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

Ontario Tobacco Research Unit

January 2015

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Acronyms and Abbreviations

AHAC	Aboriginal Health Access Centre
ATP	Aboriginal Tobacco Program
CHC	Community Health Centre
CCHS	Canadian Community Health Survey
CoP	Community of Practice
CTUMS	Canadian Tobacco Use Monitoring Survey
DTQC	Driven to Quit Contest
FHT	Family Health Team
FNIM	First Nations, Inuit and Métis
KWIYM	Know What's in your Mouth
LHINs	Local Health Integration Networks
LTPB	Leave The Pack Behind
MOHLTC	Ministry of Health and Long-Term Care
NRT	Nicotine Replacement Therapy
ODB	Ontario Drug Benefit
OSDUHS	Ontario Student Drug Use and Health Survey
OTRU	Ontario Tobacco Research Unit
PHU	Public Health Unit
PPA	Point Prevalence Abstinence
PTCC	Program Training and Consultation Centre
RNAO	Registered Nurses' Association of Ontario
SAC	Scientific Advisory Committee
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	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
TSAG	Tobacco Strategy Advisory Group
YATI	Youth Advocacy Training Institute
YSS	Youth Smoking Survey

Chapter 1: 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.[i] The Ontario Government has established structures to guide Strategy implementation and continues to take significant steps to strengthen tobacco control. The Tobacco Control System Committee, three Task Forces (Protection and Enforcement, Cessation, and Youth Prevention), and the Communications and Marketing Advisory Committee help to guide and coordinate implementation. Noteworthy recent initiatives include school-based pilots (see Prevention Chapter), a raise in tobacco taxes (see Prevention Chapter), hospital and workplace based cessation-demonstration projects (see Cessation Chapter), and the recently announced restaurant and bar patio, playground, and sports field smoking ban (see Protection Chapter). These recent activities tie in with past-year initiatives, which are ongoing, including free access to smoking cessation medications and pharmacist counselling for Ontario Drug Benefit beneficiaries; limited access to free Nicotine Replacement Therapy (NRT); and cessation counselling through Family Health Teams, Community Health Centres, addictions agencies, Aboriginal Health Access Centres, and a province-wide social marketing campaign.

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

[i] 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 comprised 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*.

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 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: Key Indicators related to Tobacco Use (Chapter 3 more fully reports on youth and young adults)
- Chapter 3: Youth Prevention
- Chapter 4: Smoking Cessation
- Chapter 5: Protection from Secondhand Smoke
- Chapter 6: Concluding Note

Methodological Approach

This report presents information about Strategy activities and tobacco control advances using the latest population survey data available, typically 2013 (primarily CAMH Monitor, CCHS, OSDUHS), 2013/14 Strategy partner reports (ending March 2014), and select policy and program updates to November 2014. 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 endeavors 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 protection, cessation, and prevention 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 successful quitting and current smoking, do not always offer sufficient precision to identify small year-over-

year changes,[ii] which is why we include short and intermediate-level outcomes and provide data on trends over five to ten year periods.

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 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 (FCTC) were able to reach (the FCTC includes recommendations on many more measures). In this report, MPOWER standards are used as reference points for monitoring progress in Ontario. However, they should be considered with some reservation in that they are 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 had a chapter on

[ii] Statements of "significance" between two estimates (such as between years or between males and females), 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.

"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 protection, cessation, and prevention goals of the Strategy.

Chapter 2: Tobacco Use

Reducing the overall use of tobacco is one of the main objectives of the Smoke-Free Ontario Strategy. In addition to smoking cigarettes, Ontarians use a variety of other tobacco products—including cigars, pipe, snuff, and chewing tobacco—as well as e-cigarettes and waterpipe shisha, both of which may contain nicotine.

Overall Tobacco Use

- According to the 2013 Canadian Community Health Survey (CCHS), 21% of Ontario respondents aged 12 years or over reported current use of tobacco in the previous 30 days (tobacco includes cigarettes, cigars, pipes, snuff or chewing tobacco).[iii] This represents 2,448,900 tobacco users (CCHS 2013). There has been no statistically significant change in this rate since 2007/08 when the rate was 23% (or 2,450,600 users).
- In 2013, 18% of Ontarians smoked cigarettes,[iv] 5.2% smoked cigars, 0.9% smoked a pipe, 0.6% used chewing tobacco, and less than 0.1% (marginal estimate, interpret with caution) used snuff (CCHS 2013; Note: these estimates include co-use so do not sum to total tobacco use, or 21%; 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).[iv]

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 past 30-day current smoking.

- In 2013, 17% of Ontarians aged 12 years or over had smoked cigarettes in the past 30 days and had smoked at least 100 cigarettes in their lifetime (current smokers),[v] representing 1,963,800 people (CCHS 2013; Figure 1), statistically unchanged from 2012 (18% or 2,027,000 people).
- In 2013, there was a significant decrease in the prevalence of current smoking compared to 2007 (17% vs. 19.5%; 1,963,800 vs. 2,117,000 smokers, respectively).

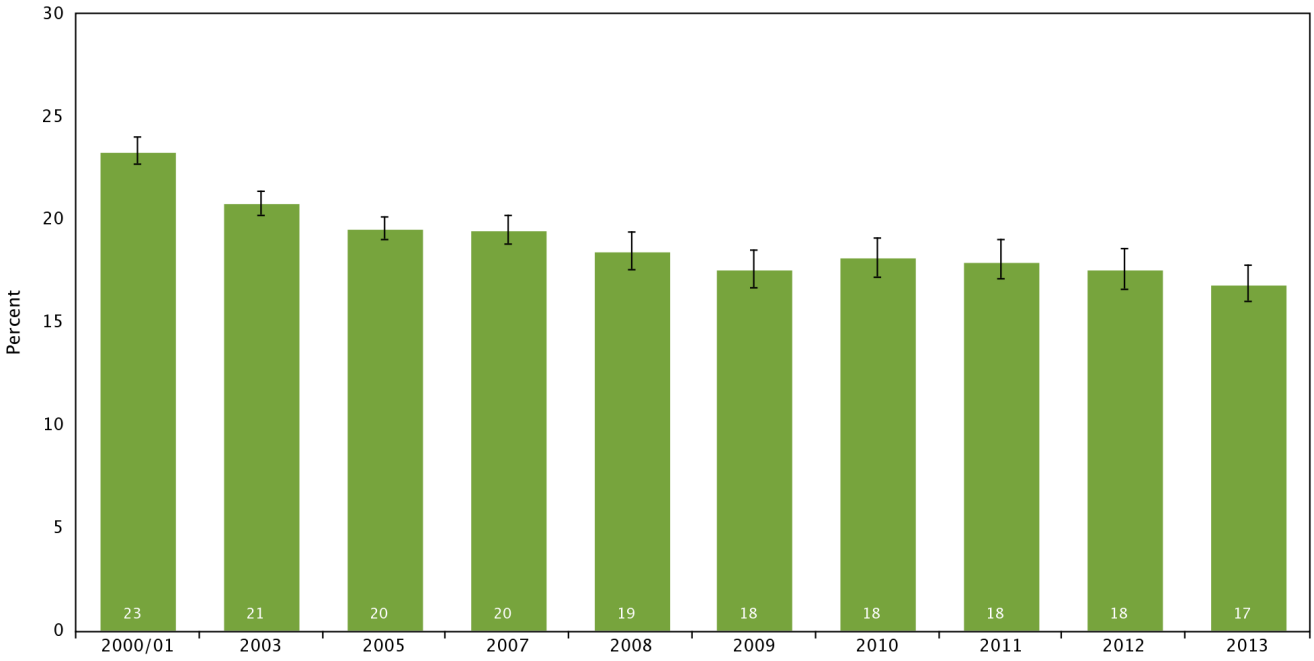
[iii] The Canadian Community Health Survey does not include questions on e-cigarettes or waterpipe shisha. These latter two products are discussed in a subsequent section.

[iv] 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 17% (from CCHS 2013), which reflects past 30-day use and having smoked 100 cigarettes in one's lifetime.

[v] In addition to having smoked in the past 30 days, the definition of "current smokers" or "current smoking" includes having smoked 100 cigarettes in one's lifetime.

- In 2013, 20% of males (or 1,132,600) were current smokers whereas 14% of females were current smokers (or 831,300).

Figure 1: Current Smoking (Past 30 Days), Ages 12+, Ontario, 2000/01 to 2013



Note: Vertical lines represent 95% confidence intervals.
Source: Canadian Community Health Survey 2000/01, 2003, 2005, 2007-2013.

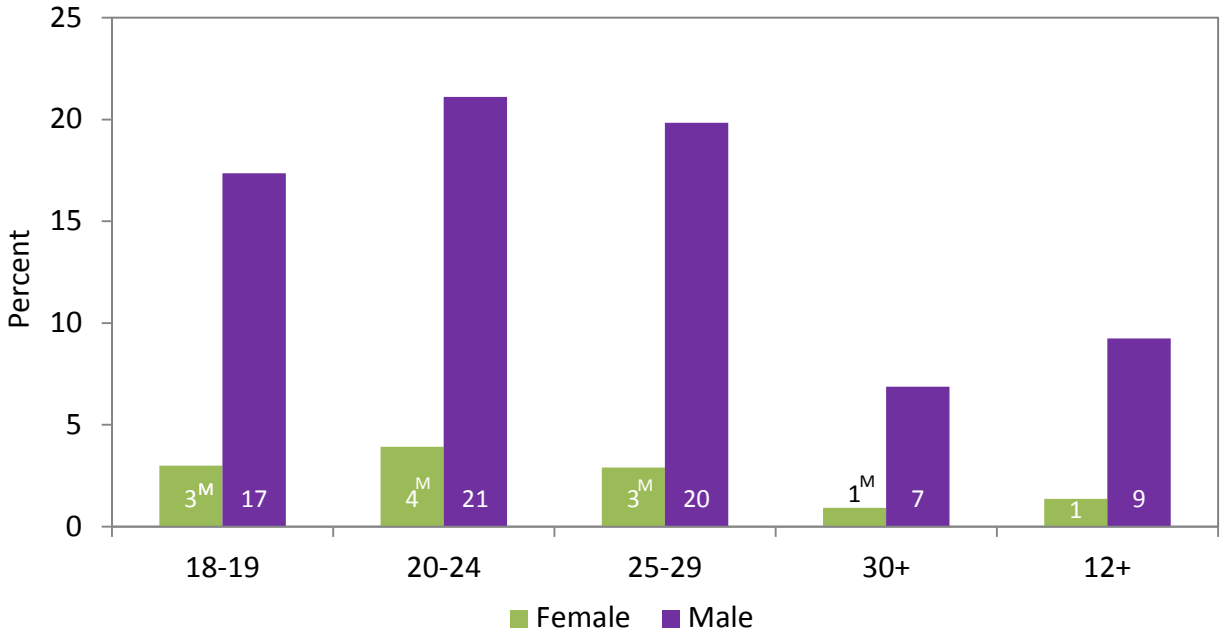
Cigar Use

- In Ontario, wholesale sales of the total cigar category (little cigars/cigarillos and cigars) have fallen 19% since 2009, the year in which sales were the highest level reported in recent years (185,743,828 unit sticks in 2009 to 150,258,186 units in 2013).[vi] The reduction in sales since 2009 may reflect users' reduced consumption, as the market of little cigars/cigarillo brands was converted into non-filtered cigar brands weighing more than 1.4g in 2010. In 2013, little cigars/cigarillos comprised 6.6% of all cigar sales.
- In 2013, 83% of the Ontario cigar market comprised flavoured cigars, with menthol comprising 2.5% of all cigar sales. On November 24, 2014, the Ontario Government introduced legislation that would ban the sale of flavoured tobacco. The regulation is expected to take effect in January 2016, with a delayed implementation date for menthol-flavoured tobacco products.

[vi] Health Canada, Personal Communication, November 12, 2014

- In 2013, 5.2% of Ontarians aged 12 years and over (601,950 people) had smoked cigars[vii] in the past 30 days, making cigars the second most prevalent form of tobacco use after cigarettes (CCHS 2013, data not shown).
- Past 30-day cigar use was significantly higher among males compared to females in 2013: 9% (or 521,800) of all males aged 12 years and over had smoked cigars in the past 30 days compared to 1.4% (or 80,100) of females (CCHS 2013; Figure 2).
- In 2013, past 30-day cigar use was particularly high among young adult males (CCHS 2013; Figure 2).

Figure 2: Cigar Use (Past 30 Days), by Age and Sex, Ontario, 2013



M = Marginal. Interpret with caution: subject to moderate sampling variability.
Source: Canadian Community Health Survey 2013.

Smokeless Tobacco Use

- The overall volume of wholesale sales in smokeless tobacco is low (Table 1). In 2013, there was a 3.8% decrease in sales over 2012. Since 2007, there has been an 18.3% increase in sales.[viii] Legislation introduced on November 24, 2014, by the Ontario Government would also ban the sale of flavoured smokeless products. The regulation is

[vii] These data are from the 2013 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.
[viii] Health Canada, Personal Communication, November 12, 2014

expected to take effect in January 2016, with a delayed implementation date for menthol-flavoured tobacco products.

- According to CCHS 2013, less than one per cent (0.6%) of Ontarians aged 12 years and over (or 63,300) used chewing tobacco in the past month. This included 0.4% of adults 19 years and older (or 42,600) and 1.9% of youth aged 12 to 18 years old (or 20,700) (Note: both the age sub-population estimates are marginal quality, interpret with caution).
- Among Ontario students in grades 7 to 12, 5.7% have used smokeless tobacco products (chewing tobacco or snuff) in the past year. Among these past-year users, 43.5% tried these products only once or twice, and another 15% used them no more than 3 to 5 times (Ontario Student Drug Use and Health Survey [OSDUHS] 2013).

Table 1: Smokeless Tobacco Sales (KGs), Ontario 2007 to 2013

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

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. 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.

- In Ontario in 2013, 66.5% of adults 18 years and older had heard of e-cigarettes, with younger adults aged 18 to 29 more aware than adults aged 30 and over (77% vs. 65%; CAMH Monitor, data not shown). Among all adults, more males than females had heard of e-cigarettes (74.5% vs. 59%). Among students in grades 9 to 12, 77% had heard of e-cigarettes (OSDUHS 2013).

- Among adults 18 years and over, past year use of e-cigarettes was 7%, with young adults more than twice as likely to have used in the past year compared to older adults aged 30 and over (13%[ix] vs. 6%; CAMH Monitor 2013, data not shown).
- Among all adults, past 30-day use of e-cigarettes was 2% (CAMH Monitor 2013).[x]
- Among all students, 15% had ever used an e-cigarette, including 4% who reported using nicotine-based e-cigarettes and 10.5% who reported using non-nicotine e-cigarettes (OSDUHS 2013).
- Significantly more male than female students in grades 9 to 12 had ever used an e-cigarette in their lifetime (19% vs. 10%; OSDUHS 2013).

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 nicotine juice or herbal ingredients) is heated by charcoal, and a water-filled chamber cools the resulting smoke before it is inhaled through a hose and mouthpiece.

- In Ontario, 10% of respondents 15 years and older have ever tried a tobacco waterpipe (Canadian Tobacco Use Monitoring Survey [CTUMS] 2012, data not shown).
- Among students in grades 7 to 12, 11% have ever used a waterpipe, with use significantly increasing with grade, peaking at 21% in grade 12 (OSDUHS 2013, data not shown).[9]
- Past year use of a waterpipe in 2013 among students in grades 7 to 12 was 10% (or 88,400) (OSDUHS 2013).

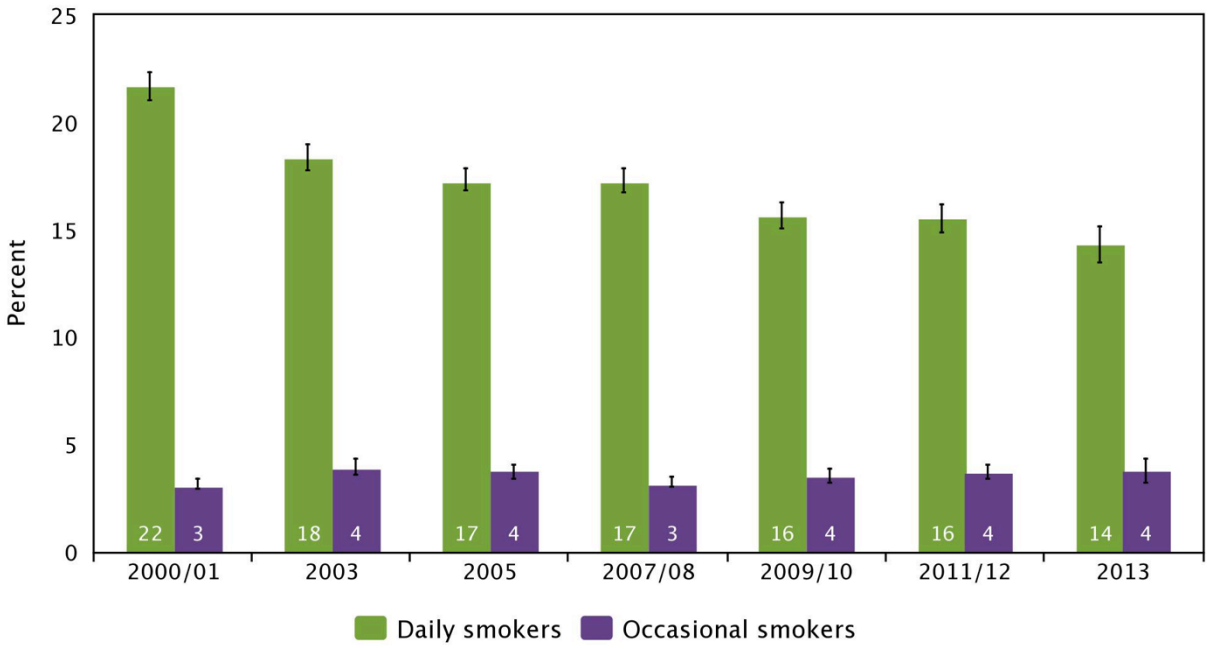
Patterns of Cigarette Use

Daily and Occasional Smoking (Past 30 Days)

- In 2013, the prevalence of current smoking among adults aged 18 or older in Ontario was 18% according to the Canadian Community Health Survey, with 14% smoking daily and about 4% smoking occasionally in the past month (Figure 3).
- The rate of daily smoking has seen a slow decline over time (Figure 3), with smoking decreasing from 17% to 14% for the period 2007/08 to 2013 (no other recent changes were significant). The rate of occasional smoking has remained unchanged in recent years (CCHS data).
- In 2013, 79% of current smokers were daily smokers, unchanged the last couple of years (CCHS data; Figure 4).

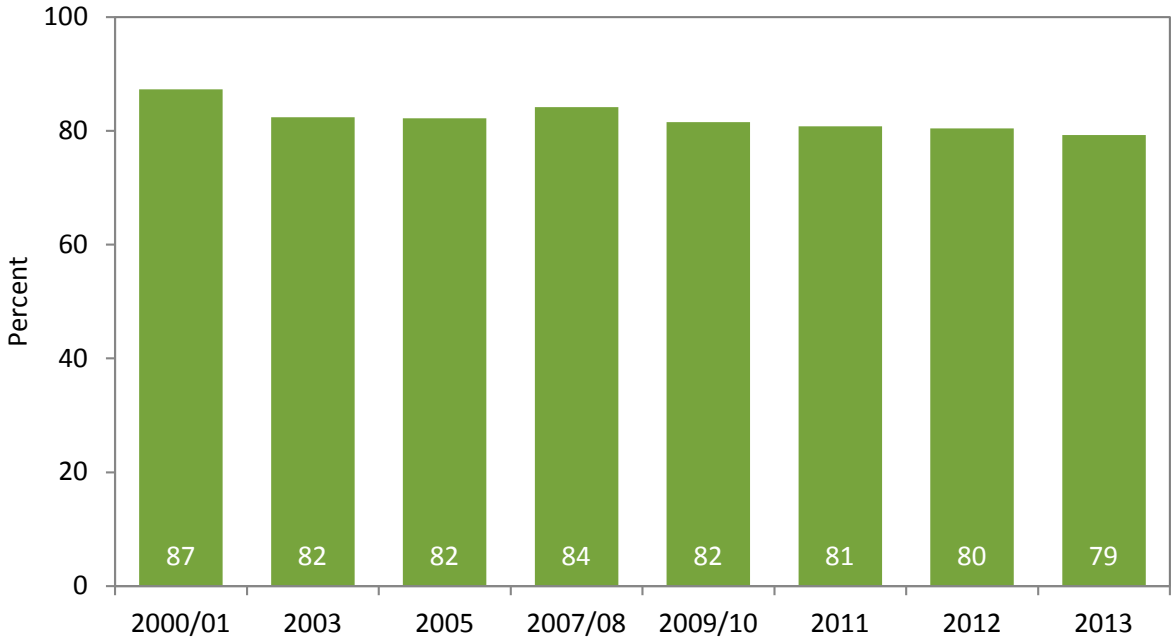
[ix] Marginal estimate. Interpret with caution. Subject to moderate sampling variability.
[x] Marginal estimate. Interpret with caution. Subject to moderate sampling variability.

Figure 3: Daily and Occasional Smoking (Past 30 Days), Ages 18+, Ontario, 2000/01 to 2013



Note: Vertical lines represent 95% confidence intervals. X-axis scale (Year) is not uniform—interpret with caution.
Source: Canadian Community Health Survey 2000/01-2013.

