes than people with no post-secondary education. With one in every five adult Ontarians currently using tobacco, it is clear that tobacco is far from done.

While cigarette smoking continues to be the main focus of tobacco control, there is a need to pay attention to the uptake of other tobacco products such as waterpipe, cigars and smokeless tobacco. As well, alternative and emerging products, including e-cigarettes and heat-not-burn products, pose potential risks for youth initiation while potentially offering a harm reduction alternative for current smokers.

Over the period 2005 to 2015, the prevalence of past 30-day smoking was cut by about 60% for

students in grades 9 to 10 (combined) and in grades 11 to 12 (combined). However, from 2011 to 2015, there has not been a significant change in the prevalence of current smoking in these grades. It is encouraging to see a significant decrease in young adult smokers (20-24 years old) from 24% to 17%. At the same time, the continued high rates amongst older, young adults (25-29 years old) (23%) is a continuing concern.

While past 30-day current smoking among 15 to 17 year olds is down to three percent in 2015, rates rise dramatically to ten percent for 18-19 year olds, 17% for 20-24 year olds and 23% for 25-29 year olds.

Even if Ontario were to adopt the full slate of MPOWER measures, the prevalence of cigarette smoking would only decrease to 12% by the year 2043, according to SimSmoke Ontario calculations conducted in 2015. A comparison with MPOWER recommendations demonstrates some gaps, especially in the areas of taxation (raising the tax to 75% of retail price), mass media campaigns (large ongoing campaigns on major media such as TV and radio), cessation programs (coverage of cessation medications) and advertising bans (ban all types of advertising).

To accelerate the rate of reduction in tobacco use, there is a need to adopt more far-reaching policies such as those recommended by the 2010 SAC and those being adopted in other leading jurisdictions. There are a number of unrealized 2010 SAC recommendations in the areas of prevention, cessation and protection.

Prevention

Tobacco use continues to be shown in movies that are rated for youth viewing; there are no requirements to run ads denormalizing tobacco preceding movies and video games that contain tobacco imagery; and the protocols for compliance of tobacco retailers with restrictions on sales to minors have not improved. Moreover, SAC noted that beyond basic information about tobacco being provided in all schools, prevention efforts need to focus on high-risk schools, colleges and workplaces where youth and young adults are at greatest risk for tobacco use. Our analyses indicate that a significant number of youth who are current smokers in grades 7 to 12 also have a drug use problem (87% in grades 9 to 12) and a hazardous drinking problem (67% in grades 7 to

12). It is unclear whether sufficient effort is being directed toward targeting youth and young adults who are most at risk of becoming established tobacco users.

Cessation

Ontario is providing support to increasing numbers of smokers. In the 2015/16 fiscal year, Strategy smoking cessation interventions in Ontario directly engaged over 324,225 smokers, or about seventeen percent of Ontario smokers. Excluding patients for whom cessation counseling by physicians was billed to OHIP, 128,881 smokers or 7% were reached directly. Six of Ontario's key cessation providers had somewhat lower reach in the past year in comparison with the year before. Despite the overall increase over past years in the reach of cessation services, we have yet to see increased rates of intentions to quit, quit attempts and successful long-term quitting.

Ontario continues to fall short on four cessation system policies recommended by SAC:

1. Provision of free NRT and stop-smoking medications.
2. Creation of accountability mechanisms to ensure that smokers are asked, advised and assisted to quit at every point of contact with the health care system.
3. Creation of a tobacco-user support system to operationalize the "no wrong door" concept for access to cessation support services.
4. Enhancement of systems of telephone, text messaging and Internet-based cessation support services that would entail: a) integration with the overall tobacco-user support system, b) integration with the cessation mass media campaign and c) capability for continual engagement with smokers.

Protection

Smoke-Free Ontario measures along with local bylaws and policies protect most Ontarians most of the time from exposure to secondhand smoke. Implementation of provincial smoking bans on restaurant/bar patios, playing fields and playgrounds now offers protection in key outdoor locations. OTRU's evaluation of the effects of this ban, demonstrate that although exposure to seconhand smoke has decreased in each of these places, levels are still quite high. As of 2014, 15% of Ontarians aged 12 years and over were exposed to secondhand smoke every day or

almost every day in public places (e.g., restaurants, bars, shopping malls and arenas) over the past month and 13% of adult workers were exposed to secondhand smoke indoors at work or inside a work vehicle for five or more minutes in the past week. In addition, 15% (or 287,100) Ontario adults living in multi-unit housing were exposed to secondhand smoke drifting between units at least once in the past month.