Figure 4: Daily Smoking as a Proportion of Current Smoking, Ages 18+, Ontario, 2000/01 to 2013



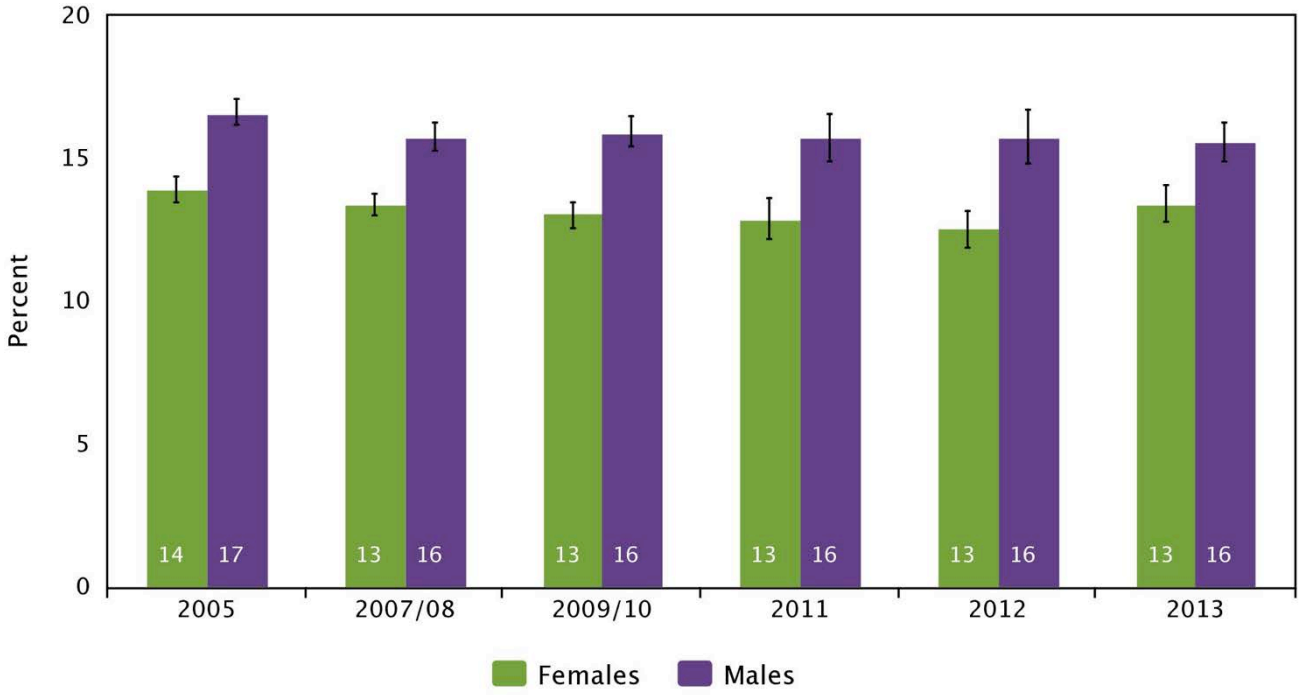
Note: X-axis scale (Year) is not uniform—interpret with caution.
Source: Canadian Community Health Survey 2000/01-2013.

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 2013, the mean number of cigarettes smoked per day by adult male daily smokers in Ontario was 16 (CCHS data; Figure 5), a level that has remained unchanged in recent years. In contrast, adult female daily smokers used 13 cigarettes per day, also unchanged in recent years.
- Over the period 2005 to 2013, males consistently smoked significantly more cigarettes per day than females (Figure 5).

Figure 5: Mean Number of Cigarettes Smoked Daily, by Sex, Daily Smokers, Ages 18+, Ontario, Select Years, 2005 to 2013



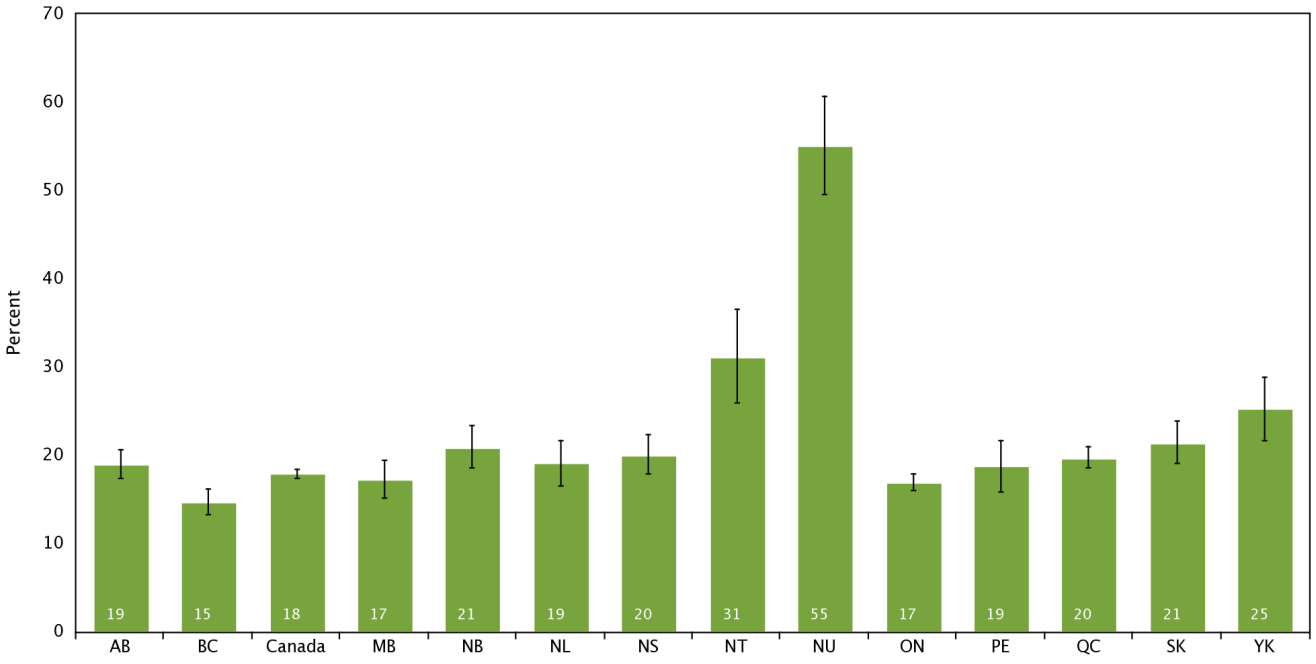
Source: Canadian Community Health Survey 2005, 2007/08, 2009/10, 2011-2013.

Current Smoking (Past 30 Days), by Location

Federal, Provincial, Territorial

- Across Canada in 2013, past 30-day current smoking ranged from 15% in British Columbia to 21% in New Brunswick and Saskatchewan (Figure 6). The highest rate of current smoking was reported in Nunavut at 55% (CCHS data).
- The prevalence of current smoking in Ontario was not statistically different from the national average (17% vs. 18%; CCHS 2013; Figure 6).

Figure 6: Current Smoking (Past 30 Days), by Jurisdiction, Ages 12+, 2013



Note: Vertical lines represent 95% confidence intervals. Ordered alphabetically.
Source: Canadian Community Health Survey 2013.

Ontario Health Regions

- In 2013, current smoking (past 30-day use) among those 12 years and older ranged from 12.2% in Peel to 26.5% in Timiskaming (Table 2). The rate of current smoking in all of Ontario in 2013 was 16.9% (representing 1,963,800 smokers).
- The prevalence of current smoking was 25% (rounded) or more in five of Ontario's 36 health regions (Table 2).

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

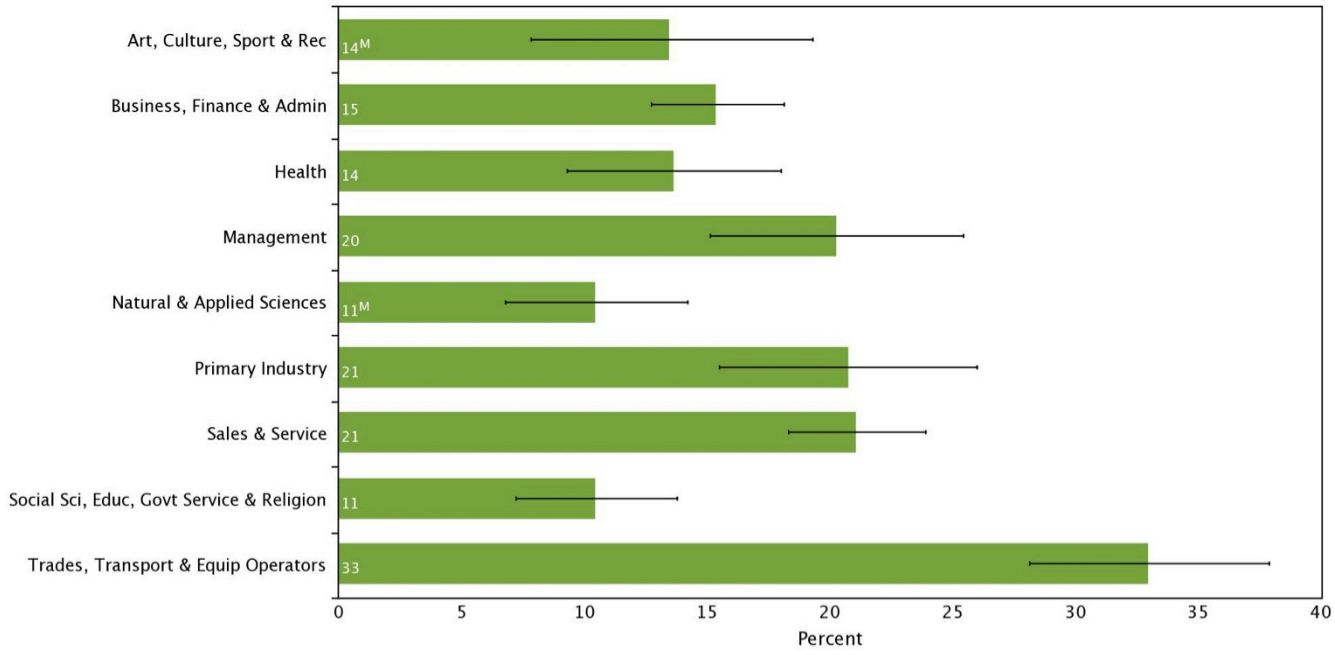
	Current Smoking[a] (%)				
Public Health Unit	**2005**	**2007/08**	**2009/10**	**2011/12**	**2013**
Peel	17.4	15.3	14.8	14.2	12.2
Middlesex-London	16.7	18.9	19.5	18.4	13
Ottawa	16.9	16.3	14.3	14.1	13.8
York Regional	14.5	13.6	15.2	14.7	14.6
Toronto	17	16.2	15	15.3	14.8
Windsor-Essex County	22.6	18.3	21.1	16.1	15.5
Halton Regional	17.2	17.7	16.1	17.4	16
Waterloo	18	20.4	17.1	19.9	16.6
Durham Region	24.1	19.7	17.9	20.8	16.9
Haliburton, Kawartha, Pine Ridge	21.1	23.3	24	23.2	17.1
Northwestern (ON)	21.2	23.2	21.6	16	17.3
North Bay Parry Sound	25.4	25.9	22	25.6	17.3[M]
Oxford County	22.1	27.7	22.5	26.3	17.4[M]
Kingston, Frontenac, Lennox & Addington	21.5	23.2	17	17.1	17.5
Porcupine	28.2	27.7	24.6	27.1	18.1
Elgin-St. Thomas	25.8	24.7	19.3	25.4	18.4
Grey Bruce	20	19.9	17	21.5	18.5
Huron County	23	22	17.1	21.4	18.7
Hasting, Prince Edward	25.6	26.2	26.2	26.7	19
Renfrew County	26.8	23.8	24.1	20.7	19.9[M]
Simcoe Muskoka	22.4	22	23.2	18.6	20.2
Eastern Ontario	25.9	26	24.7	23.7	20.2
Sudbury	23.2	24.5	23.7	25.3	20.2
Chatham-Kent	23.4	25.8	20.5	24	20.7[M]
Wellington-Dufferin-Guelph	20.4	22.1	17.3	19.4	21
Haldimand-Norfolk	28.7	24.1	21.8	22.6	21.1
Algoma	22.5	21.7	27.4	22.7	21.5
Hamilton	21.7	21.6	18.2	18.9	21.6
Perth	18.2	16	21.5	19.1	23.7
Lambton	24.4	23.8	22.3	23.5	24
Thunder Bay	26.1	25.2	23.6	21.7	24.1
Brant	24.7	22	26.4	22.9	24.7
Peterborough	20	21.7	18.5	23.8	24.9
Niagara Region	21.8	23.8	20.2	17.3	25.4
Leeds, Grenville, Lanark	24	22.6	24.5	23.2	25.4
Timiskaming	25.9	22.7	19.2	22.8	26.5[M]
Ontario	19.6	19	17.9	17.8	16.9

[a] Current smoking defined as past 30-day use and 100 cigarettes in lifetime.
[b] Ordered by 2013 current smoking (lowest to highest).
M=Marginal. Interpret with caution: subject to sampling variability.
Source: Canadian Community Health Survey 2005-2013.

Current Smoking (Past 30 Days), by Occupation

- In 2013, current smoking was highest among workers in trade occupations (33%), sales and service (21%), and primary industry (21%), representing a combined total of 688,500 (or 56%) of the 1,232,800 employed smokers in Ontario aged 15 to 75 years (CCHS 2013; Figure 7). In recent years, there have been no observed changes in these data.
- Sales and service had the greatest number of current smokers, representing 350,700 (or 21%) of the 1,232,800 employed smokers in Ontario aged 15 to 75 years (Figure 7).
- Among unemployed Ontarians aged 15 to 75 years, the prevalence of current smoking was 28%, representing 7% (141,000) of the 2 million smokers in Ontario aged 15 to 75 years (CCHS 2013; data not shown).

Figure 7: Current Smoking (Past 30 Days), by Occupation, Ages 15 to 75, Ontario, 2013

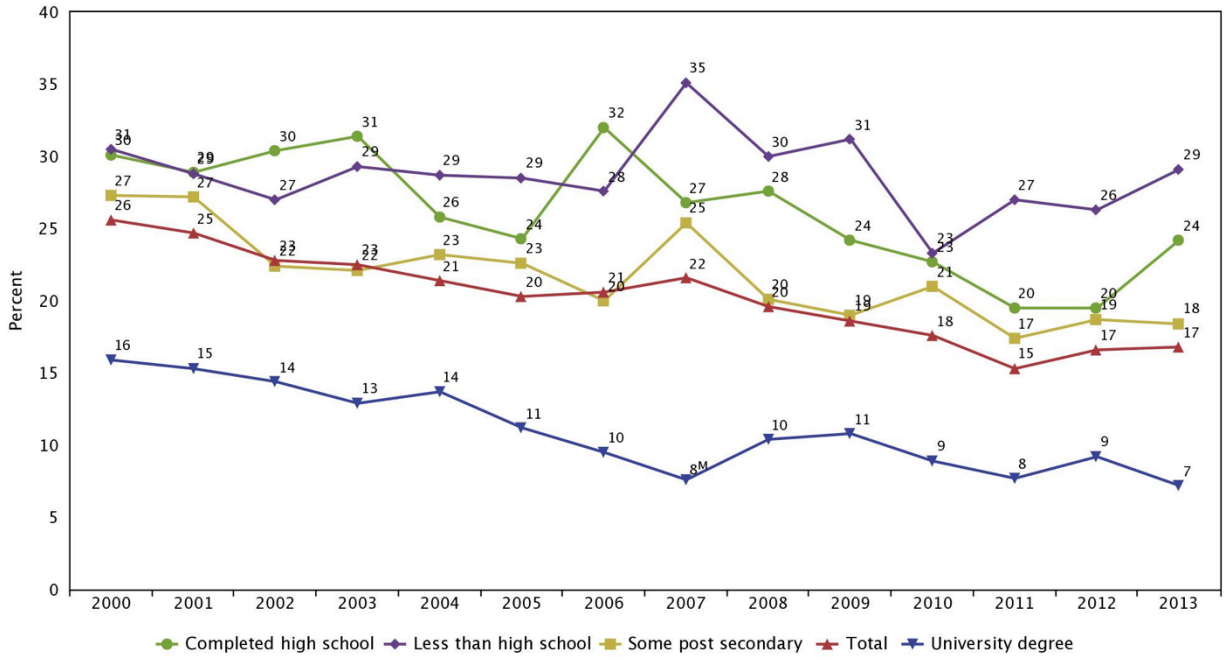


Note: Vertical lines represent 95% confidence intervals. M = Marginal. Interpret with caution: subject to moderate sampling variability.
Source: Canadian Community Health Survey 2013.

Current Smoking (Past 30 Days), by Educational Attainment

- In 2013, 17% of Ontarians aged 18 years and over smoked cigarettes (CAMH Monitor). There was no significant decrease in prevalence from 2000 to 2013 among those with less than high school (30.5% vs. 29%) or those who had completed high school (30% vs. 24%;Figure 8). However, among those with some post-secondary education, current smoking fell from 27% in 2000 to 18% in 2013 and among those with a university degree, current smoking fell from 16% to 7%.
- Over the past few years, levels of smoking have remained steady among Ontarians with some post-secondary schooling or with a university degree (Figure 8).
- In recent years, Ontarians with a university degree were 2 to 4 times less likely to be current smokers than those with less education (Figure 8).

Figure 8: Current Smoking (Past 30 Days), by Educational Attainment, Ages 18+, Ontario, 2000 and 2013



Note: M = Marginal. Interpret with caution: subject to moderate sampling variability.
Source: Centre for Addiction and Mental Health Monitor 2000-2013.

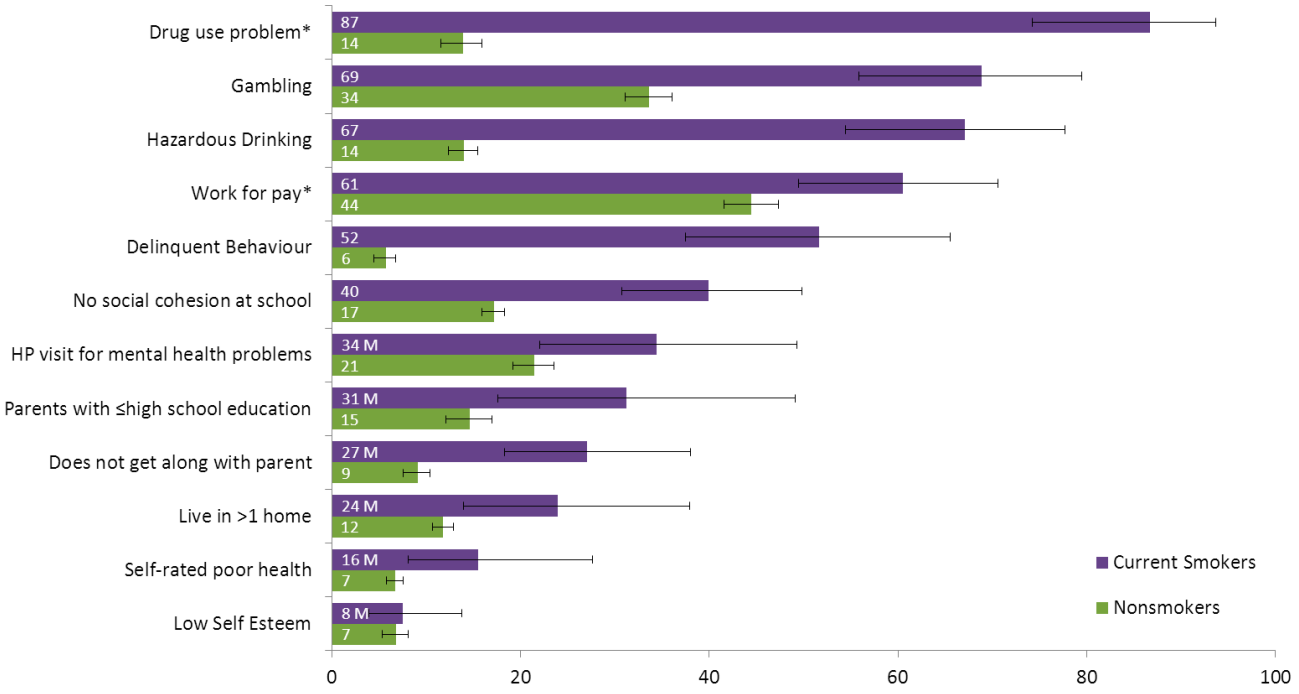
Risk Factors and Social Determinants of Health Associated with Smoking Status

The purpose of this section is to characterize who current smokers are, and to describe the degrees to which smoking behavior correlates with other recognized behavioural and social risk factors for poor health, and other social determinants of health. 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

- Students who were current smokers were significantly more likely than nonsmokers to have a drug-use problem (87% vs. 14%), gamble (69% vs. 34%), be a hazardous drinker (67% vs. 14%), work for pay (61% vs. 44%), engage in delinquent behaviour (52% vs. 6%), feel no social cohesion at school (40% vs. 17%), have parents with high school education or less (31%^{M} vs. 21%), not get along with parents (27%^{M} vs. 9%), currently live in more than one home (24%^{M} vs. 12%), and have poor self-rated health (16%^{M} vs. 7% ; M = Marginal. Interpret with caution: subject to moderate sampling variability) (Figure 9; OSDUHS 2013).

Figure 9: Factors[xi] Associated with Smoking Status among Students in Grades 7 to 12,* Ontario, 2013



Note: *Drug use problem and Work for pay categories sampled youth in grades 9 to 12 only. Horizontal lines represent 95% confidence intervals. M = Marginal. Interpret with caution: subject to moderate sampling variability.
Source: Ontario Student Drug Use and Health Survey 2013.

Young Adults

- Among those aged 18 to 29, more current smokers than nonsmokers identified as White (75% vs. 64%), male (61% vs. 47%), or Aboriginal (9% vs. 4%; CCHS 2013, data not shown).
- More current smokers than nonsmokers aged 18 to 29 drank in excess of the low-risk drinking guidelines (50% vs. 37%) or had been clinically diagnosed with a mood disorder (13% vs. 6%; CCHS 2013, data not shown).
- A greater proportion of current smokers than nonsmokers aged 18 to 29 worked in trades, transport and equipment operator occupations (20% vs. 10%; CCHS 2013, data not shown).
- Concerning social determinants of health, more current smokers than nonsmokers aged 18 to 29 reported renting their current dwelling (49% vs. 35%), not having a family

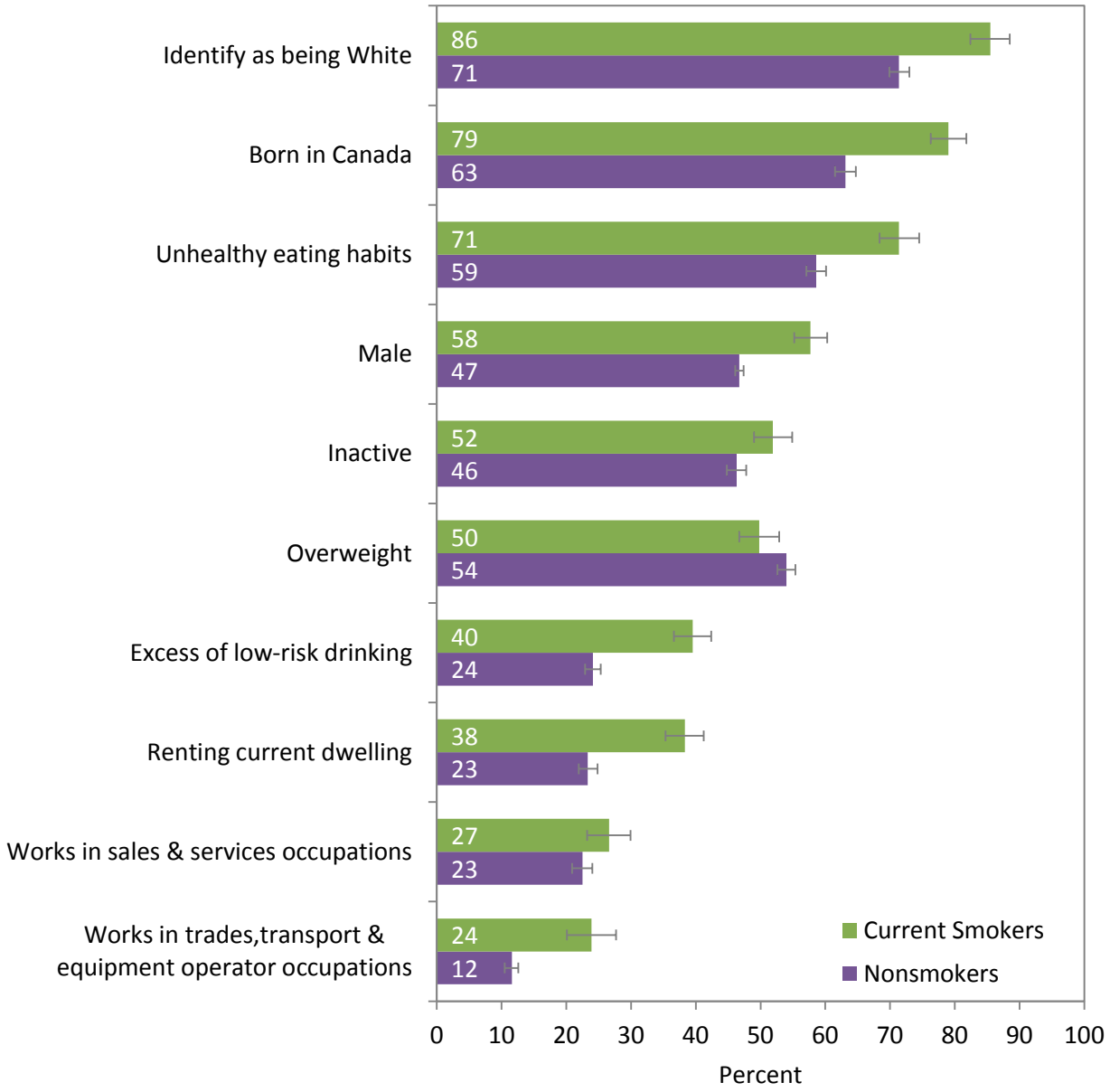
[xi] Indicator definitions and information on data analysis provided in Appendix A.

doctor (26% vs. 15%), having less than high school education (16% vs. 7%), or experiencing severe food insecurity (7% vs. 2%; CCHS 2013, data not shown).

Adults

- Current smokers aged 18 years and older more frequently identified as White than nonsmokers (86% vs. 71%) and as Canadian born (79% vs. 63%; CCHS 2013)(Figure 10).
- Compared to nonsmokers, a greater proportion of current smokers engaged in other behaviours that are risk factors for the development of chronic disease: having unhealthy eating habits (eating less than 5 fruits or vegetables per day: 71% vs. 59%), being inactive in leisure time (52% vs. 46%) and drinking in excess of the low-risk drinking guidelines (40% vs. 24%).
- More young adults aged 18-29 who currently smoke reported drinking in excess of low-risk drinking guidelines compared to all adult current smokers (50% vs. 40%; CCHS 2013; data not shown), with a similar pattern emerging between young adult smokers and nonsmokers.
- A greater proportion of current smokers than nonsmokers were male (58% vs. 47%).
- Similar proportions of current smokers and nonsmokers reported being overweight (50% vs. 54%).
- More current smokers reported living in a rented dwelling (38% vs. 23%) compared to nonsmokers.
- Current smokers more frequently reported working in sales and service occupations than nonsmokers (27% vs. 23%) and working in trades, transportation and equipment operation occupations (24% vs. 12%).
- Compared to nonsmokers, a greater proportion of adult current smokers reported poorer social determinants of health, such as lower education (less than high school: 17% vs. 12%; CCHS 2013, data not shown), not having a regular family doctor (16% vs. 8%; CCHS 2013, data not shown), or were categorized as severely food insecure (6.2% vs. 1.5%; CCHS 2013, data not shown).

Figure 10: Factors[xii] Associated with Smoking Status, 18+, Ontario, 2013



Note: Horizontal lines represent 95% confidence intervals.
Source: Canadian Community Health Survey 2013.

[xii] Indicator definitions and information on data analysis provided in Appendix A.

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 3).

Table 3: 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, 13.1% among 12+, 2013 (Note: Compared to MPOWER definition, the age used here for Ontario is slightly lower (12 years in Ontario vs. 15 years), 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) 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 key strategy for achieving health equity in Ontario.[8] The SAC report includes several recommendations addressing disparities and equity, targeted interventions, community involvement, and evaluation and monitoring (Table 4). Reducing differences in tobacco use between population groups is expected to contribute to improved health equity.

Table 4: Scientific Advisory Committee Recommendation for Tobacco-related Disparities and Equity

Goal: 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 key strategy for achieving health equity in Ontario.	
Recommendations	**Current Status**
Disparities and Equity	
[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.	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	
[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.	Ontario has not earmarked funds generated by increased taxes on tobacco to targeted interventions. Although not directly linked to increased taxation, the Ontario government directs funds to some sub-populations which may not benefit from universal interventions: 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 2013/14, a total of 28,309 ODB patients received cessation medication. The Ministry's Health System Research Fund promises to address several targeted populations once these awards are announced.
Community Involvement	
[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.	Various public health units involve youth and young adults in conceptualization, design and implementation of interventions
Evaluation and Monitoring	
[8.4] Ensure monitoring and surveillance of tobacco-related disparities, and that evaluation of policies and services, capture the differential impact on sub populations.	Strategy funds the Ontario Tobacco Research Unit to conduct monitoring and surveillance initiatives including working with SFO partners on evaluation.

Chapter 3: Youth Prevention

Prevention: Smoke-Free Ontario Strategy Components

A comprehensive approach is required to prevent and reduce prevalence of tobacco use among youth due to the complexity of factors that determine smoking initiation in this population.[10] This 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 11).

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

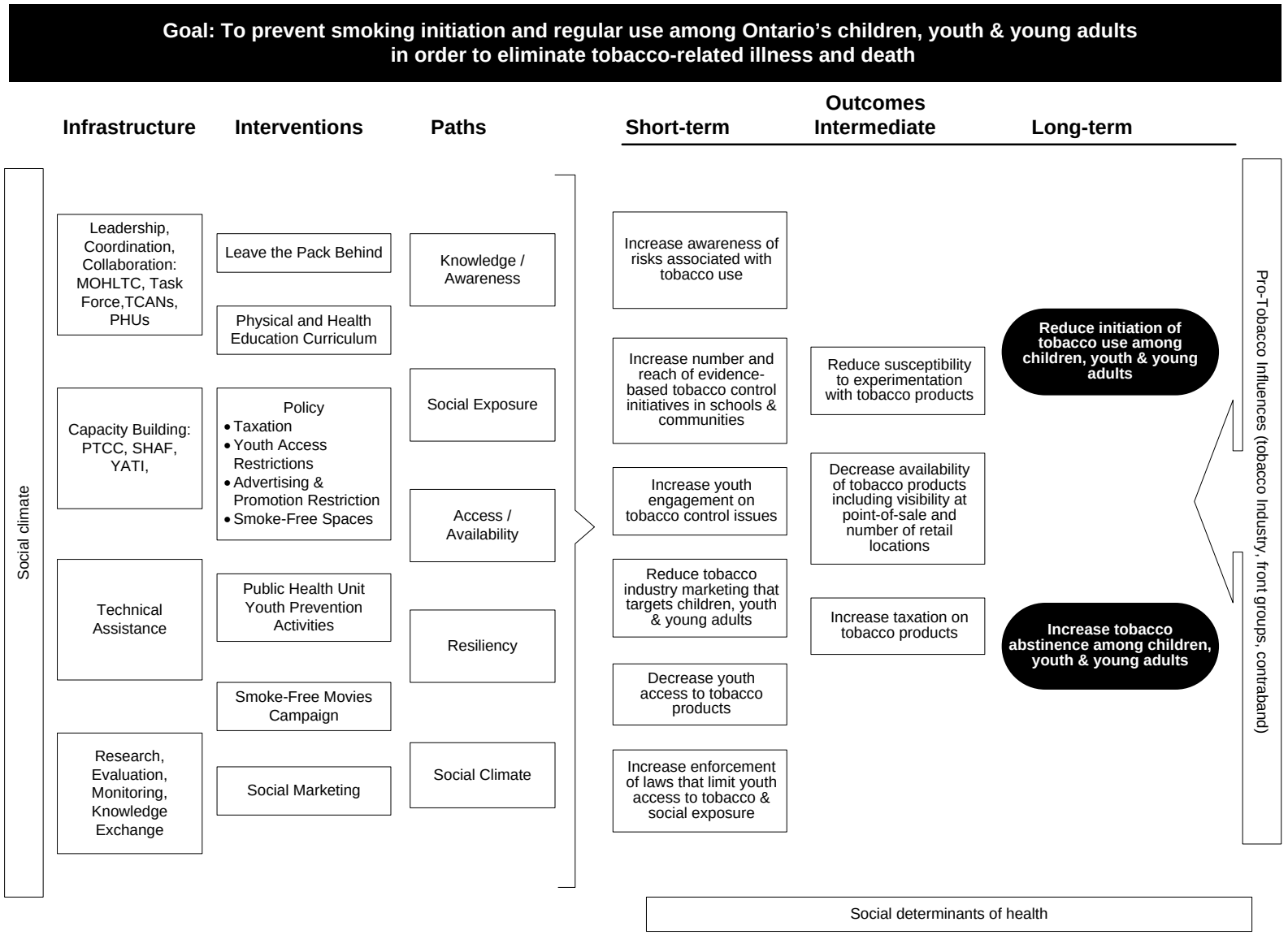
Prevention Infrastructure

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, including public health units (PHU), Tobacco Control Area Networks (TCAN), the Ontario Tobacco Research Unit (OTRU), the Program Training and Consultation Centre (PTCC), Smoking and Health Action Foundation (SHAF), and the Youth Advocacy Training Institute (YATI).

Prevention Task Force

The Smoke-Free Ontario Strategy's Prevention Task Force is 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.

Figure 11: Prevention Path Logic Model



Public Health Units (PHUs)

PHUs are important 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. Because the focus of this chapter is on large prevention interventions with provincial-wide outcomes, PHU specific programs are reviewed only briefly. However, we do report on PHU Youth Prevention activities under the Interventions to Build Knowledge and Resiliency section.

Tobacco Control Area Networks (TCANs)

TCAN Coordinators and Youth Development Specialists from each of the seven TCANs, representing the 36 public health units, 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. One of the more important roles TCANs play is to plan and execute large regional projects and coordinate regional media and public relations activities. Regional action planning around prevention has involved the development of a number of initiatives. For example, the *Play, Live, Be Tobacco-Free* has developed resources, a collaborative network, and a provincial framework to support local and regional communities to develop tobacco-free policies within sport and recreation organizations.[11] (A website developed by this project along with associated resources is currently being maintained by the PTCC.) TCANs also assist in assessing local public health unit training and technical assistance needs around youth prevention, and they help communicate Ministry policies and activities including local media and public relations initiatives.[3]

Ontario Tobacco Research Unit (OTRU)

OTRU provides research, monitoring, evaluation, and teaching and training resources to the prevention component of the Strategy. Prevention projects conducted by OTRU investigate the influence of student and school-level characteristics on tobacco use behaviour, predictors of tobacco use comorbidities among young adults, and new approaches to youth access policy compliance. In addition, OTRU provided rapid scientific consulting to the Ministry and SFO partners, and responded to 60 knowledge and evaluation support requests from partners in 2013/14. OTRU's online tobacco control course has a prevention module that is widely used by public health professionals in Ontario. A total of 777 people enrolled in the online course prevention module in 2013/2014.

Program Training and Consultation Centre (PTCC)

The Program Training and Consultation Centre provides a range of evidence-based services to build capacity for comprehensive tobacco control at the community level. These activities include

training programs, consultation services, and knowledge exchange initiatives. The PTCC provides these services to Ontario local public health units, regional Tobacco Control Area Networks, community health centres, voluntary organizations and other health and human service providers that are active in comprehensive tobacco control.

Under prevention, PTCC provides training in the foundations of the *Smoke-Free Ontario Act* and conflict resolution training to Tobacco Enforcement Officers, whose enforcement responsibilities include the enforcement of youth access policies. PTCC also supports province-wide Communities of Practice in a variety of tobacco control areas (e.g., Tobacco Use Reduction for Young Adults, Outdoor Smoke-Free Spaces and Tobacco-Free Sport and Recreation). 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 outdoor space bylaw development, flavoured tobacco products, e-cigarettes).

Program Reach (All pillar goals, combined): In 2013/14, the PTCC delivered 49 training events reaching over 1800 clients. Training events included 37 workshops and 12 webinars. PTCC's training programs were highly attended by staff of Ontario's 36 PHUs. Participants from Community Health Centres, the health care sector (e.g., hospitals,), community coalitions, non-governmental organizations and government were also well represented. Tobacco control consultations were also delivered to all local PHUs and TCANs. Approximately 260 public health practitioners and researchers were actively engaged in PTCC's provincial Communities of Practice.[xiii]

Smoking and Health Action Foundation (SHAF)

SHAF engaged in a number of prevention-related activities in 2013/14 to support, educate and build capacity in the Ontario public health community including PHUs and TCANs. SHAF has provided training, technical assistance and knowledge exchange to Strategy partners (including PHUs and TCANs) on a number of current and emerging prevention topics such as e-cigarettes, waterpipes, contraband, tobacco taxation, retail reform (including licensing and zoning measures) tobacco industry activity, and smoke-free movies. SHAF co-chairs the Ontario Coalition for Smoke-Free Movies.

[xiii] Steven Savvaidis, Personal Communication, December 2, 2014

Youth Advocacy Training Institute (YATI)

The Ontario Lung Association's 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.

A June 2013 summative evaluation of YATI activities reveals that training programs have continued to improve in content, style and delivery, and these programs have led to an increase in knowledge and skills required to engage youth and adults in health promotion and advocacy-oriented activities to prevent chronic diseases.[12]

In 2013/14, YATI delivered 56 regular trainings across Ontario including 49 trainings for youth (n = 1,015) and 7 trainings for adults (n = 286). Youth received training on a variety of topics including: advocacy, public policy, health promotion and targeting the tobacco industry. Adult training focused on youth engagement and development as well as support for youth in the creation of health promotion campaigns.

YATI held 22 partnership and special event trainings in 2013/14 involving 370 youth and 63 adults. Partnership training included the following programs: *Northern First Nations Hockey Tournament*, *Tobacco-Wise Project* – Cancer Care Ontario; Ontario Federation of Indian Friendship Centres; Ontario Physical and Health Education Association *School-Based Tobacco Prevention Pilot Project*. Special event training included YATI Trainer Development Day, Youth Leadership Program, *N.O.T. (Not On Tobacco)* Training, Public Health Unit – Knowledge Exchange Conference, and the National Conference on Tobacco or Health

Across all YATI trainings, participant satisfaction was high. The change in knowledge (participants' skills and knowledge of resources) significantly increased from pre to post training. Participants also reported increased confidence in their skills and ability to engage in health promotion and advocacy work in the community. In the year following training, 74.5% of youth participants reported that they were able to apply the knowledge and skills learned in the trainings to a range of tobacco cessation and prevention activities.

Prevention Interventions

The Smoke-Free Ontario 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.

Given the nature of some of the interventions and challenges in attributing changes in prevention-related outcomes at the population level to particular interventions, evaluative data are not currently available for all prevention interventions discussed in this chapter. Recent data on the effects of price, availability of contraband cigarettes, and smoke-free policies on prevention-related outcomes are also not currently available.

Interventions to Build Knowledge and Resiliency

The province's current mix of prevention initiatives aim to increase knowledge and resiliency to prevent tobacco use among youth and young adults. In Ontario, these initiatives include: school-based programs, *Leave The Pack Behind*, and programs that directly involve youth in program planning and implementation.

Educational Programs

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.

The health and physical education expectations of students are grouped into three related strands: Active Living, Movement Competence, and Healthy Living. Living Skills expectations are found within each strand. The Healthy Living strand comprises four topic areas, one of which is substances use, addictions and related behaviours. Under this topic area, 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.[13] Each resource includes ready-to-use lesson

plans and other supports such as student templates, assessment tools, and daily physical activity ideas.

Tobacco Use Prevention in Schools

Under the renewed Smoke-Free Ontario Strategy, the Ontario Government is committed to working with educators and young people to keep schools smoke-free. As part of this process, the Ministry of Health and Long-Term Care has funded the Ontario Physical and Health Education Association (Ophea) to implement a school-based tobacco prevention pilot program in grades 6 to 11 during the 2013/14 and 2014/15 school years. Running in 8 elementary and 16 secondary schools, the pilot program takes a comprehensive tobacco control approach touching on four main components that are aligned with the Foundations for a Healthy School framework.[14] These components include high-quality instruction and programs, a healthy physical environment, a supportive social environment, and community partnerships. This project is being run in partnership with the Youth Advocacy Training Institute, the Centre of Excellence for Youth Engagement, and local public health units.

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 and campus policies; and provide general tobacco control education.

LTPB's annual *wouldurather...* contest challenged post-secondary students and young adults aged 18 to 29 to quit, reduce, or stay smoke-free for a 6-week period. In 2014, the prevention component of the contest attracted 8,304 registrants who were nonsmokers or former smokers and pledged to be smoke-free for the duration of the contest (the majority of these registrants were students—8,065)

LTPB integrated keys elements of the Province's *Quit The Denial* campaign—including the tag line "social smoking is smoking"—into its own *Preventing the Initiation and Escalation of Smoking* campaign. This campaign targeted nonsmokers and social smokers to prevent nonsmokers from starting to smoke and social smokers from escalating their use. Students were educated about the dangers of any level of tobacco use; encouraged to unpair drinking and smoking and were

provided with support to quit smoking. Based on a survey of 3,690 students from 44 campuses across the province, 38% of respondents were aware of this campaign.[15]

Youth Prevention (Public Health Units)

There is growing recognition that a youth engagement approach is an important strategy to promote positive health behaviour change[16,17,18,19] and is in keeping with recommendations issued by the Tobacco Strategy Advisory Group to decrease the number of youth who try smoking. Research studies have shown that youth engagement is a promising approach to raise awareness of the harmful effects of tobacco use, empower youth, and build skills to resist tobacco use initiation.[16,20]

In recent years, the MOHLTC 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.[21] Youth Engagement Coordinators focus their work on a number of activities including: training on the principles of youth engagement across PHU programs, the funding of youth-led health promotional activities, the ongoing recruitment of youth to engage in healthy tobacco control in the community, and creation of opportunities for peer networking and learning.[21]

Numerous 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 ongoing projects and other work supporting a one-time event. For instance, TCAN-wide projects in Prevention include: *Measuring youth engagement and development* (North East), *Social Identities Project* (South West, Central West), *Dental Health Messages* (South West), *Smoke-Free Movie Nights* (South West), *Boy Scouts Prevention Program* (South West), *Love My Life Campaign* (Eastern), *Expose* (Eastern), *Why You Puffin* (Toronto). Several additional programs are listed under the Availability and Access section of this chapter.

Interventions to Limit Physical and Social Exposure

A number of tobacco-control policies have been implemented that limit physical and social exposure (i.e. the visual exposure to tobacco products and/or use in social environments). For

instance, policies include restrictions on smoking in schools, bars and restaurants, vehicles and workplaces; advertising and promotion of cigarillos, blunt wraps and flavoured tobacco; and display bans at point of purchase.[22] Protecting Ontarians from exposure to secondhand smoke is a goal unto itself but also has secondary prevention effects. Youth who are not exposed to secondhand smoke are not exposed to harmful constituents in tobacco smoke. Lower exposure to secondhand smoke also provides less modeling/social acceptability of smoking. (See the Protection chapter for additional details.)

Availability and Access

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.

The current retail tobacco system in Ontario allows tobacco to be readily accessible 24 hours a day, seven days a week, in essentially every corner store, gas station and grocery store, as well as a myriad of other outlets. In Ontario, there is one tobacco retail outlet per 1,000 people aged 15 years or more.[23] The omnipresence of retail stores that sell tobacco products serves to increase consumption, normalize tobacco products and tobacco use, and undermine the health-risk messaging of government authorities and health groups.[23]

The Tobacco Strategy Advisory Group (TSAG) identified the pervasive availability of tobacco products in the retail environment as a major issue for tobacco control in Ontario. TSAG makes two main recommendations: (a) Ontario should move toward a system of designated sales outlets, by using licensing strategies and zoning laws to reduce the number of tobacco retailers and locations permitted to sell tobacco products; and (b) Ontario should increase the number of specific places that are prohibited from selling tobacco products to match or exceed similar bans in leading Canadian provinces.

Next, we discuss various aspects of availability including product prohibitions, taxation, vendor locations, vendor licensing, minimum age restrictions, vendor compliance and youth access, and public support for availability measures.

Bans on the Sale of Single and Flavoured Cigarillos

In 2010, the *SFOA* and the Federal Bill C-32 (passed in 2009) banned the manufacture, importation and sale of flavoured cigarettes, cigarillos and blunt wraps[xiv] (except menthol).[22] Cigarillos are classified as smaller versions of cigars that resemble a cigarette in size and shape, are wrapped in tobacco leaf, and contain a cigarette filter or weigh 1.4 grams or less. Previously, cigarillos were sold in a variety of flavours (grape, vanilla, maple, cherry, strawberry, etc.) and were available in tubes or small boxes resembling candy or lip-gloss. Small cigars weighing more than 1.4 grams—still commonly referred to as cigarillos even though they don't meet the legal definition—continue to be sold in a variety of flavours.

Regulations also aligned the packaging requirements of cigarillos with that of cigarettes. Rather than being sold as single units for as low as $1, cigarillos must be sold as part of a package that contains a minimum quantity of 20 sticks.