The US Surgeon General's review of scientific evidence concluded that there is no risk-free level of exposure to secondhand smoke.[1] In addition to the adverse health effects of secondhand smoke, exposure to other people smoking results in social exposure to tobacco use with ensuing normalization of tobacco use, triggering of initiation in youth and young adults through processes of social influence and modeling and encouragement of the continued use of tobacco among smokers and relapse among quitters.

The 2010 Scientific Advisory Committee recommended possible next steps to offer further protection for Ontarians including eliminating smoking in priority settings specifically unenclosed bar and restaurant patios, not-for-profit multi-unit housing and selected outdoor public settings (e.g., beaches, parks, transit shelters, doorways, etc.). Recent regulatory changes implemented by the Government of Ontario closed some of these gaps in protection. Select municipalities have closed other gaps.

Although there are remaining gaps and slow progress in reducing tobacco use prevalence, steady progress in tobacco control is being made: smoking has been banned on restaurant and bar patios; flavoured tobacco has been banned including menthol (but not adult flavours such as rum, wine, whiskey); the proportion of smokers who are advised to quit and are assisted in quitting has risen; and significant strides are being made at the provincial and local levels to further both physical and social protection from smoking in outdoor settings.

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Smoke-Free Ontario Strategy Monitoring Report:

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Appendix: Technical Information about Population Surveys

Data Sources

Canadian Tobacco Use Monitoring Survey (CTUMS)

Health Canada's Canadian Tobacco Use Monitoring Survey (CTUMS) was an annual cross-sectional nationwide, tobacco-specific, random telephone survey, conducted between 1999 and 2012. Annual data were based on two cycles, the first collected from February to June, and the second from July to December. The sample design was a two-stage, stratified, random sample of telephone numbers. To ensure that the sample was representative of Canada, each province was divided into strata or geographic areas (Prince Edward Island had only one stratum). As part of the two-stage design, households were selected first and then, based on household composition, one, two, or no respondents were selected. The purpose of this design was, in part, to over-sample individuals 15 to 24 years of age. In general, CTUMS sampled the Canadian population aged 15 and older (excluding residents of the Yukon, Northwest Territories, Nunavut, and full-time residents of institutions). The annual sample for CTUMS in 2012 was 19,286 in Canada (person response rate of 83%), including 1,792 in Ontario (person response rate of 83.9%). All survey estimates were weighted, and variance estimates were calculated using bootstrap weights.

Centre for Addiction and Mental Health Monitor (CAMH Monitor)

The Centre for Addiction and Mental Health's CAMH Monitor (CAMH Monitor) is an Ontario-wide, random telephone survey, focusing on addiction and mental health issues. Administered by the Institute for Social Research at York University, this ongoing monthly survey has a two-stage probability selection design. The survey represents Ontario residents aged 18 and older, excluding people in prisons, hospitals, military establishments, and transient populations such as the homeless. The CAMH Monitor replaced earlier surveys at the Centre including the Ontario Alcohol and Other Drug Opinion Survey (1992-1995) and the Ontario Drug Monitor (1996-1999). Reported trend data are based on all of these surveys, which used similar questions and sampling methods. In 2015, estimates were based on telephone interviews with 5,013 adults (41% of eligible respondents) representing 10,157,964 Ontarians aged 18 or older, conducted

between January and December. All survey estimates were weighted, and variance estimates and statistical tests were corrected for the sampling design.

Ontario Student Drug Use and Health Survey (OSDUHS)

The Centre for Addiction and Mental Health's Ontario Student Drug Use and Health Survey (OSDUHS) is a province-wide survey, first implemented in 1977 and conducted every two years (in the spring) by the Institute for Social Research at York University. The survey uses a two-stage (school, class) cluster sample design and samples classes in elementary and secondary school grades (i.e., grades 7 to 12). Students enrolled in private schools, special education classes, those institutionalized for correctional or health reasons, those on Indian reserves and Canadian Forces bases, and those in the far northern regions of Ontario were not included in the target population. These exclusions comprise approximately 8% of Ontario students. In 2015, 10,523 students participated in the survey, with a student participation rate of 59% (the participation rate was influenced by 11% of students who were absent and 29% of nonparticipating students who either did not return consent forms or their parents refused participation). All survey estimates were weighted, and variance estimates and statistical tests were corrected for the complex sampling design.

Canadian Community Health Survey (CCHS)

The Canadian Community Health Survey (CCHS) is an ongoing cross-sectional population survey that collects information related to health status, healthcare utilization and health determinants. Initiated in 2000, it operated on a two-year collection cycle but changed to annual data collection in 2007. The CCHS is a large-sample general population health survey, designed to provide reliable estimates at the health region level. The CCHS samples respondents living in private dwellings in the ten provinces and the three territories, covering approximately 98% of the Canadian population aged 12 or older. People living on Indian reserves or Crown lands, residents of institutions, full-time members of the Canadian Forces and residents of certain remote regions are excluded from the survey. The CCHS uses the same sampling frame as the Canadian Labour Force Survey, which is a multistage stratified cluster design, where the dwelling is the final sampling unit. In total, 63,964 Canadians aged 12 or older participated in the 2014 survey (including 21,000 Ontarians). All survey estimates were weighted, and variance estimates were calculated using bootstrap weights.

Data Analysis

Characteristics Associated with Smoking Status

Youth

A segmentation analysis of students in grades 9 to 12 was conducted, with a focus on current smoker and nonsmoker sub-populations defined by risky behaviours (e.g., drinking, drug use) and social determinants of health (e.g., social cohesion, work for pay, housing), as defined in Table A-1). The analysis was conducted using the 2015 Ontario Student Drug Use and Health Survey (OSDUHS). Data were weighted to represent students in Ontario. All analyses took into account the complex sampling design of the survey.

Table A-1: Indicators of Chronic Disease Risk Factors and Social Determinants of Health among Current Smokers[a] and Nonsmokers, OSDUHS

Indicator	Definition
Drug Use Problem	Reporting experiencing at least 2 of the 5 items (used drugs to relax or fit in, used drug alone, forgotten things while using drugs, gotten into trouble while on drugs, had family say cut down on drugs) on the CRAFFT screener, which measures a drug use problem that may require treatment (in the past 12 months)
Hazardous or harmful drinking	Scoring at least 8 out of 40 (Likert scoring) on the World Health Organization's Alcohol Use Disorders Identification Test (AUDIT) screen, which measures heavy drinking and alcohol-related problems during the past 12 months
Work for Pay	Students reported working for pay outside the home during the school year
Gambling Activity	Reporting gambling money on 1 or more of 9 gambling activities during the past 12 months: cards, bingo, sports pools, sports lottery, other lottery (i.e. scratch cards, Lotto 6-49), video gambling/slot machines, casino, internet game, dice, any other activities. This is not a measure of problem gambling
Health Professional Visit for Mental Health Problems	Reported at least one visit to a doctor, nurse, or counsellor for emotional or mental health reason in the last 12 months
Delinquent Behaviour	Reporting at least 3 of the following 9 delinquent behaviours in the 12 months before the survey: vandalized property, theft of goods worth less than $50, theft of goods worth $50 or more, stole a car/joyriding, break and entering, sold cannabis, ran away from home, assaulted someone (not a sibling), carried a weapon
No Social Cohesion at School	Students who did not "feel close to people at school" or did not feel like they are "part of the school"
Self-Rated Poor Health	Rating one's physical health as either "fair" or "poor"
Live in >1 Home	Reported dividing time between two or more homes
Parents with ≤high school education	Parents (both for two parents families and one for single families) have high school education or less

[a] Current smoker is someone who has smoked at least 100 cigarettes in his or her life and smoked within the last 30 days

Adults

A segmentation analysis of young adult (aged 18 to 29 years) and adult (18+ years) current smoker and nonsmoker subpopulations was conducted using health indicators such as chronic disease risk factors (e.g., physical inactivity, overweight) and social determinants of health (e.g., food security, education), as defined in Table A-2. The analysis was conducted using the 2014 Canadian Community Health Survey (CCHS) Master file. All survey estimates were weighted, and variance estimates were calculated using bootstrap weights.