Contribution: In Ontario, wholesale sales of the total cigar category (little cigars/cigarillos and cigars) have fallen 19% since 2009, the year in which sales were the highest level reported in recent years (185,743,828 unit sticks in 2009 to 150,258,186 units in 2013).[xv] In 2013, 83% of the Ontario market comprised flavoured cigars, with menthol comprising 2.5% of all cigar sales. On November 24, 2014, the Ontario Government introduced legislation that would ban the sale of flavoured tobacco. The regulation is expected to take effect in January 2016, with a delayed implementation date for menthol-flavoured tobacco products.

Tobacco Taxation

Youth, particularly older adolescents, are very sensitive to the cost of tobacco products.[24,25,26] Specifically, higher cigarette prices have been shown to prevent youth initiation,[24] prevent adolescents from becoming daily, addicted smokers and can impact the smoking behaviour of youth who are further along the smoking uptake continuum.[27] Increases in the price of tobacco through taxation are central to any preventive approach. Currently, Ontario has the second lowest total tobacco taxes in Canada ($59.18), with an average retail price of $88.64 per carton (Table 5).

[xiv] Similar to rolling paper, a blunt wrap is a sheet or tube made of tobacco, which can be used to roll cigarette tobacco.
[xv] Health Canada, Personal Communication, November 12, 2014.

Table 5: Federal/Provincial/Territorial Tobacco Tax Rates (per 200 Cigarettes, June 2014)

Province	Average Pretax Price[a]	Federal Excise Duty[b]	Provincial/ Territorial Excise Tax	Provincial/Territorial Sales Tax[c] or HST	Federal GST[d] (5%)	Total Tobacco Taxes	Total Retail Price
Alberta	$27.48	$21.03	$40.00	No PST	$4.43	$65.46	$92.94
British Columbia	$31.13	$21.03	$47.80[e]	No PST	$5.00	$73.83	$104.96
Manitoba	$32.30	$21.03	$58.00	PST: 7% = $8.91	$5.57	$93.50	$125.80
New Brunswick	$19.42	$21.03	$38.00	HST: 13% = $10.20	See HST	$69.23	$88.65
Newfoundland	$27.90	$21.03	$47.00[f]	HST: 13% = $12.47	See HST	$80.50	$108.40
NW Territories	$34.02	$21.03	$57.20	No PST	$5.61	$83.84	$117.86
Nova Scotia	$29.35	$21.03	$47.04	HST: 15% = $14.61	See HST	$82.68	$112.03
Nunavut	$25.54	$21.03	$50.00	No PST	$4.83	$75.86	$101.40
Ontario	**$29.46**	**$21.03**	**$27.95[g]**	**HST: 13% = $10.20**	**See HST**	**$59.18**	**$88.64**
Prince Edward Island	$28.11	$21.03	$45.00	HST: 14% = $13.18	See HST	$79.21	$107.32
Quebec	$30.49	$21.03	$29.80	No PST	$4.07	$54.90	$85.39
Saskatchewan	$29.17	$21.03	$50.00	PST: 5% = $5.01	$5.01	$81.05	$110.22
Yukon	$25.54	$21.03	$40.00	No PST	$4.43	$67.46	$93.00

[a] This average estimate of "pre-tax price" for each province is calculated using the Consumer Price Index (CPI) and the CPI Intercity Index from Statistics Canada for a carton of 200 cigarettes in 2011. The full methodology for the calculations is available from NSRA by request.
[b] Federal tobacco tax increase effective February 12, 2014. See http://www.budget.gc.ca/2014/docs/plan/pdf/budget2014-eng.pdf
[c] PST/HST is calculated on the total of pre-tax price plus federal excise duty plus provincial excise tax.
[d] GST is calculated on the total of pre-tax price plus federal excise duty plus provincial excise tax.
[e] British-Columbia tobacco tax increase effective April 1, 2014. See http://bcbudget.gov.bc.ca/2014/bfp/2014_Budget_Fiscal_Plan.pdf
[f] Newfoundland tobacco tax increase effective March 28, 2014. See http://www.budget.gov.nl.ca/budget2014/speech/budget_Speech_2014.pdf
[g] Ontario tobacco tax increase effective May 2, 2014. See http://www.fin.gov.on.ca/publication/tobacco-tax-rates-en.pdf.
[h] Quebec tobacco tax increase effective June 5, 2014. See http://www.budget.finances.gouv.qc.ca/budget/2014-2015a/en/documents/AdditionalInfo.pdf
Source: 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 June 2014 (http://www.nsra-adnf.ca/cms/file/files/140605_map_and_table.pdf).

Tobacco Retail Availability

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 healthcare 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 (11,581 in 2013),[31] primarily convenience, gas, and grocery stores.

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.[32,33] 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.[34] Those exempted from this ban include tobacconists, duty free retailers, and manufacturers.

Tobacco Vendor Locations

In 2013, the total number of tobacco vendors operating in Ontario was 11,581. This is down from 12,455 in 2012 (Tobacco Inspection System, 2014)[31] and a further decrease from the approximate 14,000 tobacco vendors that were operating in 2006. Sixty-five per cent of Ontario tobacco retail outlets are located within 500 metres of a school.[23] Tobacco retailers are also more likely to be located in lower socioeconomic status neighbourhoods.[23]

Higher tobacco retail outlet density has been associated with higher rates of youth smoking and increased likelihood of young smokers purchasing their own tobacco.[29] According to the 2013 Ontario Student Drug Use and Health Survey, approximately 16% 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 (52.5%) reported getting their last cigarette from social sources such as a friend or family member.[9] Young smokers report that they would smoke less if they had to travel farther to buy cigarettes.[35]

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.[36] As of January 1, 2015, Ontario has increased the number of locations prohibited from selling tobacco including college and university campuses.[30]

Tobacco 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.[37,38] Most provinces in Canada have not established tobacco retailer license fees, but there are a few exceptions. For example, Nova

Scotia has a tobacco retailer licence fee of $120.95, renewable every 3 years.[39] 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.

Some municipalities have implemented their own licensing structures. Some of the highest annual fees are charged in St. Albert, Alberta ($700),[40] Ottawa, Ontario ($445)[41] and Hamilton, Ontario ($394).[42]

Minimum Age of Cigarette Purchase

The minimum age of cigarette purchase in Ontario is 19 years old; it is an offence to sell or supply tobacco to anyone under the age of 19. As of May 31, 2006 the *Smoke-Free Ontario Act* requires retailers to request identification if a person trying to buy cigarettes appears to be under the age of 25.[22,43] To make it easier for retailers to identify potential underage customers, the Ontario government has added a new age identifier to drivers' licenses that clearly show the exact date that a cardholder turns 19.[43]

Tobacco Vendor Compliance with Youth Access Laws

In 2013, there were 22,857 youth access checks (compliance or enforcement) conducted in Ontario, in which a test shopper entered a store. The test shopper was sold a tobacco product 1290 times.[31] Ninety-six per cent of Ontario tobacco vendors were found to be in compliance with youth access legislation at the time of their last inspection.[31]

OTRU, in partnership with the MOHLTC and local PHUs, recently evaluated a pilot project that focuses resources on addressing retail non-compliance based on a risk-based enforcement model. Results suggest that PHUs having retailers in the moderate or high-risk groups, which were visited more often, were able to significantly increase compliance among these retailers. Overall, this study suggests that resources for inspections were saved and compliance increased significantly from the pre- to the post-intervention period.[44]

Youth Experience with Vendor Sales

In 2012/13, 36% of youth in grades 10 to 12 reported having been asked for identification when buying cigarettes in a store. Significantly more boys than girls reported having been asked for ID

(40% and 25%, respectively) (Youth Smoking Survey [YSS] 2012/13, data not shown). In the same survey, 26% of youth in grades 10 to 12 reported that the last time they tried to buy cigarettes in a store, someone refused to sell to them. Slightly more boys than girls were refused (27% and 23%, respectively) (YSS 2012/13, data not shown).

Ease of Obtaining Cigarettes

In 2013, 60% of students in grades 7 to 12 under the age of 19 believed it was easy to obtain cigarettes, a significant increase from 51% in 2011 (OSDUHS, data not shown). In 2013, 94% of past-year smokers believed it was easy to obtain cigarettes, unchanged from 2011.

Interventions to Limit Availability and Access

Activities to Promote Smoke-Free Movies

In response to the high number of tobacco impressions found in youth-rated films shown in theatres across Ontario, the Ontario Coalition for Smoke-Free Movies formed in May 2010 to challenge the presence of tobacco imagery in movies. This initiative involves partnerships among YATI, the Ontario Lung Association, the TCANs, the Canadian Cancer Society, Ontario Division, Heart and Stroke Foundation of Ontario, Non-Smokers' Rights Association/Smoking and Health Foundation (SHAF), and Physicians for a Smoke-Free Canada.

Between 2004 and 2013, 57% (818/1434) of top-grossing movies—including 54% (701/1289) of youth-rated movies (i.e., excluding 18A and R)—featured onscreen tobacco.[45] Over this same period, these top grossing movies contained a total of 26,850 tobacco incidents, with 2498 incidents occurring in 2013. Over the seven years (2005, 2007 to 2012) where data were available, it is estimated that, on average, 13,241 current smokers in Ontario aged 12 to 17 were recruited to smoking in a year because of watching smoking in movies. It is projected that, on average, 4,237 of these smokers will die prematurely as a result of tobacco imagery in movies.[45]

Freeze the Industry

Freeze the Industry is a youth-led campaign that is active in the majority of TCANs across the province. This campaign aims to: a) raise awareness among youth about tobacco industry products, and b) increase support for a Canadian wide ban on the sale of flavoured tobacco products.

Bad Ways to be Nice

Bad Ways to Be Nice is a campaign of 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.

Know What's in Your Mouth

In the fall of 2013, the Central East TCAN and their partners implemented the *Know What's in Your Mouth* (KWIYM) prevention campaign to increase awareness among high school aged youth in the region about the negative health effects associated with using smokeless tobacco. The KWIYM campaign gained momentum in several Central East communities via grass root health promotion activities adapted from a campaign toolkit. In 2014, the Central East TCAN is promoting a regional media campaign as well as encouraging local grass root activities adapted from the KWIYM toolkit

Back to Basics

Back to Basics is a health education campaign run by the North East TCAN that seeks to increase awareness of youth access to cigarettes among adults in the region. This campaign uses a social marketing strategy to disseminate messaging (TV ads, online and hardcopy newspaper ads, Facebook video, and other social media resources such as YouTube).

Public Support for Curtailing Youth Access to Tobacco

In 2011, there was strong agreement (85%) that friends and family who supply tobacco to young people less than 19 years of age should be fined, a finding consistent over the last decade (ranging from 80% to 85%; CAMH Monitor, data not shown).

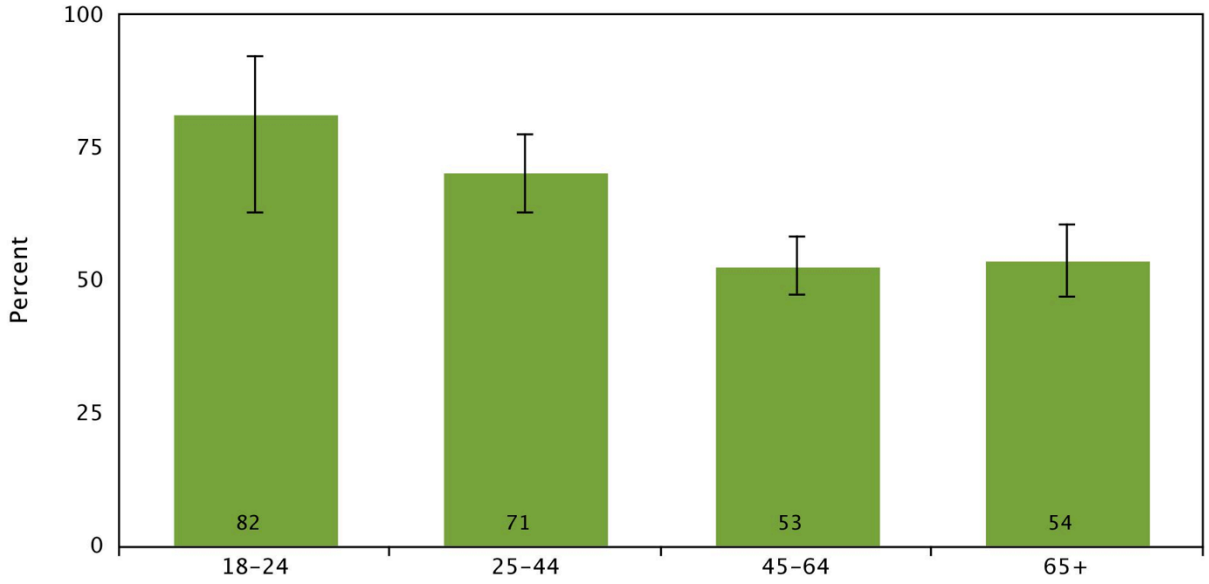
In 2013, 83% of Ontario students in grades 7 to12, under 19 years of age, indicated their support for further restrictions on tobacco sales. Thirty-six per cent agreed that tobacco products should not be sold at all; 29% responded they should be sold in government-owned stores, similar to the way alcohol is sold in liquor stores; 17% responded that tobacco products should be sold in a number of places as they are now (OSDUHS 2013, data not shown).

Public Support for Limiting Availability of Cigarettes

Retail Sales

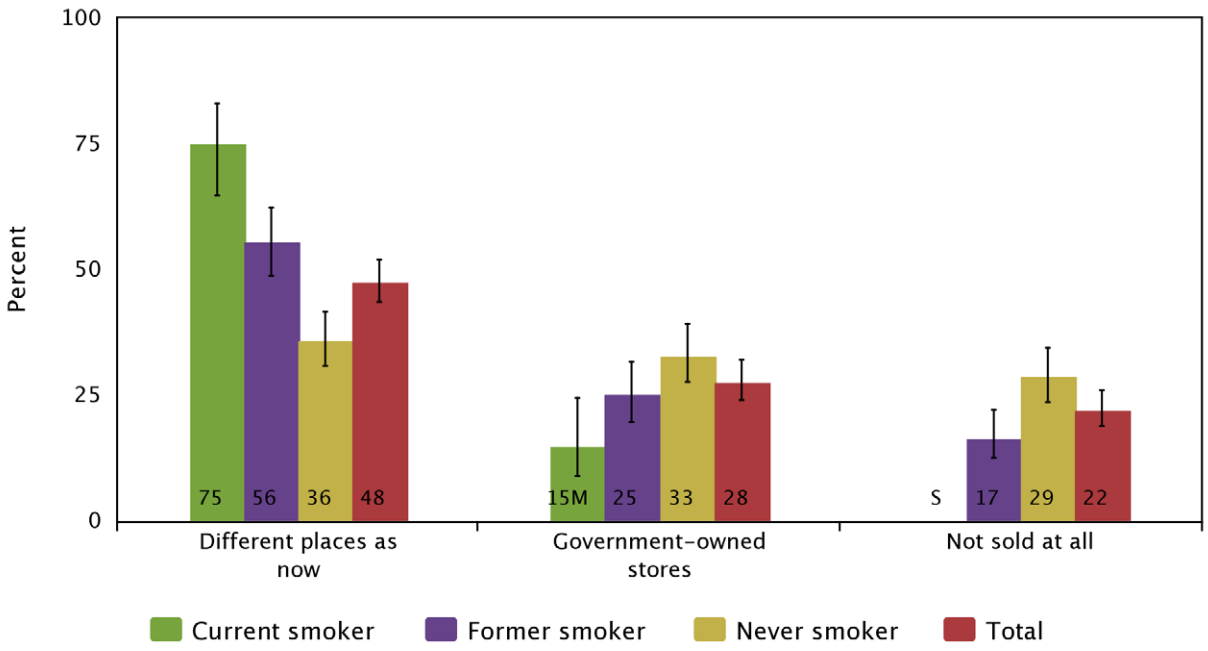
- In 2013, 62% of all Ontario adults agreed that the number of retail outlets that sell cigarettes should be greatly reduced, a rate unchanged in recent years (CAMH Monitor, data not shown).
- Significantly more young adults aged 18 to 24 (and adults 25 to 44) thought that the number of retail outlets should be reduced than did older adults aged 45 years and older (Figure 12).
- Three quarters (75%) of never smokers agreed with this policy option compared to 35% of current smokers and 52% of former smokers (vs. 74%, 38%, 63% respectively in 2012; data not shown).
- In 2013, 50% of adults in Ontario indicated their support for further restrictions on tobacco retail locations (49% in 2012). Two in ten (22%) responded that tobacco products should not be sold at all (vs. 21% in 2012; Figure 13); 28% responded tobacco should be sold in government owned stores similar to the way alcohol is sold in Liquor Control Board of Ontario stores (no change from 2012); 48% of adults agreed that tobacco should be sold in a number of different places, as they are now (vs. 49% in 2012).

Figure 12: Agreement that the Number of Retail Outlets Selling Cigarettes Should Be Reduced, by Age, Ontario, 2013



Note: Vertical lines represent 95% confidence intervals.
Source: Centre for Addiction and Mental Health Monitor 2013.

Figure 13: Views on How Tobacco Should Be Sold, Ages 18+, Ontario, 2013

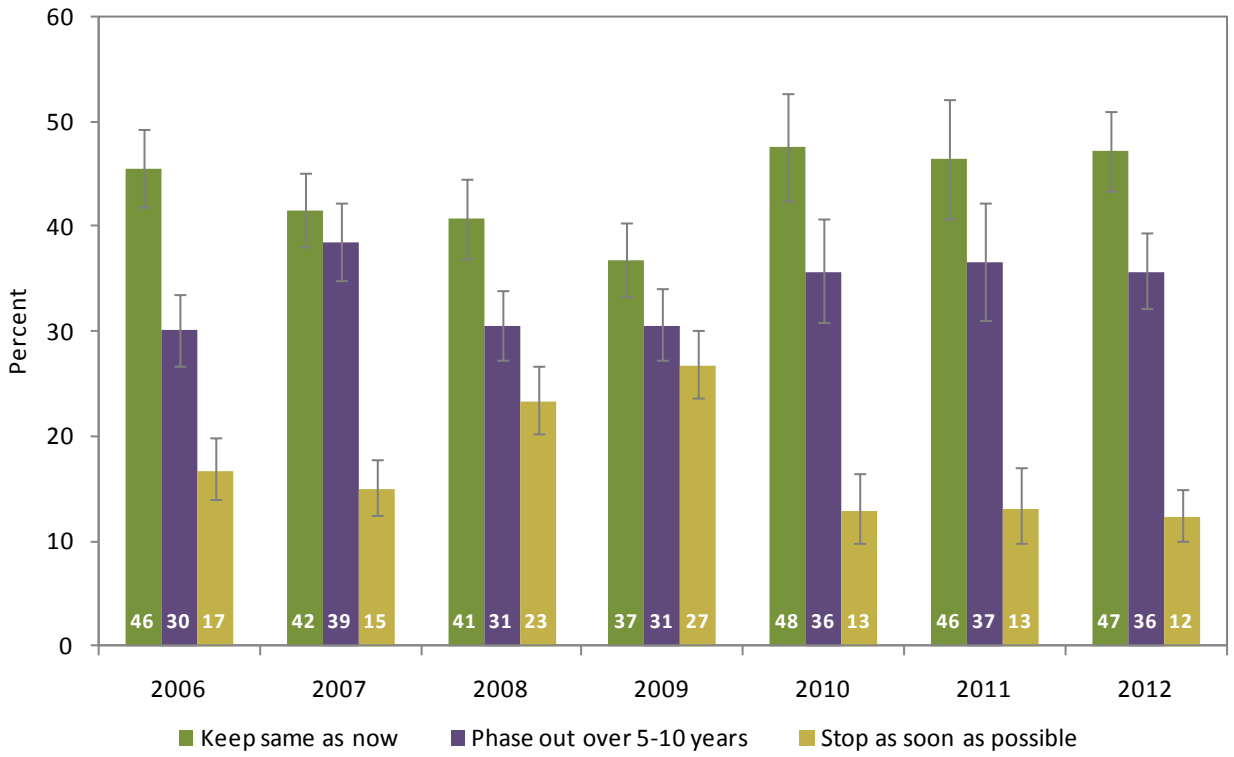


Note: Survey wording as follows: Which of the following comes closest to your view of how we should treat tobacco products in Ontario? Tobacco products should be sold in a number of different places, AS THEY ARE NOW; Tobacco products should be sold in government-owned stores similar to the way alcohol is sold in LCBO stores; Tobacco products should not be sold at all. Vertical lines represent 95% confidence intervals.
Source: Centre for Addiction and Mental Health Monitor 2013.

Support for the Prohibition of Tobacco Products

- In 2012, 12% of Ontario adults responded that the sale of cigarettes should be stopped as soon as possible, 36% felt cigarettes should be phased out over the next 5 to 10 years, and 47% felt that the sale of cigarettes should be kept as it is now (Figure 14). Two out of every ten smokers (20%) felt that cigarettes should be phased out in 5 to 10 years (CAMH Monitor, data not shown).
- Recent opinion on how tobacco should be sold has remained unchanged over the last three years (Figure 14), with 47% of respondents in 2012 agreeing that it should be sold the same as it is now, 36% wanting to phase tobacco out over the next 5 to 10 years, and 12% wanting the sale of tobacco to stop as soon as possible.

Figure 14: Views on the Sale of Cigarettes, Ages 18+, 2006 to 2012



Note: Vertical lines represent 95% confidence intervals.
Source: Centre for Addiction and Mental Health Monitor 2006-2012.

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 11). 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.

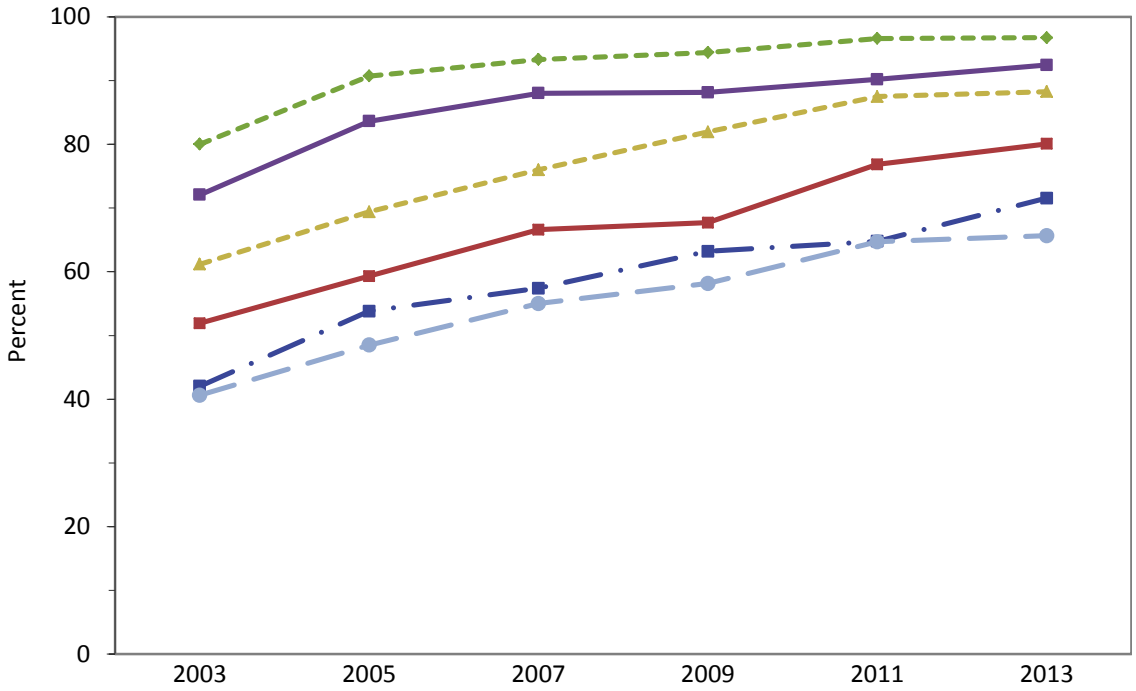
Long-Term Outcomes

Comprehensive tobacco control programs, such as the Smoke-Free Ontario 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 97% of students in Grade 7 to 66% of students in Grade 12 (OSDUHS 2013 data; Figure 15), continuing an upward trend in abstinence over the reporting period (that is, from 2003).
- Since 2007, there have been notable increases in lifetime abstinence in grades 9, 10, 11, and 12, reaching levels of 88%, 80%, 72%, and 66% respectively.
- Across all grades combined, there was a significant increase in lifetime abstinence among students in 2013 compared to 2009 (80% vs. 74%; OSDUHS, data not shown).

Figure 15: Lifetime Abstinence, by Grades 7 to 12, Ontario, 2003 to 2013



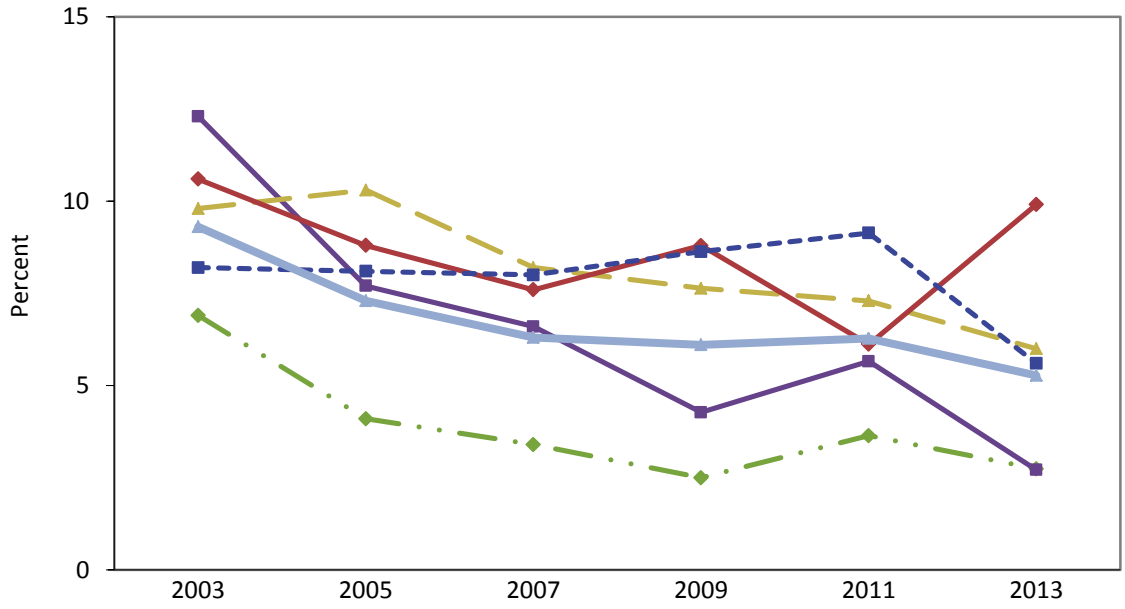
	2003	2005	2007	2009	2011	2013
Grade 7	80	91	93	94	97	97
Grade 8	72	84	88	88	90	92
Grade 9	61	69	76	82	87	88
Grade 10	52	59	67	68	77	80
Grade 11	42	54	57	63	65	72
Grade 12	41	49	55	58	65	66

Source: Ontario Student Drug Use and Health Survey 2003–2013 (Biennial).

Past-Year Initiation: Students in Grades 7 to 12

- In 2013, first use of cigarettes at any time in the previous 12 months ranged from 3% for both Grade 7/8 students (combined) and Grade 9 students to 10% for Grade 11 students (Figure 16).
- From 2003 to 2013, past-year initiation among all students (Grades 7 to 12 combined) significantly decreased from 9% to 5%. When viewed by individual grade, only students in Grade 9 showed a significant decrease in past-year initiation over this period (12% to 6%).
- From 2011 to 2013, the prevalence of initiating smoking in the previous year remained static for all students combined and within each grade (Figure 16).

Figure 16: Use of Cigarettes for the First Time in the Past Year, by Grades 7 to 12, Ontario, 2003 to 2013



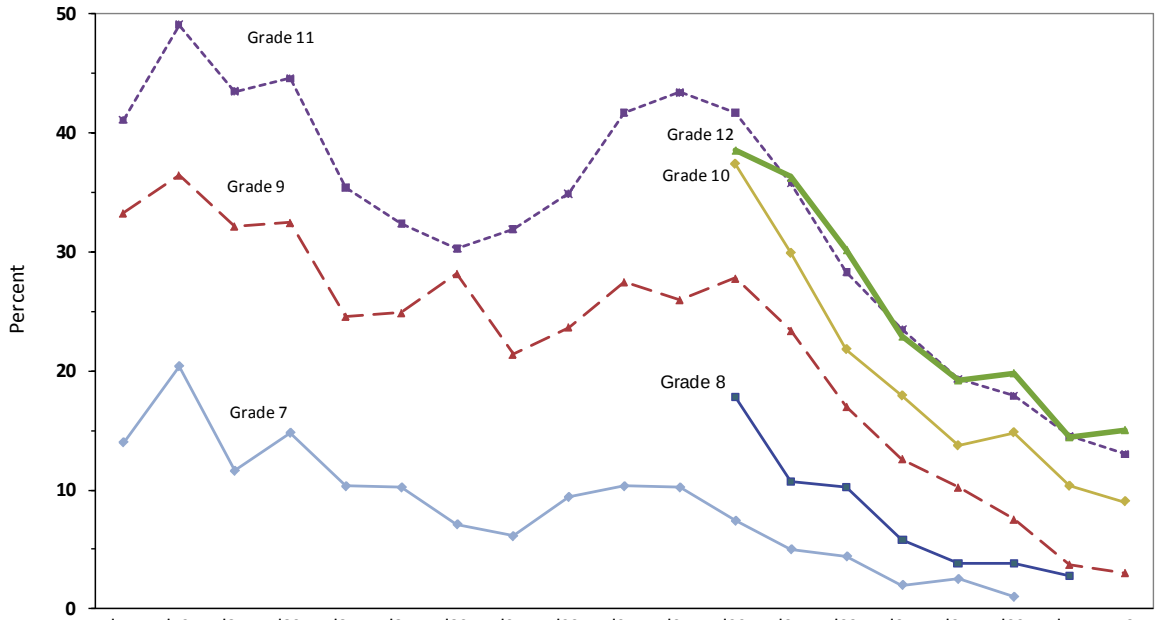
	2003	2005	2007	2009	2011	2013
Grade 7-8	7	4	3	3	4	3
Grade 9	12	8	7	4	6	3
Grade 10	10	10	8	8	7	6
Grade 11	11	9	8	9	6	10
Grade 12	8	8	8	9	9	6
Total	9	7	6	6	6	5

Source: Ontario Student Drug Use and Health Survey 2003–2013 (Biennial).

Past-Year Smoking: Students in Grades 7 to 12

- Among students in Grades 7 to 12, the 2013 overall prevalence of smoking more than one cigarette in the past year (past-year current smoking) was 8.5% (or 83,100 students; data not shown).
- Since 1999, there has been a significant decline in past-year smoking across each grade (Figure 17), with an historical low occurring in 2011, which has been maintained in 2013.
- In 2013, the prevalence of past-year smoking was very low in Grade 9 (3%), with prevalence numbers too small to report in Grades 7 and 8 (Figure 17). In grade 10, students were three times more likely to be smokers (9%) compared to students in Grade 9 (3%), which underscores a significant transition to past-year smoking among Grade 10 students. (Note: respondents were surveyed in Grade 10, but they reported on their smoking behaviour over the previous year.) Past-year smoking was highest in Grade 12 (15%).

Figure 17: Past-Year Smoking, by Grades 7 to 12, Ontario, 1977 to 2013



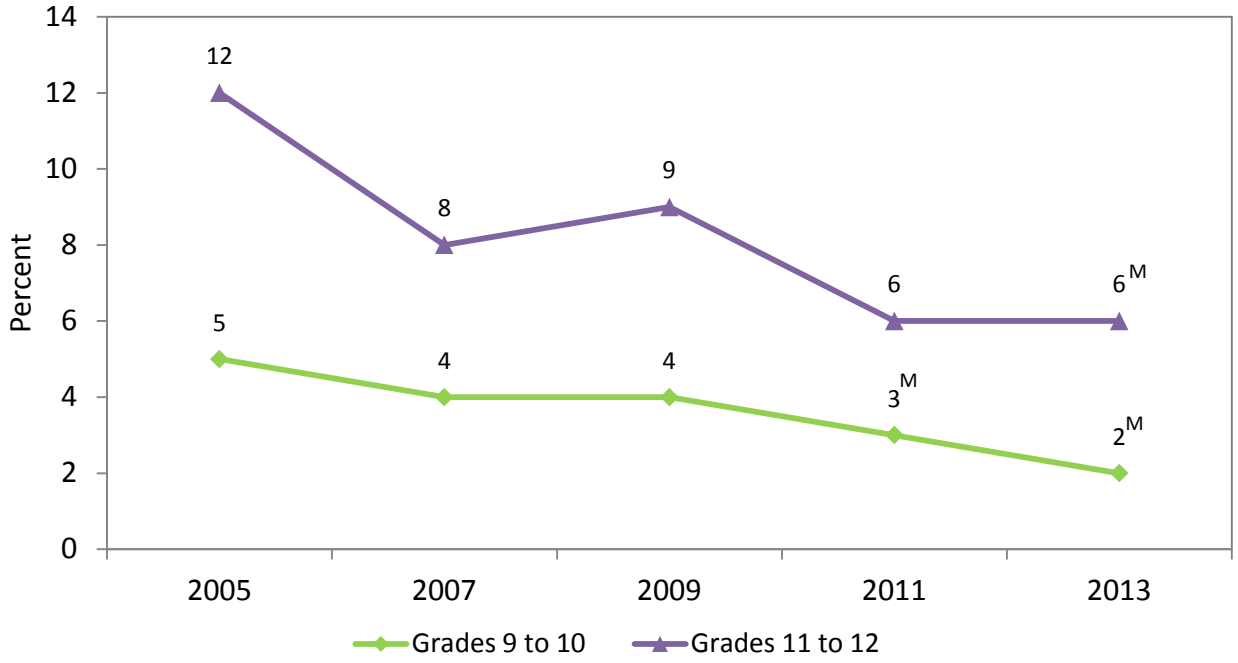
	'77	'79	'81	'83	'85	'87	'89	'91	'93	'95	'97	'99	'01	'03	'05	'07	'09	'11	13
Grade 7	14	20	12	15	10	10	7	6	9	10	10	7	5	4	2	2.5	1	(S)	(S)
Grade 8												18	11	10	6	4	4	3	(S)
Grade 9	33	36.5	32	32.5	25	25	28	21	24	27.5	26	28	23	17	13	10	7.5	4	3
Grade 10												37	30	22	18	14	15	10	9
Grade 11	41	49	43.5	45	35	32	30	32	35	42	43	42	36	28	23.5	19	18	14.5	13
Grade 12												39	36	30	23	19	20	14	15

Note: Data collection for Grades 8, 10, and 12 started in 1999. For Grade 7, 2011 data suppressed due to small sample sizes.
Source: Ontario Student Drug Use and Health Survey 1977–2013 (Biennial).

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

- According to the Ontario Student Drug Use and Health Survey, over the period 2005 to 2013, the prevalence of past 30-day smoking was cut in half for students in Grades 9 to 10 and Grades 11 to 12 (Figure 18).

Figure 18: Current Smoking (Past 30 Days), by Grade, Ontario, 2005 to 2013



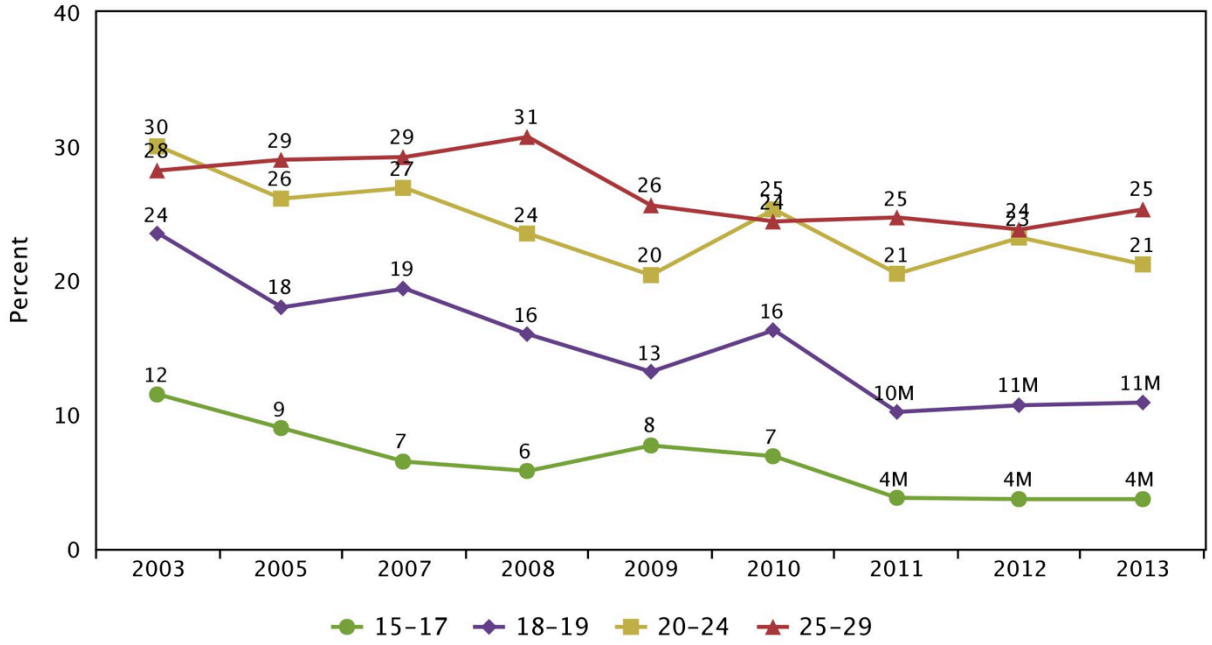
M= Marginal. Interpret with caution, moderate levels of error associated with estimate—Coefficient of Variation (CV) between 16.6% and 33.3%.
Source: Ontario Student Drug Use and Health Survey 2005–2013 (Biennial).

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

- Youth aged 15 to 17 have a significantly lower rate of current smoking than young adults, with their level stable at 4% in recent years (CCHS, Figure 19).
- Among 18 to 19 year olds, the rate of smoking has remained at 11% over the last couple of years and is significantly lower than that of young adults aged 20 to 24 and 25 to 29 years (Figure 19).
- In recent years, young adults aged 20 to 24 and 25 to 29 have smoked at similar rates (Figure 19).
- Although males and females aged 15 to 17 have the same low rate of smoking (4%),[xvii] the rate rises as they age, particularly for males (sex differences are significant for 18 to 19 and 20 to 24 year olds; Figure 20).

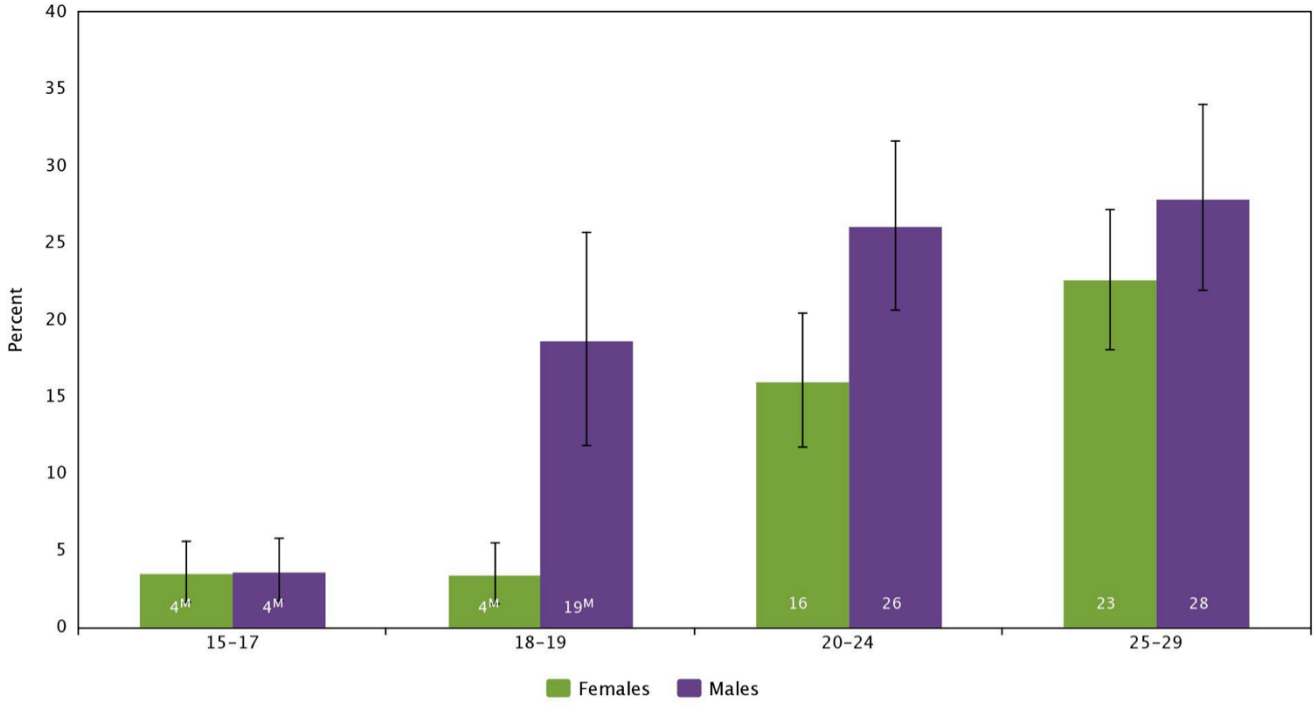
[xvi] Note: The Canadian Community Health Survey, on which this section is based, considers both in-school and out-of-school respondents.
[xvii] Marginal. Interpret with caution: subject to moderate sampling variability.

Figure 19: Current Smokers (Past 30 Days), Youth and Young Adults, Ontario, 2003 to 2013



Note: M= Marginal. Interpret with caution. X-axis scale (Year) not uniform—interpret with caution.
Source: Canadian Community Health Survey 2003, 2005, 2007-2013.

Figure 20: Current Smokers (Past 30 Days), Youth and Young Adults, by Sex, Ontario, 2013



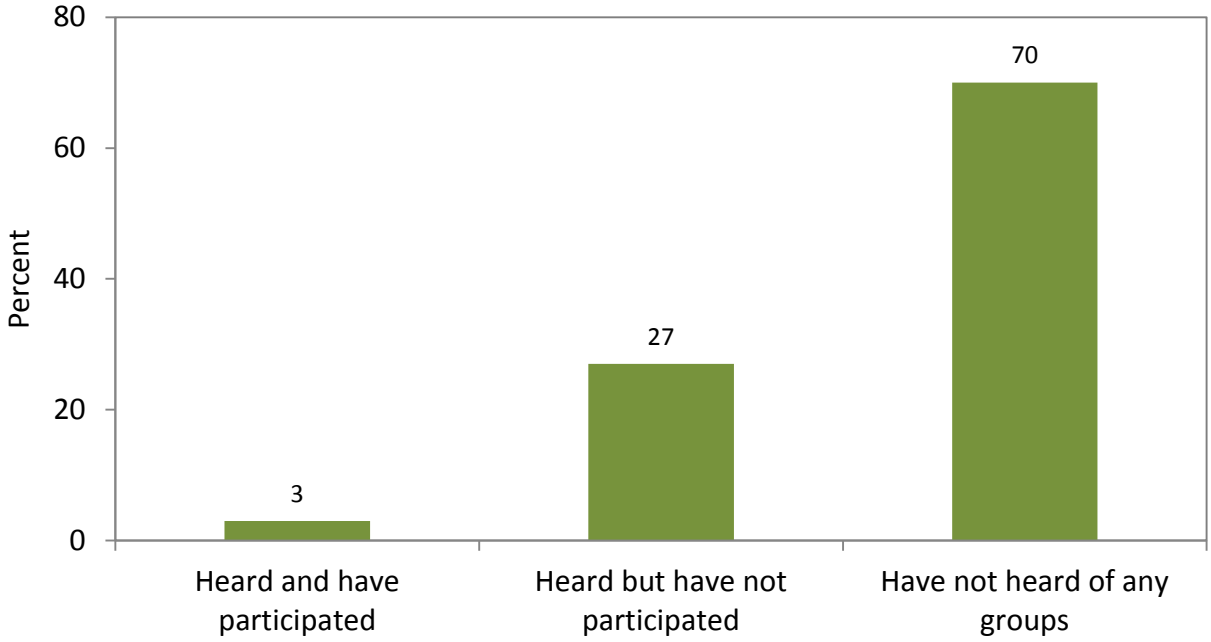
Note: Vertical lines represent 95% confidence intervals. M=Marginal. Interpret with caution: subject to moderate sampling variability.
Source: Canadian Community Health Survey 2013.