Table A-2: Indicators of Chronic Disease Risk Factors and Social Determinants of Health among Current Smokers[a] and Nonsmokers, CCHS

Indicator	Definition
Identifies as being White	Respondent reported that his/her cultural / racial background is White
Born in Canada	Respondent is not an immigrant
Unhealthy eating habits	Respondent eats less than 5 servings of fruits and vegetables per day
Male	Male
Inactive	Respondent is "inactive" in their leisure time based on the total daily Energy Expenditure values
Overweight	Respondents whose self-reported body mass index (BMI) exceeds a value of 25.
Excess of low risk drinking[b]	Women who had more than 10 drinks in the previous week, had more than 2 drinks on a single day in the previous week, consumed alcohol on 6-7 days in the previous week, and/or had 5+ drinks in one occasion at least once per month for the past 12 months. Excludes women who were pregnant or breastfeeding. Men who had more than 15 drinks in the previous week, had more than 3 drinks on a single day in the previous week, consumed alcohol on 6-7 days in the previous week, and/or had 5+ drinks in one occasion at least once per month for the past 12 months
Renting current dwelling	Respondent's dwelling is rented by a member of the household
Working in sales & services occupations	Respondents work in sales and service occupations (e.g., retail, hospitality, and child care)
Working in trades, transportation & equipment operation occupation	Respondents work in trades, transportation and equipment operation occupation (e.g., construction and taxi drivers)
Low education	Respondent's household's highest level of education is less than high school completion
Not having a family doctor	Respondent does not have a regular family doctor
Severely food insecure	Respondent has indication of reduced food intake and disturbed eating patterns

[a] Current smoker is someone who has smoked at least 100 cigarettes in his or her life and smoked within the last 30 days

[b] Calculated using the Canadian Centre on Substance Abuse's 'Canada's Low-Risk Alcohol Drinking Guidelines.[1]

Strengths and Weaknesses of Surveys

Each of the surveys described has its own particular strengths, and we draw on these throughout the report. For instance, because of the lengthy period over which the CAMH surveys have been conducted—since 1977 for OSDUHS and since 1991 for the CAMH Monitor—trend data on provincial smoking behaviour are unsurpassed. CTUMS strengths include breadth of tobacco-specific questions and the opportunity it affords to make inter-provincial comparisons. CTUMS includes information on use of cigarettes and alternative forms of tobacco, age of initiation, access to cigarettes, cessation (including reasons and incentives), use of cessation aids, readiness to quit, secondhand smoke exposure, restrictions on smoking at home, and attitudes toward tobacco control policies. The CCHS includes information on type of smoker, amount smoked, cessation, age of initiation, use of other tobacco products, workplace restrictions and secondhand smoke exposure. The strength of CCHS is its large sample size and geographic coverage (down to health region).

Direct comparison of results from different surveys might not always be appropriate because the surveys use different methodologies (e.g., school-based vs. telephone surveys) and can have different question wording and response categories. Moreover, the target population (e.g., people aged 12 or over vs. people aged 15 or over), as well as purpose and response rates of surveys, can vary. To aid the reader, figures and tables depicting survey data are accompanied by a detailed title, which typically provides information on the survey question, population of interest, age, and survey year. Figures and tables also have data sources listed in figure and table notes.

Estimating Population Parameters

One should be cautious in interpreting trend data (e.g., differences in yearly estimates) and comparisons between two or more estimates (e.g., men and women). Statements of significance, including any directional statement (e.g., increase, decrease, higher, lower, etc.) are based on non-overlapping confidence intervals or z-test for two population proportions. Trend tests are based on linear regression, treating prevalence as the outcome and years as an independent variable.

Sample surveys are designed to provide an estimate of the true value of a particular

characteristic in the population such as the population's average tobacco-related knowledge, attitudes, or behaviours (e.g., the percentage of Ontario adults who report smoking cigarettes in the past month). Because not everyone in a province is surveyed, the true population value is unknown and is therefore estimated from the sample. Sampling error will be associated with this estimate. A confidence interval provides an interval around survey estimates and contains the true population values with a specified probability. In this report, 95% confidence intervals are used, which means that if equivalent size samples are drawn repeatedly from a population and a confidence interval is calculated from each sample, 95% of these intervals will contain the true value of the quantity being estimated in the population. For instance, if the prevalence of current smoking among Ontario adults on Survey A is 25% and the 95% confidence interval is 22% to 28%, we are 95% confident that this interval (22% and 28%) will cover the true value in the population.

It is equally true that an estimate of 20% (±3) from population A is not statistically different from a 25% (±4) estimate from population B (e.g., female vs. male). This occurs because the upper limit on population A's estimate (20 + 3 = 23%) overlaps with the lower limit on population B's estimate (25 – 4 = 21%), albeit a formal test of significance might prove otherwise. This argument holds for comparisons of estimates from different survey years, and between other groupings within the same survey. To aid the reader in making comparisons, 95% confidence intervals are provided where possible.

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