Short and Intermediate-Term Outcomes

Awareness of School and Community Prevention Initiatives

- In 2013, very few students (3%) had participated in an event sponsored by youth groups who were raising awareness of smoking and tobacco issues (Figure 21), although 27% had heard of such groups.

Figure 21: Awareness of Groups of Youth who Raise Concerns about Smoking and Tobacco Issues, Students (Grades 7 to 12), Ontario, 2013



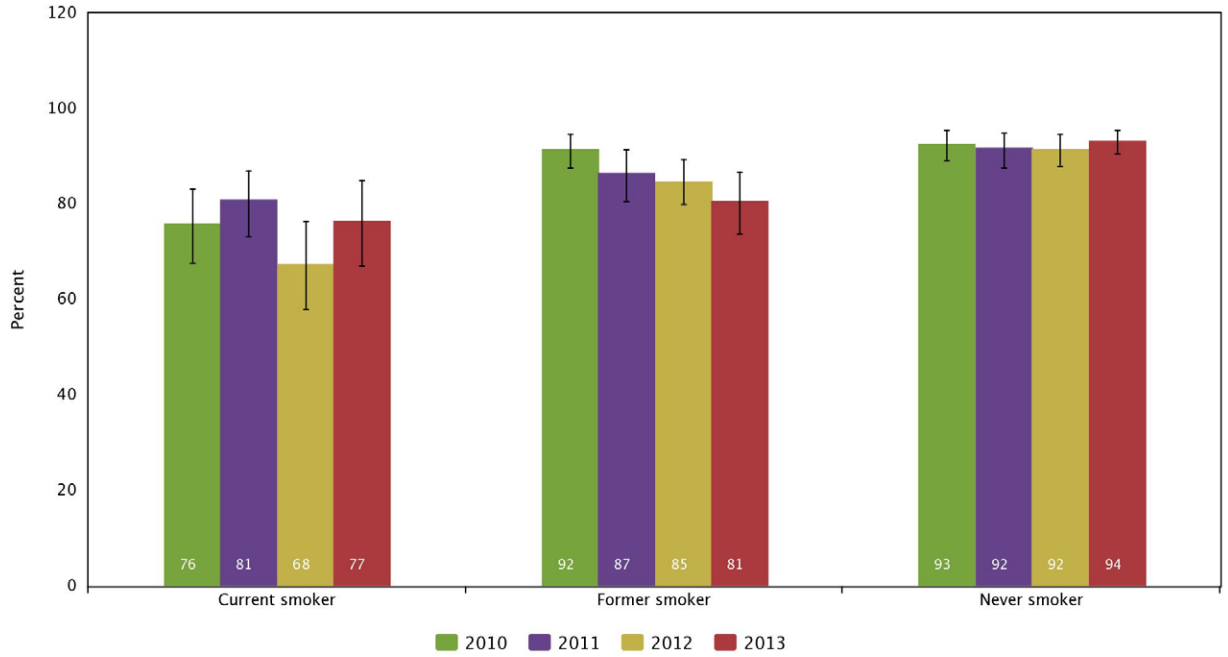
Source: Ontario Student Drug Use and Health Survey 2013.

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.

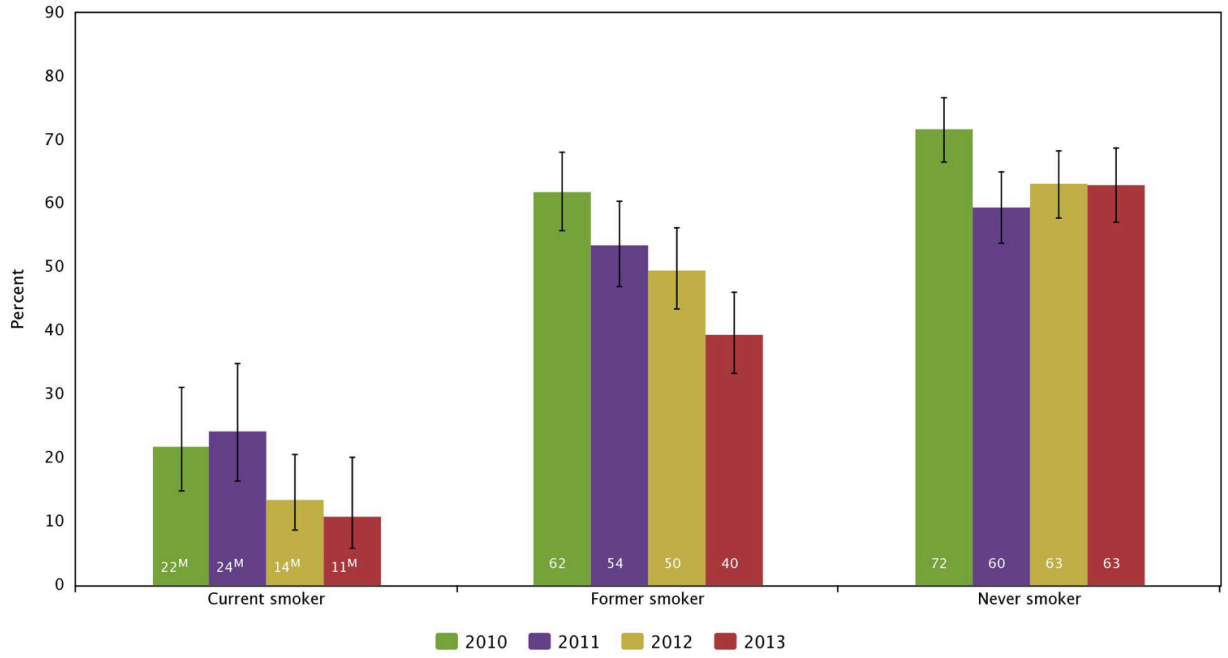
- In 2013, 63% of never-smokers, 40% of former smokers and 11% of current smokers aged 18 years and over reported that it was unacceptable for adults to smoke (CAMH Monitor 2013; Figure 22).
- There has been no significant change over time, with the exception of former smokers whose views on the social unacceptability of adults smoking cigarettes has fallen significantly since 2010 (62% in 2010 vs. 40% in 2013; CAMH Monitor).
- Smoking by teenagers was viewed as highly unacceptable among all adults regardless of smoking status (Figure 23). Never-smokers had a significantly higher level of disapproval than current smokers (93.5% vs. 77%; CAMH Monitor 2013).
- Adult views on the unacceptability of teenagers smoking have remained stable over time.

Figure 22: Adult Views on the Social Unacceptability of Adults Smoking Cigarettes, by Smoking Status, Ontario, 18+, 2013



Note: Vertical lines represent 95% confidence intervals. M=Marginal. Interpret with caution: subject to moderate sampling variability.
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2010-2013.

Figure 23: Adult views on the Social Unacceptability of Teenagers Smoking Cigarettes, by Smoking Status, Ontario, 18+, 2013

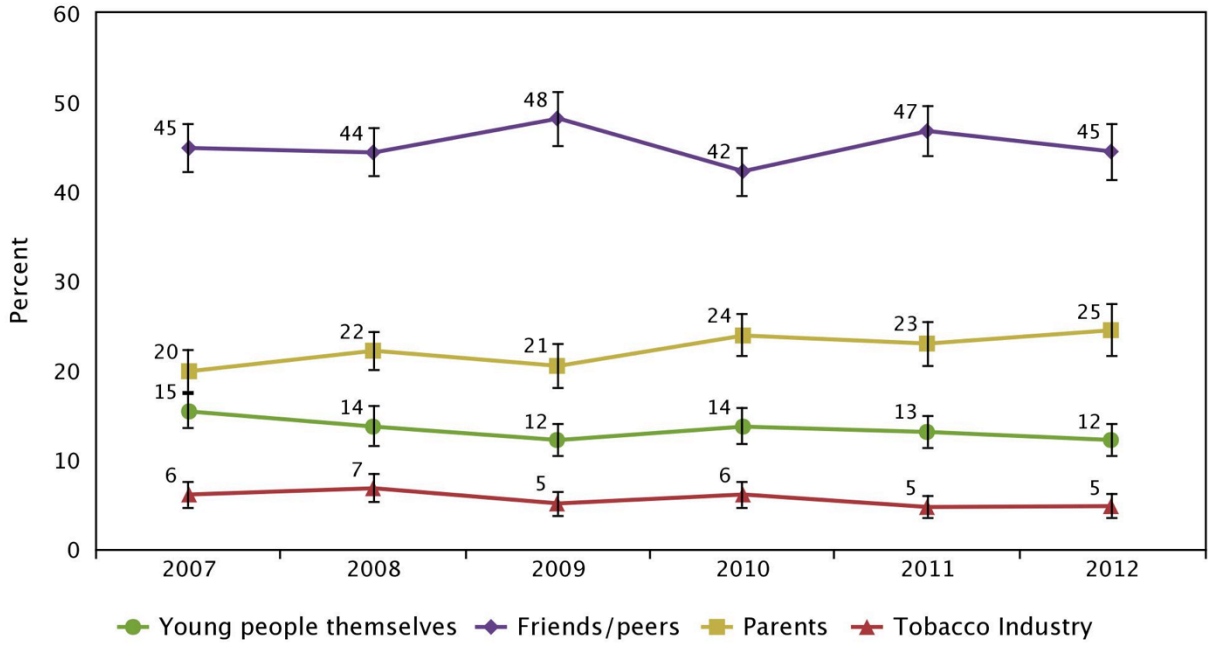


Note: Vertical lines represent 95% confidence intervals. M=Marginal. Interpret with caution: subject to moderate sampling variability.
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2010-2013.

Attitudes about Responsible Party for Smoking among Youth

- Evidence indicates that tobacco industry denormalization is an effective tobacco control strategy that leads to positive tobacco control outcomes.[46,47] When asked who was the most responsible for smoking initiation among youth, 5% of Ontarians aged 15 years and over believed it was the tobacco industry, 12% believed it was young people themselves, 24.5% believed it was parents, and 44.5% believed it was friends and peers (44.5%). Over the reporting period (2007 to 2012), rates were unchanged (CTUMS; Figure 24).
- Quebecers were twice as likely as Ontarians to view the tobacco industry as the most responsible for young people starting to smoke (10% vs. 5%, data not shown).

Figure 24: Responsible Party for Smoking Initiation by Youth, Ages 15+, Ontario, 2007 to 2012



Note: Vertical lines represent 95% confidence intervals.
Source: Canadian Tobacco Use Monitoring Survey 2007-2012.

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 6).

Table 6: 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 prevention campaigns have been conducted in Ontario with duration longer than 3 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 67% of the retail price in Ontario in 2014

Scientific Advisory Committee: Overview of Prevention Goals and Recommendations

The 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) (Table 7).

Table 7: Scientific Advisory Committee Recommendation for Prevention of Tobacco Use among Youth and Young Adults

Goal: To prevent the uptake of tobacco use among youth and young adults in Ontario, where uptake encompasses all stages of smoking, initiation and progression.	
Recommendations	**Current Status**
Media and Social Marketing	
[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.	Since January 2011, no sustained and intensive campaigns have been conducted in Ontario with duration longer than 3 weeks. There have been varied online and local campaigns and the MOHLTC 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).
Movies and Video Games	
[5.2] Require adult ratings for movies (18A) and video games (Mature) with any tobacco imagery.	Ontario Film Review Board started to implement a 'tobacco use' content advisory in March 2012. Tobacco use continues to be shown in movies that are rated for youth viewing.
[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.	No requirements for ads preceding movies and video games which contain tobacco imagery
Policy Enforcement	
[5.4] Develop, implement and enforce comprehensive tobacco control policies within and across settings (e.g., schools, colleges, universities and communities).	Comprehensive legislation on sales-to-minors enforced; legislation announced to: a) prohibit the sale of tobacco on college and university campuses, as of January 1, 2015, and b) prohibit flavoured tobacco, with regulation expected to take effect in January 2016, with a delayed implementation date for menthol-flavoured tobacco products.
Program Alignment	
[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.	TCANs, health units, YATI, and *Leave The Pack Behind* have variously worked in these settings, leveraging prevention programs and other activities.

High-Risk Youth and Young Adults	
[5.6] Target program interventions to the schools, colleges, universities and workplaces where youth and young adults are at greatest risk for tobacco use.	TCANs, health units, YATI, and *Leave The Pack Behind* 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	
[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 subpopulations. [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.	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	
[5.8] Implement revised and more rigorous (realistic) compliance protocols with tobacco retailers regarding sales to underage consumers.	No change to existing protocol
Cessation Assessment and Early Intervention	
[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.	

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 2013, but is 2% in Grades 9 and 10 combined and has remained constant at 6% for Grade 11 and 12 since 2011. Yet despite improvements in recent years, current smoking is still firmly established among 18- to 19-year olds (11%), young adults aged 20 to 24 (21%) and young adults aged 25 to 29 (25%).

Compared to school-aged youth, rates of current smoking are much higher for young adults (16% for females and 26% for males aged 20 to 24; Figure 20), suggesting that initiation continues into early adulthood. Efforts to prevent initiation in this young adult age group include expansion of *Leave The Pack Behind* 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 amongst young adults.

While Ontario does well on most of the MPOWER prevention related indicators, there are still noticeable gaps in meeting these minimum requirements. Despite a small increase during 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 there are still gaps 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 indicate that a significant number of youth who are current smokers in Grades 7 to 12 also have a drug use (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 to targeting youth and young adults who are most at risk of becoming established tobacco users.

The progress in decreasing initiation among school aged youth has held course. At the same time, there is stagnation in decreasing tobacco use among young adults indicating a need for more focus on policies and programs for those at high risk.

Chapter 4: Smoking Cessation

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 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,[48,49] increasing knowledge of tobacco harm and awareness of available cessation supports, promoting and supporting quit attempts, and limiting physical and social exposure to tobacco products[50,51] (Figure 25). 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.[52,53] The cessation component of the Strategy is the main avenue by which progress toward these pathways and desired cessation outcomes are expected to be achieved (Figure 25).

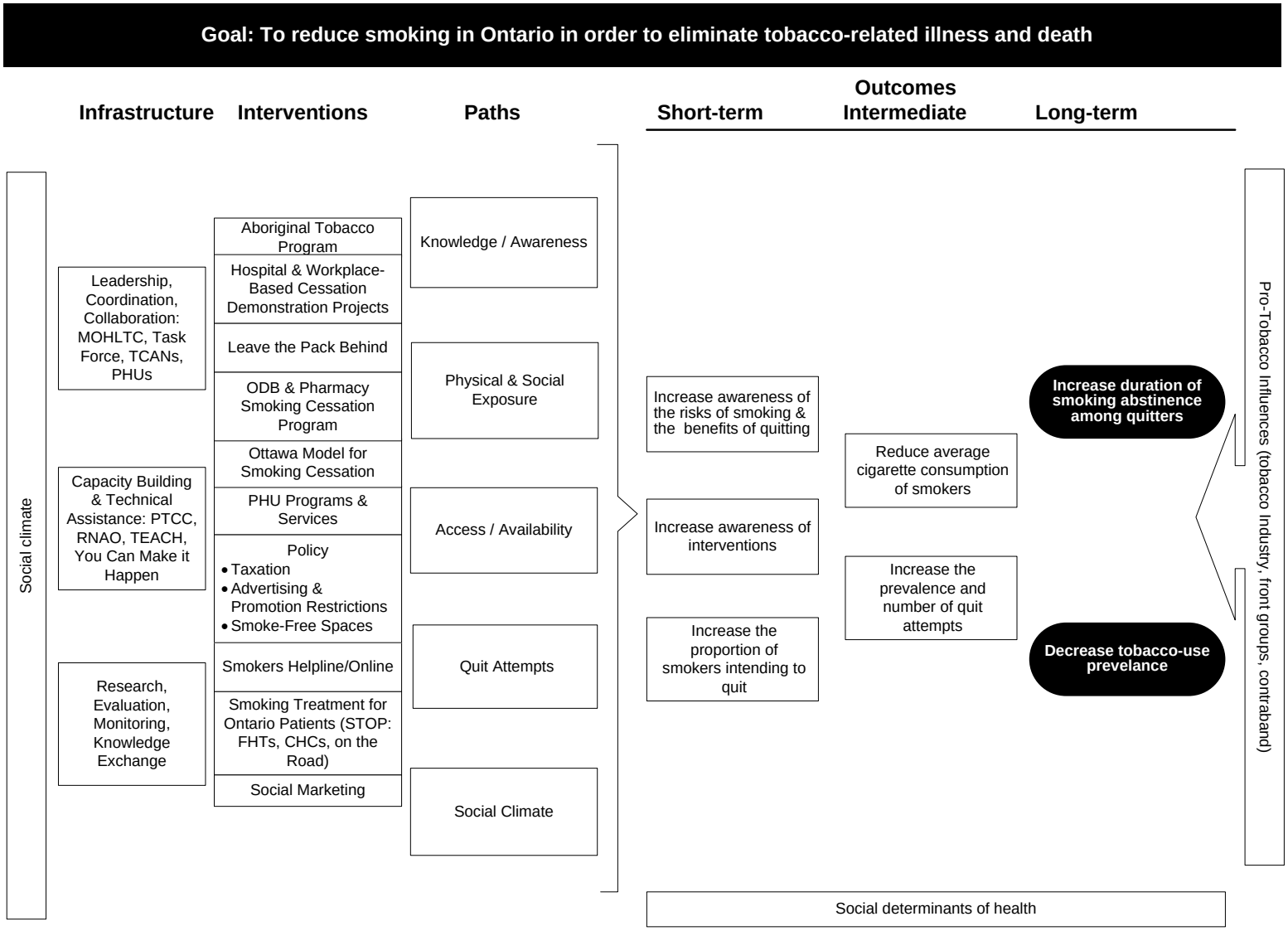
In this chapter, we provide a brief overview of current cessation infrastructure, policy measures, and cessation-related interventions and outcomes. We follow with an examination of progress toward cessation objectives at the population level.

Cessation Infrastructure

Several cessation infrastructure components support the development and implementation of a variety of programs, services, and policies. The Ministry of Health and Long-Term Care – Health Promotion Division 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.

Seven TCANs, representing the 36 PHUs, provide leadership, coordination, and collaborative opportunities.

Figure 25: Cessation Path Logic Model



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 PHU staff, nurses, physicians and other health professionals, and to deliver evidence-based programs, services, and policies to the public. This infrastructure is delivered by several key organizations including the Ontario Tobacco Research Unit (OTRU), Program Training and Consultation Centre (PTCC), Registered Nurses' Association of Ontario's (RNAO) Nursing Best Practice Smoking Cessation Initiative (Initiative), Training Enhancement in Applied Cessation Counselling and Health (TEACH) Project, University of Ottawa Heart Institute's Ottawa Model for Smoking Cessation, and *You Can Make It Happen*.

Ontario Tobacco Research Unit

The Ontario Tobacco Research Unit's current cessation work includes evaluations of smoking cessation initiatives in a variety of workplace and healthcare settings, and the RNAO Nursing Best Practice Smoking Cessation Initiative. OTRU continued analyzing data from the Ontario Tobacco Survey, recruited smokers to participate in the Smoker's Panel, provided rapid scientific consulting to the Ministry and SFO partners, and responded to 60 knowledge and evaluation support requests from partners in 2013/14. 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 2013/14, a total of 1,073 people enrolled in the online course cessation module; 4,253 smokers were registered in Smokers' Panel.

Program Training and Consultation Centre

In the area of smoking cessation, PTCC offers workshops on a range of topics, including brief counseling techniques for smoking cessation, a woman-centred approach to smoking cessation, integrating a Motivational Interviewing Approach into Tobacco Treatment, Group Cessation Counseling and Community Engagement to Support Smoking Cessation. Training workshops are conducted in collaboration with public health units and Tobacco Control Area Networks. The PTCC also supported two province-wide communities of practice (CoP) in the area of smoking cessation. One of these CoPs supported knowledge exchange among PHUs that had received workplace cessation demonstration grants. An additional CoP was launched to support hospitals that had received Ministry demonstration grant funding. PTCC Health Promotion Specialists also provided consultations to local PHU tobacco control staff to assist them with engaging local cessation networks, and in the development of internal public health cessation policies and protocols. In partnership with the Propel Centre for Population Health Impact, the PTCC also documented the implementation of smoking cessation policies in three Ontario hospitals. The

multi-case documentation of practice report was broadly disseminated to health intermediaries as a resource for planning.

Program Reach (All pillar goals, combined): In 2013/14, the PTCC delivered 49 training events reaching over 1800 clients. Training events included 37 workshops and 12 webinars. PTCC's training programs were highly attended by staff of Ontario's 36 PHUs. Participants from Community Health Centres, the health care sector (e.g., hospitals,), community coalitions, non-governmental organizations and government were also well represented. Tobacco control consultations were also delivered to all local PHUs and TCANs. Approximately 260 public health practitioners and researchers were actively engaged in PTCC's provincial Communities of Practice.[xviii]

RNAO Nursing Best Practice Smoking Cessation Initiative

The *Nursing Best Practice Smoking Cessation Initiative* (Initiative) is a program undertaken by the Registered Nurses' Association of Ontario (RNAO). The goal of the RNAO Initiative is to increase the capacity of nurses to implement smoking cessation strategies and techniques in their daily practice and, more specifically, to adopt the RNAO Smoking Cessation Best Practice Guideline recommendations at the individual and organizational levels. Since 2007, a multi-pronged strategy has been developed and implemented to ensure achievement of the goal. Key programmatic components of the strategy include: establishment of project sites in Ontario PHUs to coordinate the Initiative; delivery of training workshops in smoking cessation to nurses and other health professionals (i.e., Smoking Cessation Champions); support from a Smoking Cessation Coordinator; 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 smoking cessation guide (*Nursing Faculty Education Guide: Tobacco Use and Associated Health Risks*) among nursing faculty and nursing students. In the past few years, RNAO has focused on expanding and strengthening the strategy through integration of smoking cessation activities within a broader chronic disease framework. New to the project in 2013/14 was the selection of 16 health-care organizations (e.g., Family Health Teams, Community Health Centres, Nurse Practitioner-led Clinics) to participate in the Initiative as implementation sites. With a small grant from RNAO, these implementation sites aim to strengthen and sustain nurses' and other health practitioners' capacity in smoking cessation and support the integration of the RNAO guidelines at the organizational level.

[xviii] Steven Savvaidis, Personal Communication, December 2, 2014.

Reach: In 2013/14, 267 health-care professionals (e.g., nurses, nursing students, etc.) were trained as Smoking Cessation Champions across 4 Ontario municipalities.[xix] Since 2007, the RNAO Initiative has trained 1,886 health-care professionals.

Effects: Evaluation studies of the RNAO Initiative were conducted in 2010, 2011, 2012 and 2014 using a mixed-methods approach (web survey of Champions, case studies of public health and healthcare organizations).[54,55,56,57] These studies demonstrated that project-specific components, such as the Champion workshops and Smoking Cessation Coordinators' support, as well as the uptake of RNAO evidence-based cessation resources, had been instrumental in increasing nurses' capacity in smoking cessation. In 2014, the RNAO Smoking Cessation Best Practice Guideline was still being widely adopted, as evidenced by an increase from 32% (baseline) to 73% (6-month follow-up) in the proportion of Champion respondents who reported using the guideline recommendations in their daily practice. Evaluation studies also show that most Champions deliver the minimal intervention recommended by the guideline (e.g., Ask, Advise, Assist, and Arrange).

Evaluation studies conducted in the past four years have consistently shown that management buy-in and support is crucial in ensuring successful implementation of the project, increasing nurses' and other practitioners' engagement in the provision of smoking cessation services and adopting cessation policies and practices at the organizational level. The 2014 evaluation study also found that even in the early stages of implementation, practitioners reported an increase in: time dedicated to smoking cessation, knowledge of tobacco cessation, confidence in offering smoking cessation support, and consistency of service delivery and documentation of services. 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

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-centered approach) and a one-hour webinar: Lunch and Learn Seminar

[xix] RNAO, personal communication, July 16, 2014.

Series for health and allied 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; and an evaluation component to examine project impact and knowledge transfer. TEACH training is now considered the training standard for primary-care settings and community-based services planning to offer cessation services including Family Health Teams, Community Health Centre, addiction agencies, and Aboriginal Health Access Centres.

Reach: Since the project's launch in 2006, TEACH has trained 3,201 unique practitioners from diverse disciplines in intensive cessation counseling across Ontario. In 2013/14, TEACH trained 507 practitioners in 4-core courses (2 classroom and 2 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 hospitals (160), Family Health Teams (73), Community Health Centres (60), PHUs (77), addiction agencies (21), Aboriginal Health Access Centres (4), and other settings. In 2013/14, there were 1,695 practitioners who attended one of twelve webinars offered by TEACH.[58]

Effects: In 2013/14, practitioners rated measures of feasibility, importance, and confidence on TEACH core course topic areas (e.g., tobacco use and dependence, psycho-social interventions, and pharmacotherapy, etc.) significantly higher following TEACH training. In follow-up surveys, practitioners indicated that the TEACH training changed their abilities to provide cessation counseling at a high or very high level (76% agreed at 3 months; 75% agreed at 6 months). In addition, practitioner engagement in intensive cessation counselling or brief interventions with clients (either in group or to individuals) increased following TEACH training (53% were in agreement at 3 months and 72% were in agreement at 6 months). (Note. Interpret with caution due to relatively low response rates at follow-ups; approximately 41% at 3 months and 35% at 6 months.) [58]

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.

Ottawa Model for Smoking Cessation

University of Ottawa Heart Institute provides support and training to sites that are implementing the Ottawa Model for Smoking Cessation (The Ottawa Model). Outreach facilitators support sites through trouble shooting, reporting, and on-site training (e.g. Grand Medical Rounds, education days, on-unit clinical rounds). Workshops are offered twice a year for clinical settings and once a year for primary care settings. Both workshops provide health professionals with an overview of the Ottawa Model program and how it can be successfully implemented in their practice setting. Additional topics covered in the clinical inpatient/outpatient workshop include: nicotine addiction, current cessation medications and recommendations on their usage, behaviour change theory and various support strategies based on a patient's readiness to quit smoking. The primary care workshop also covered topics such as smoking cessation pharmacotherapy, counseling strategies, special populations, managing withdrawal symptoms and providing follow up with smokers. Five e-learning courses are also available 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 2013/14, a total of 1,013 health professionals received training. Outreach facilitators trained 800 frontline staff on-site, 177 health professionals received training given by their site's coordinator during orientation, and 36 health professional completed the e-learning courses. In addition, 50 program coordinators and task committee members from participating Ottawa Model sites attended workshops.[59]

No specific information is readily available about the Ottawa Model's influence on health professionals' practice behaviour or the program's impact on clients at the time of writing. Evaluations of both workshops and e-learning courses are currently underway.

You Can Make It Happen

You Can Make It Happen 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 the first 3 quarters of 2014, the *You Can Make It Happen* website received a total of 2,412 visits, 1,997 of which were from accounts hosted by Canadian Internet Service Providers.[xx] Per website visit, visitors looked at an average of 2.51 pages and spent 2 minutes 53 seconds per page view. A total of 1,682 PDF documents were downloaded from the website; the three most commonly downloaded products were the Worksheet for Implementing an Office System for Tobacco Use Cessation, the resource order form, and the Integrating Tobacco Cessation policy toolkit. The Smokers' Helpline reports suggest that *You Can Make It Happen* has grown awareness of Helpline services among health-care professionals and has provided an ongoing source of Helpline Quit Connection referrals and a number of FAX Referral Partnerships (exact numbers were not available).[60]

No specific information is readily available about *You Can Make It Happen's* influence on health professionals' practice behaviour or the program's impact on clients.

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 (i.e., exposure to secondhand smoke) and social exposure to tobacco (i.e., the visual exposure to tobacco products and/or use in social environments). These policies include smoking bans in bars, restaurants, vehicles and workplaces and restrictions on marketing and promotion of tobacco products.[61] On November 24, 2014, the Ontario Government introduced legislation that would ban the sale of flavoured tobacco, which has the potential to promote and facilitate quitting behaviour. (The regulation is expected to take effect in January 2016, with a delayed implementation date for menthol-flavoured tobacco products.)

[xx] Google Analytics. Distributed by Donna Kosmack, Southwest TCAN. Personal Communication, November 10, 2014.

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, and cars transporting minors. While these policy measures are not directly related to 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.[62,63,64,65]

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.[66,67,68] 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*. A recent amendment to this *Act* (Bill C-32) has further restricted the marketing opportunities of tobacco companies by imposing a total ban on tobacco advertising in newspapers and magazines.

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 tobacco price increases and restrictions on the location where tobacco products may be sold.

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.[69,70,71,72,73,74] On average, a 10% increase in price results in a 3-5% reduction in demand in higher income countries.[75,76,77]

In Ontario, the provincial tobacco tax was increased on May 2, 2014 when the provincial excise tax for 200 cigarettes was increased by $3.25, resulting in an increase from $24.70 to $27.95 in total tobacco tax. This increase accounts for inflation since 2006 and will help restore the effectiveness of the Ontario tobacco tax. Overall, tobacco taxes account for 67% 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 tobacco tax ($59.18) of any Canadian province or territory (Table 5, Prevention Section).

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.[48,49,29] In Ontario, legislation prohibits tobacco from being sold by vending machines, at pharmacies, 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 11,600 in 2013), primarily convenience and grocery stores.[31] The number of tobacco vendors has decreased from the 12,455 vendors in 2012 and the approximate 14,000 tobacco vendors that were operating in the province in 2006. Reasons for this decrease are largely unknown; however the implementation of the SFOA enclosed workplace and public place smoking ban in 2006 may explain some of the reduced numbers of tobacco vendors operating in the province.

Interventions to Build Knowledge and Awareness

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

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 in 2013 called *Quit the Denial*. This campaign targeted young adults aged 18 to 29 years old who are 'social smokers' but don't consider themselves to be smokers. One aim of the campaign was to equate social smoking with socially unacceptable behaviours in social situations such as snacking from other's plates, passing gas and earwax picking. The campaign was repeated in 2014. 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.

Leave The Pack Behind

Across 20 universities and 24 applied arts colleges, Leave the Pack Behind (LTPB) works toward enhancing its existing social marketing campaigns through social media platforms, peer-to-peer support, and linkages with other effective social media campaigns.

In 2013/14, LTPB ran three social marketing campaigns, which used multiple communication channels (interpersonal, mass media, social media, and direct-to-consumer):

- *Preventing the Initiation and Escalation of Smoking* (September to October), which incorporated the provincial social marketing campaign (Quit the Denial) tag line—Social Smoking is Smoking—onto all its campaign materials.[78]
- *Don't Cave to the Crave* (February to March), a relapse prevention social marketing campaign in which smokers and recent quitters were encouraged to respond to cravings in creative fashion including engaging in physical activity, relaxation techniques, and healthy eating.[78]
- *wouldurather...* contest (November to January), a 6-week quit smoking contest designed for young adults aged 18 to 29. The cessation goals of the contest were to have regular smokers pledge to quit smoking, reduce smoking by 50%, or refrain from smoking when drinking alcohol.[78]

A total of 5,141 smokers registered to quit or cut back in the *wouldurather...*contest. A March 2014 intercept poll of 3,690 students found that awareness was moderate for each of these three campaigns (38% for *Social Smoking is Smoking*, 37% for *Don't Cave to the Crave, and* 46% for the *wouldurather...*contest).

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 amongst the Aboriginal population and strives to deliver concrete results by enhancing the Aboriginal community's knowledge, skills, capacity and behavior by delivering programming that is aligned with the Strategy's tobacco control objectives of prevention, cessation and protection. Key activities include:

- Working with local resources to develop campaigns and workshops tailored for specific age and gender groups

- Facilitating/co-facilitating cessation seminars aimed at building capacity of care providers to provide community based cessation support
- Engaging First Nation Inuit and Métis (FNIM) communities throughout Ontario to foster the development of smoking cessation, prevention and education programs
- Engaging with First Nation communities to begin the discussion on the development of smoke-free by-laws and/or policies
- Establishing cross-jurisdictional and organizational partnerships through the Aboriginal Tobacco Partnership Table (ATPT)

Reach and Effect: Since 2012, over 200 FNIM communities and organizations across Ontario have been visited and engaged. The result of the ATP's sustained, respectful engagement is an increasing amount of requests by communities to present workshops and provide resources, as well as the requests by their organizational partners to collaborate and provide insight into engaging FNIM communities. The ATP reports the following key outcomes (an evaluation report was not available to OTRU):[xxi]

- Identification and dissemination of existing—and development of new—culturally appropriate and relevant resources
- FNIM community members received in depth and personalized information about the hazards of using commercial tobacco utilizing both traditional and western methods towards cessation
- FNIM youth were provided information, and engaged in discussions around smoking cessation, protection and prevention
- Increased awareness of the ATP as well as increased confidence of the program to provide prevention and cessation support to communities
- Established outreach streams are being developed, using resources and supports to address smoking cessation and prevention (i.e., reaching out to high schools)
- Through collaborations with FNIM organizations and agencies, the ATP is able to provide tobacco cessation and support to a greater number of FNIM
- By sharing information and increasing collaboration, the ATP is able to better align the ATPT member activities

[xxi] Darren Fisher. Aboriginal Tobacco Program, Cancer Care Ontario. Personal Communication, December 3, 2014.

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 helping them in their quit attempts (Figure 25). Unlike previous years' reports, we have chosen to report responder-quit rates[xxii] where available, as a measure of each intervention's effects this year. 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). 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.

Public Health Units

Local Boards of Health are mandated to ensure the provision of tobacco use cessation programs and services for priority populations.[3] In approaching this requirement, PHUs may refer smokers to community and provincial partners (see below) and run public education or social marketing campaigns to motivate smokers to quit. PHUs may also provide front-line cessation services. Currently, systematic evaluative data on PHU cessation activity is not available.

Smokers' Helpline

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 uses different channels to deliver cessation support, including over the phone, and by web-based and text messaging services. SHL does not offer NRT—only counselling is available.

1. Smokers' Helpline (Phone support)
   SHL phone support is provided by trained smoking cessation specialists. 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.
2. Smoker's Helpline Online (SHO)
   This online resource offers 24/7 web-based interactive assistance moderated by program staff and Evolution Health Systems Inc. (the program vendor). Since its

[xxii] The responder quit rate is a measure of quit rate in which the numerator is all participants who report having quit using tobacco, and the denominator is all those who completed the follow-up survey/evaluation.

introduction in 2005, the program has been providing smokers with online support groups, email support, instant messages, and personalized feedback about financial and health gains associated with quitting.

3. Smokers' Helpline Text Messaging (SHL TXT)
   In 2009, the Smokers' Helpline introduced a text messaging smoking cessation service. The service is provided either as a stand-alone service or in conjunction with phone support and online services. Registrants receive a series of supportive messages and can text key words to get help with preparing for their quit attempt, coping with their cravings, withdrawal symptoms and stress, identifying quit tips and aids, and staying motivated to maintain their quit.

Smokers' Helpline (Phone Support) Outcome Contributions

Reach: In the 2013/14 fiscal year, SHL reached 7,934 (equivalent to 0.41% of 1.9 million) adult smokers aged 18 years and older in Ontario,[xxiii, 79] which represents a decrease from 10,217 reached in 2012/13 (Table 8). Smokers' Helpline suggests that the 2013/14 decrease is likely due to the absence of the *Driven to Quit* contest in 2013, which previously accounted for 11.5% of new callers in 2012, and the tapering-off of calls and registrations associated with the National 1-800 number and URL on cigarette packaging warning labels. For example, 3,719 callers (73% of all new reactive callers[xxiv]) indicated that the warning labels were the most common way in which they had heard of SHL in 2013/14; down from the 5,589 callers or nearly 80% of all new reactive callers in 2012/13.

The current reach in 2013/14 is slightly lower than the median reach of quitlines in Canada in 2012 (0.48%) and is considerably lower than the median reach of quitlines in the US as reported by North American Quitline Consortium (NAQC) at 1.16% in 2012.[80] This rate also falls far short of the reach of leading quitlines in individual US jurisdictions, such as New York (1.69%) and Maine (2.35%),[81] which have been successful in achieving higher smoker penetration as a result of increased paid media and/or distribution of free cessation medication.

[xxiii] 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.

[xxiv] Reactive callers represent new clients calling for themselves

Table 8: Smokers' Helpline Reach, 2005/06 to 2013/14

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

[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 2013/14 were calculated based on CCHS 2005 to 2013 (TIMS data).

As in past years, females comprised slightly more than half of all smokers reached by SHL in 2013/14 (50.5%). This is consistent with the experience of other quitlines,[80] although the majority of Ontario smokers are male (58%; CCHS 2013).

More than half of SHL callers in 2013/14 were individuals 45 or more years of age (60%). Young adults (18-34) comprised 23% of all new callers in 2013/14, which is lower than the proportion of young adults in the Ontario smoking population (33%; CCHS 2013).

Effects: No evaluative data are available about the effects of SHL on smokers' quitting behaviour in 2013/14 due to the ongoing evaluation of the national quitline. Previous evaluation data from 2011/12 indicated that at the 7-month client follow-up, 89% of survey respondents had taken some action toward quitting after their first contact with SHL (response rate = 64.5%). This proportion was the same as that reported in 2009/10 (89.0%) and 2010/11 (89.5%). The most frequently reported actions included reducing cigarette consumption (75.1%), quitting for 24 hours (70.8%) and setting a quit date (55.7%).[82] Responder quit rates[xxv] at the 7-month follow-up were as follows: 25% (7-day point prevalence absence or PPA), 23% (30-day point prevalence), and 14% (6-month prolonged abstinence) (Table 9).

[xxv] The responder quit rate is a measure of quit rate in which the numerator is all participants who report having quit using tobacco, and the denominator is all those who completed the follow-up survey/evaluation.

From 2006 to 2012, the SHL saw a 9.0 percentage-point increase in the proportion of users reporting 7-day and 30-day point prevalence abstinence (Table 9). The proportion of 6-month abstainers has doubled over the same period. Furthermore, the 7-day and 30-day quit rates achieved in 2011/12 compare 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.

Table 9: Smoker's Helpline 7-Month Follow-up Responder Quit Rates, 2006/07 to 2011/12

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
US Quitline Quit Rates[b]	6-27	16-23	-

PPA = Point Prevalence Abstinance

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

[b] North American Quitline Consortium review of US quitlines quit rates (from published literature), 2009.

Smokers' Helpline Online Outcome Contributions

Reach: In 2013/14, a total 4,593 smokers registered for SHO, which is a 1.4-fold increase since the launch of the program, but a 38% decrease from 2012/13, and below the 2009/10 peak of 9,539 registered smokers (Table 10). SHO reached an estimated 0.24% of the smoking population in 2013/14. Smokers' Helpline report several reasons that may have negatively impacted the comparative number of online registrations including the tapering off of online registration due to the National 1-800 number/URL on cigarette packages combined with technical issues that limited contact with 5,179 of the 11,330 2014 Driven to Quit participants who opted in to SHO registration.

There is no information about the demographic characteristics of tobacco users who accessed SHO in 2013/14. Nor is there evaluative information on the effects of SHO on participants' quitting behaviour over this period.

Table 10: Smokers' Helpline Online Registration, 2005/06 to 2013/14

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

[a] Estimates of the total population of smokers aged 18+ from 2005/06 to 2013/14 were calculated based on CCHS 2005 to 2013 (TIMS data).

Smokers' Helpline Text Messaging Outcome Contributions

Reach: The number of SHL TXT users has increased since the service was introduced in the 2009/10 fiscal year. In 2013/14, there were 1,645 new service users,[79] which is a similar number of service users registered in the previous fiscal year (Table 11). SHL TXT ceased functioning at the end of March 2014 due to system capacity issues. A re-launch of the text messaging service is planned in 2014/2015.

Table 11: Smokers' Helpline Text Service Registration, 2009/10 to 2013/14

Fiscal year	No. of New Registrants
2009/10	218
2010/11	583
2011/12	839
2012/13	1,666
2013/14	1,645

There is no information about the demographic characteristics of tobacco users who accessed SHL TXT in 2013/14. Nor is there evaluative information on the effects of SHL TXT on participants' quitting behaviour over this period (Note: SHL is being evaluated as part of the federal initiative that mandated the 1-800 number be placed on cigarette packages).

The Smoking Treatment for Ontario Patients (STOP) Program

The STOP program is a province-wide initiative coordinated by the Centre for Addiction and Mental Health (CAMH), which uses the existing healthcare infrastructure as well as new and innovative means to provide smoking cessation support to smokers in Ontario.
In 2013/14, the STOP Program continued to implement the following program models:

- STOP on the Road offers smokers a psycho-educational group session (1-3hrs) and a 5-week kit of nicotine replacement therapy. The initiative is implemented in various locations across Ontario, where smoking cessation clinics are not easily accessible.
- STOP with Family Health Teams (FHTs), STOP with Community Health Centres (CHCs) and STOP with Addiction Agencies (started in 2013) expands support to smokers willing to quit by providing access to free NRT and counselling. FHTs, CHCs and Addiction Agencies participating in the STOP program are able to choose from various program delivery models that suit their specific capacity or interest, including: one-on-one counselling and up to 26 weeks of NRT (individual model); a psycho-educational group session and a 5-week kit of NRT (group model); or a combination of both (combination model).
- STOP with Aboriginal Health Access Centres (AHACs) began engaging and building partnerships with AHACs in 2013/14. This STOP program will work collaboratively with the AHAC to develop sustainable smoking cessation intervention programs and aim to provide knowledge exchange regarding smoking cessation interventions specific to the Aboriginal population. Implementation of the program will begin in 2014/15.

Reach: A total of 17,842 smokers were reached by various STOP models in 2013/14. A majority of participants were enrolled through the STOP with FHTs/CHCs (n=14,596).[xxvi] Demographic and smoking characteristics of the STOP program participants are summarized in Table 12.

Table 12: STOP Program Participants, by Select Characteristics, 2013/14

Program Model	No. of Participants	Male %	Female %	Age Mean	20+ Cigarettes per Day, %
STOP on The Road VI	347	44	56	47.6	63
STOP on The Road VII	1,541	46	54	47.5	62
STOP with FHTs	12,013	46	54	49.9	52
STOP with CHCs	2,583	46	54	47.9	58
STOP with Addictions Agencies	1,358	62	38	44.2	53

Source: STOP program

[xxvi] STOP Program, personal communication, November 11, 2014

Effects: In 2013/14, at 6 months post-treatment, the self-reported 7-day point prevalence responder quit rates[xxvii] ranged from 14% for STOP on the Road V to 36% for STOP with FHTs (Table 13).

Table 13: STOP Program 7-Day Point Prevalence Responder Quit Rates, 2013/14

Program Model	Responder Quit Rate %
STOP on The Road V	14%
STOP on The Road VI	28%
STOP with FHTs	36%
STOP with CHCs	27%
STOP with Addictions Agencies	28%

Source: STOP program

Ottawa Model for Smoking Cessation

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 in the hospital system with effective, evidence-based tobacco dependence treatments delivered by health professionals. Systematically identifying and documenting the smoking status of all admitted patients, providing evidence-based cessation interventions—including counselling and pharmacotherapy—and conducting follow-up with patients after discharge accomplishes this.

Hospital Sites

Reach: As of March 2013, the Ottawa Model was used at 57 hospital sites in Ontario (representing 44 hospital organizations).[83] In 2013/14, the Ottawa Model provided services to 13,815 smokers in participating hospitals (Table 14). This is an increase of 16% in service provision over 2012/13 and a 5-fold increase from that reported in 2006/07. According to data from a large subsample of patients (n=10,891) who participated in the Ottawa Model program, smokers were 54.6 years of age on average, more likely to be male (54.9%), had long smoking histories (32.9 years), and smoked a mean 18.4 cigarettes per day.

[xxvii] The responder quit rate is a measure of quit rate in which the numerator is all participants who report having quit using tobacco, and the denominator is all those who completed the follow-up survey/evaluation.

Table 14: Number of Smokers Reached by the Ottawa Model for Smoking Cessation (Hospitals), Ontario, 2006/07 to 2013/14

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	11,873
2013/14	13,815

Source: Ottawa Model for Smoking Cessation

Effects: The most recent evaluative survey data from a subset of Ottawa Model hospital patients indicate that at six months post-discharge, the responder-quit rate was 54% (7-day point prevalence for abstinence).[83, xxviii]

Primary-Care Organizations

Reach: In 2013/14, the Ottawa Model partnered with 15 new primary-care organizations, representing 30 primary-care sites; bringing their total partnerships to 60 primary-care organizations representing a total of more than 156 primary-care sites since 2010.[84] During 2013/14, a total of 5,721 patients expressing an interest in quitting smoking were referred to Quit Plan Visits with trained cessation counselors, with 2,312 of these patients being referred to a Telephone/Email Follow-up program.

Effects: Evaluation survey data of patients referred to the telephone/email follow-up program indicate that 57% of all patients who completed the survey remained smoke-free 30 days following their quit date (responder quit rate).[84]

Ontario Drug Benefit and Pharmacy Smoking Cessation Programs

As of August 2011, the Ontario government funds counseling and prescriptions for smoking cessation medications through the Ontario Drug Benefit (ODB) program, an initiative that covers seniors, MHLTC 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

[xxviii] The responder rate is a quit rate measure in which the numerator includes all respondents who report having quit smoking and the denominator includes only respondents who completed the survey.

Trillium Drug Plan. ODB recipients are now 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 2013/14, a total of 28,309 ODB patients received cessation medication—such as Zyban™ and Champix™—or counselling. Of these clients, the majority received smoking cessation medication (27,358), with counselling accounting for 4,074 clients. The number of ODB patients reached in 2013/2014 decreased from the previous year; however the number of patients reached in 2013/14 remained higher than the first year the program was offered (Table 15). As of March 2014, 84% of patients enrolled for counselling had participated in the consultation meeting, half (56%) had attended the first (of seven) follow-up counselling session, and 35% had attended the second follow-up session.

Table 15: Number of Smokers Reached by the Ontario Drug Benefit and Pharmacy Smoking Cessation Programs, Ontario, 2011/12 to 2013/14

	Program		
Fiscal Year	Drugs	Counselling	Drugs or Counselling[a]
2011/2012	23,503	2,510	24,053
2012/2013	30,991	4,226	31,906
2013/2014	27,358	4,074	28,309

[a]Numbers do not represent the combined totals for Drugs and Counselling, as clients receiving both programs are counted only once.

In total, approximately 63% of clients were from Ministry of Community and Social Services programs (Ontario Disability Support Program or Ontario Works) and 29% were seniors.[85]

Ontarians from across the province enrolled in ODB drug or counselling programs, with the Hamilton Niagara Haldimand Brant LHIN garnering the most clients (4,566; Table 16).

Effects: No information is available on ODB client smoking cessation outcomes.

Table 16: Unique Ontario Public Drug Program Clients, by LHIN, 2013/14

	Program		
Local Health Integrated Network	Drugs	Counselling	Drugs or Counselling[a]
Erie St. Clair	2,188	628	2,258
South West	2,475	254	2,530
Waterloo Wellington	1,581	250	1,670
Hamilton Niagara Haldimand Brant	4,461	650	4,566
Central West	779	79	799
Mississauga Halton	891	87	914
Toronto Central	1,799	238	1,896
Central	1,507	197	1,552
Central East	2,931	391	3,063
South East	1,965	187	2,018
Champlain	3,038	443	3,184
North Simcoe Muskoka	1,248	265	1,297
North East	2,133	327	2,189
North West	571	79	585
Total	**27,358**	**4,074**	**28,309**

[a]Numbers do not represent the combined totals for Drugs and Counselling, as clients receiving both programs are counted only once.

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 5As 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 2012, a total of 192,530 patients in Ontario received initial cessation counselling from a physician. This is down from the 203,028 patients reached in 2011 (Table 17). Since 2006, the largest number of patients served was in 2008 (n=214,286), which may be attributable to the expansion of the eligibility criteria for billing to all primary care physicians in that year. Comparison with population level estimates indicates that patients billed for initial counselling represented 14% of smokers who reported visiting a physician and 9% of all smokers aged 15+ in 2012.

A total of 35,386 patients received one or more follow-up counselling sessions in 2012 representing 17% of recipients of initial counselling and 3% of all smokers who visited a doctor (Table 18). Although the number of individuals receiving these sessions has steadily increased over time, it represents only a small proportion of the initial counselling recipients (3% to 21%) and only a small fraction of smokers who reported visiting a physician in the reference period (‹1% to 3%).

Table 17: Reach of Initial Cessation Counselling Compared to Number of Patients Who Visited a Physician, Ages 15+, by Year

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	124,812	10
2007	140,705	9
2008	214,286	16
2009	200,911	15
2010	201,426	15
2011	203,028	14
2012	192,530	14

[a] Source: Ontario Health Insurance Plan
[b] Estimates based on number of smokers (at present time) aged 15+ who visited a physician, using CTUMS 2006 to 2012 data.

Table 18: Reach of Follow-up Cessation Counselling Compared to Population-level and Initial Counselling Estimates, Ages 15+, by Year

Year	Number of Recipients of Follow-up Counselling[a]	Recipients of Initial Counselling Who Received Follow-Up Counselling, %	Recipients of Follow-up Counselling as a Proportion of Ontario Smokers Who Visited a Physician, %[b]
2007	4,137	3	0.3
2008	29,651	21	2
2009	31,479	15	2
2010	34,128	17	2
2011	36,248	18	3
2012	35,386	17	3

[a] Source: Ontario Health Insurance Plan
[b] Estimates based on number of smokers (at present time) aged 15+ who visited a physician, using CTUMS 2006 to 2012 data.

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

Hospital and Workplace-Based Cessation Demonstration Projects

As part of its commitment to a renewed Smoke-Free Ontario Strategy, the Ontario government has identified hospitals and workplaces as key sites for enhancing cessation support to smokers willing to quit. Hospital-based initiatives are currently underway in Ontario using various strategies including both brief and intensive counselling.[86] Of the 14 hospital demonstration project sites selected, seven are community hospitals, three are teaching hospitals, two are mental health hospitals, one is an academic ambulatory hospital, and one is a chronic rehabilitation hospital. At this time, no evaluative information is available.

The Ministry of Health and Long-term Care has provided one-time funding to Ontario Public Health Units to run workplace-based tobacco use cessation demonstration projects at worksites in the construction, mining, manufacturing, hospitality and service sectors. Individual cessation initiatives have been tailored to suit the needs, opportunities and circumstances of each workplace and include a variety of supports and activities, including (but not limited to):

- Self-help materials
- Group and individual counseling
- Competitions and challenges
- Smoking cessation training for workplace staff
- Smoke-free policy development
- Improving accessibility to nicotine replacement therapy (NRT)

As of September 2014, 11 PHUs (representing 19 health unit partners) were engaged with 43 workplaces representing more than 21,000 workers in Ontario. Cessation initiatives have been tailored to suit the needs, opportunities and circumstances of each workplace and include a variety of supports and activities, including, but not limited to, free nicotine replacement therapy (NRT), individual or group counseling, competitions and challenges, smoking cessation training for workplace staff and smoke-free policy development.

Other Cessation Interventions to Increase Quit Attempts

Leave The Pack Behind

Taking a comprehensive approach, LTPB uses age-tailored tobacco strategies to successfully reduce tobacco use among older youth and young adults across Ontario. In 2013/14, LTPB's key strategies to achieve this goal included:

1. Promoting and distributing free, full-course treatments of nicotine patch/gum through campus health centres.
2. Developing and managing a web platform (modeled on STOP's system), which allows Ontario young adults living on- and off-campus to order and receive full course (8 week) treatments of nicotine patch/gum (along with peer and/or professional support) free of charge.
3. Creating effective, age-tailored promotional campaigns to engage smokers in the quitting process.
4. Productively collaborating with a wide range of partners to ensure campaigns and interventions reach young adults in the general community, as well as students at colleges and universities.

Reach: In 2013/14, LTPB operated at all 20 universities in the province and at 24 applied arts colleges.[78] In 2013/14, at least 24,963 smokers (7% of all 362,624 young adult smokers in Ontario) accessed any of LTPB programs or services (Table 19). For additional information on other programs, see the Social Marketing Campaigns section above and the LTPB section in the Prevention Chapter).

Table 19: Leave The Pack Behind Participants by Program or Service, 2013/14

Program or Service	No. of Participants/Recipients
Health Professional Cessation Counselling	1,482
NRT distribution through Health Professional Cessation Counselling	1,093
Web Platform NRT distribution	2,630
SMOKE|QUIT self-help booklets distributed by student teams	13,828
One Step at a Time booklets (for older students) distributed by student teams	535
Public Health distribution of self-help books (i.e., Hey, Something's Different)	145
Registration to quit or cut back in the *wouldurather…* contest	5,141
Quit*Run*Chill	109
TOTAL	24,963

Effects: In 2013/14, it is estimated that of the 13,828 smokers who received the Smoke|Quit booklets, 1,576 (or 11.4%) were expected to quit smoking at 3 month follow-up; of the 1,482 smokers who received the Smoke|Quit booklets and advice from a health professional, 169 (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[87]).

It is estimated that of the 5,141 smokers who registered to quit or cut back in the wouldurather… contest, 838 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.)[88,89] 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.

The Driven to Quit Challenge (DTQC)

Following a one-year absence, DTQC returned in 2014 without funding from the MOHLTC. DTQC is a provincial quit smoking contest run by the Canadian Cancer Society, usually on an annual basis. The main objectives of the contest are to encourage quit attempts, to increase tobacco users' awareness of cessation resources, and to encourage tobacco users to seek help through Smokers' Helpline. The contest is open to all Ontario residents over the age of 19 who have used tobacco for at least one year. Participants register online, by fax, telephone or mail with a "buddy" who supports his/her pledge to remain smoke-free during the quit month in order to be eligible for one of several prizes. Since 2010, occasional tobacco users (along with daily tobacco

users) have been eligible to participate in DTQC. In 2012, promotional efforts were also directed towards healthcare providers to further increase referrals to DTQC and the overall reach of the contest.

Reach: In 2014, a total of 11,330 tobacco users registered for the DTQC (Table 20).[79] This decrease in the number of registrants can be explained in part by the decreased DTQC budget in 2014. As a result, the estimated reach decreased from 1.8% of Ontario smokers in 2012 to <1% in 2014.

Table 20: Total Number of DTQC Registrants and Reach, 2005/06 to 2013/14

Fiscal year	No. of Enrollees	Proportion of Ontario Smokers Reached, %[a]
2005/06	25,642	1.3
2006/07	26,950	1.3
2007/08	26,623	1.3
2008/09	22,365	1.1
2009/10	28,835	1.5
2010/11	36,091	1.8
2011/12	37,404	1.8
2013/14	11,330	0.6

[a] Estimates of the total population of smokers from 2006 to 2014 were calculated based on CCCHS (TIMS data).

Effects: No impact information is available for the 2014 DTQC smoking cessation outcomes beyond reach.

Overall Program Reach

In the 2013/14 fiscal year, Strategy smoking cessation interventions in Ontario directly engaged over 116,152 smokers, or about 6% of Ontario smokers[xxix] (Table 21. Note: assumption is that all clients are smokers, and that they use only one of the services). Of these smokers, 4.3% engaged in some sort of clinical intervention, whereas 1.6% engaged in a nonclinical intervention such as a contest. These figures do not include cessation-counselling services billed by family physicians (In 2012, family physicians conducted 192,530 initial smoking cessation counselling sessions, with 35,386 patients receiving one or more follow-up counselling sessions; the 2013 data were not available at time of writing.)

[xxix] The population of currents smokers in Ontario in 2013, aged 18 years and older is 1,942,000 (based on CCHS data, TIMS estimate).

As in previous years, the current cessation programs and services continue to reach more female than male smokers and, in general, tend to serve the older smoking population (with the exception of LTPB, which has a specific target group of young adults).

Table 21: Smokers Enrolled in Ontario Smoking Cessation Interventions[a] in 2013/14

Program	Clinical Reach	Intervention Reach
Smokers' Helpline	7,934	
Smokers' Helpline Online	4,593	
Smokers' Helpline Text Messaging	1,645	
Ottawa Model for Smoking Cessation (hospital sites)	13,815	
Ottawa Model for Smoking Cessation (primary care sites' quit plan visits)	5,721	
The STOP Program	17,842	
Pharmacy Smoking Cessation Program	28,309	
Leave The Pack Behind (Health professional cessation counselling +NRT distribution)	5,205	
Leave The Pack Behind Programs (excluding counselling and NRT distribution)		19,758
Driven to Quit Contest		11,330
Sub-Total	85,064	31,088
Total (Clinical and Intervention Reach)	116,152	

[a]Table excludes cessation-counselling services billed by family physicians. In 2012, 35,386 patients received one or more follow-up counselling sessions from a family physician.
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.

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 5% of all smokers in the province. With long-term quit rates reported to range from 6% to 12% for those undergoing cessation treatment,[90] it may be that only 5,000 to 10,000 of these smokers wishing to quit go on

to have a long-term successful smoking abstinence. 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 2013 CCHS, 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 22). During the period 2007-2013, there has been only slight change and no substantial increase in the recent quit rate among Ontarians aged 12 years and older.

Table 22: Annualized (Recent) Quit Rate among Past-Year Smokers, by Duration of Quit, Ontario, 2007 to 2013

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, 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, 9.2)	1.7

Source: Canadian Community Health Survey 2007- 2013.

Lifetime Quit Ratio

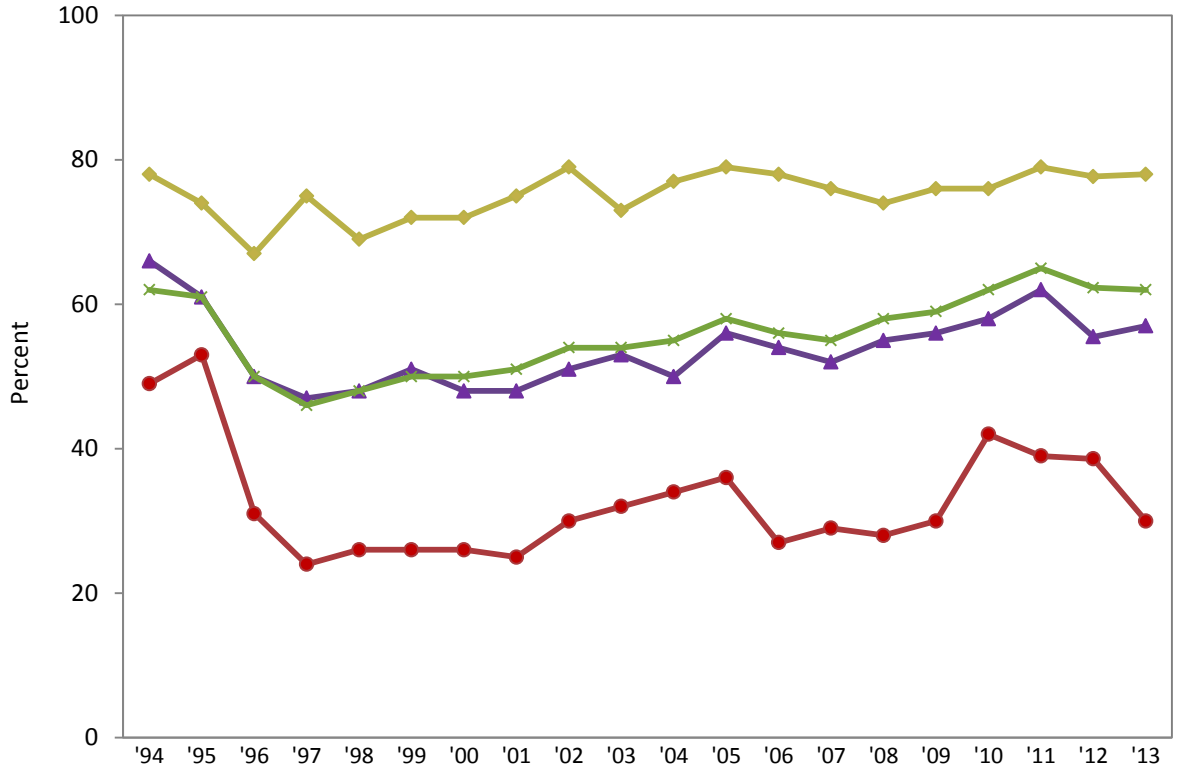
The lifetime quit ratio is the percentage of ever smokers (that is, former and current smokers) who have successfully quit smoking (based on 30-day abstinence) and is derived by dividing the number of past 30-day former smokers by the number of ever smokers in a population.

- In 2013, 62% of adults who had ever smoked had quit for at least 30 days at time of interview (Figure 26).
- Adults aged 18 to 34 had the lowest ratio of quitting (30%) among all ever smokers.
- In recent years, there is no clear pattern of change in quit ratios.

Quit Duration

- In 2013, 6% of ex-smokers (or 181,500 people) reported quitting between 1 and 11 months ago, 14% of ex-smokers quit between 1 and 5 years ago, and 78% quit smoking more than 5 years ago (CAMH Monitor 2012, data not shown), unchanged in recent years.

Figure 26: Quit Ratio (Former Smokers as a Proportion of Ever Smokers), by Age, Ontario, 1994 to 2013



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

Source: Centre for Addiction and Mental Health Monitor 1994–2013.

Short and Intermediate-Term Outcomes

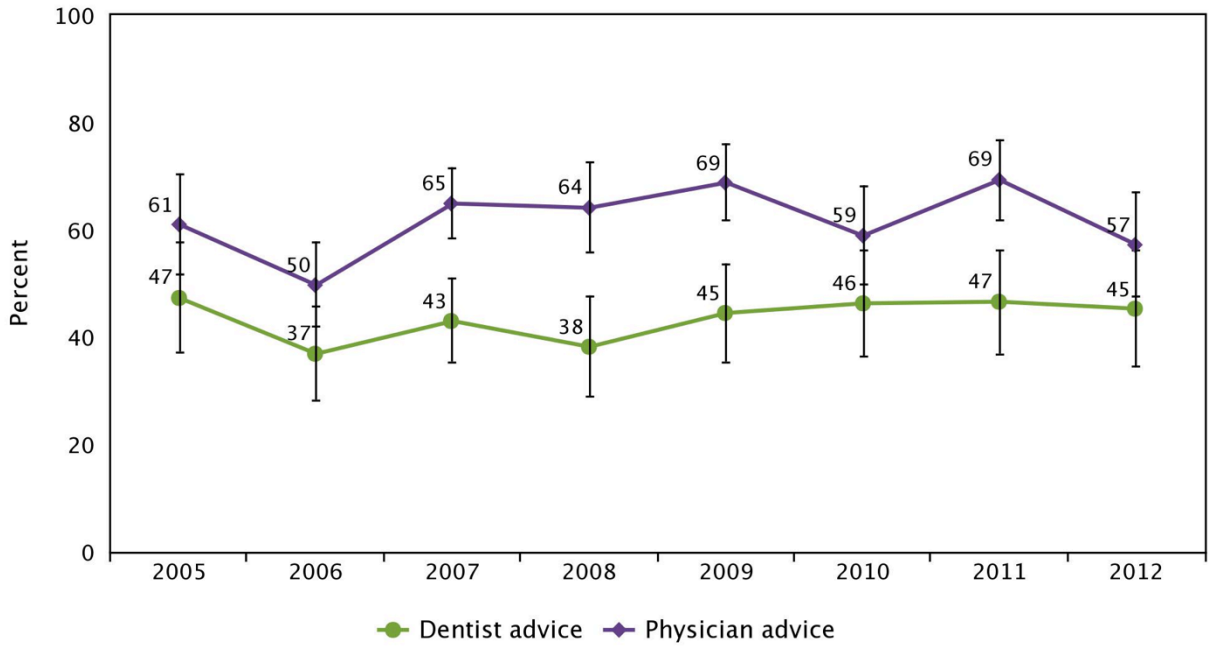
As suggested by the Path Logic Model (Figure 25), to reach desired cessation outcomes, the Strategy must increase the awareness and use of evidence-based cessation initiatives, decrease cigarette consumption, increase the proportion of smokers intending to quit, and increase the prevalence and actual 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 27), unchanged in recent years (CTUMS).
- 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 27), 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.

Figure 27: Health Professional Advice to Smokers, by Occupation, Ages 18+, Ontario, 2005 to 2012

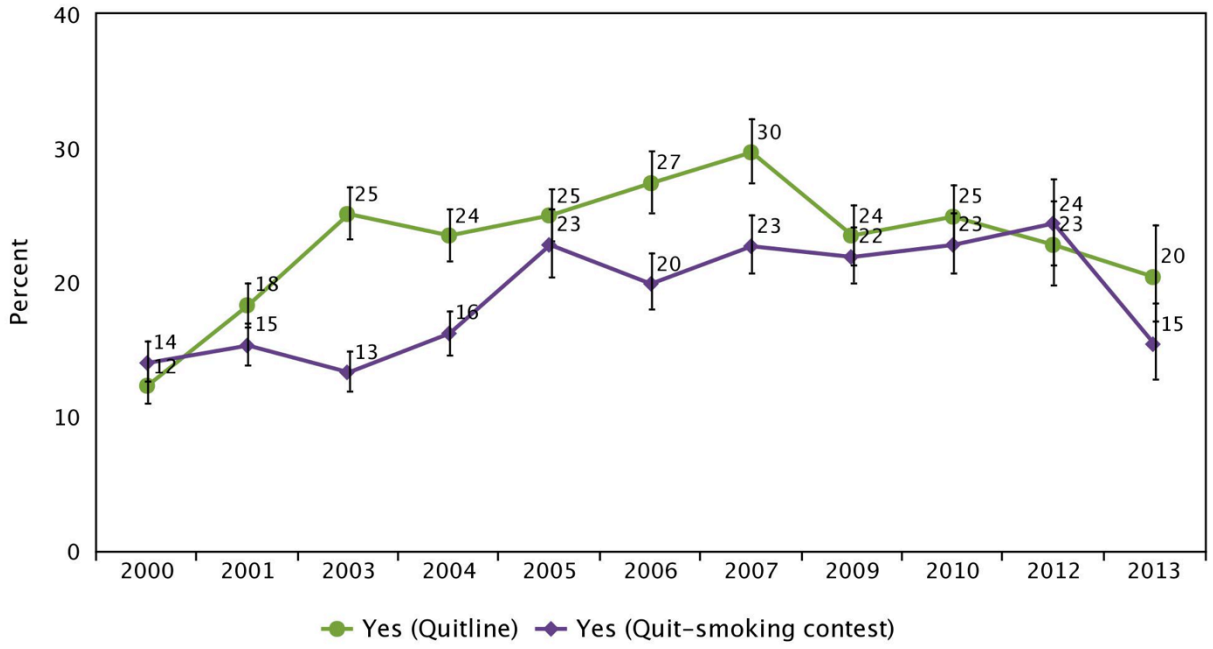


Note: Vertical lines represent 95% confidence intervals.
Source: Canadian Tobacco Use Monitoring Survey 2005–2012.

Awareness of Quit Programs

- In 2000, 12% of Ontarians 18 years and older were aware of a 1-800 quit line. Awareness significantly increased by 2007 (30%), with awareness falling in recent years (20% in 2013; Figure 28).
- Awareness of a quit line differed by smoking status: 50% of current smokers were aware compared to 16% of former smokers and 14% of never-smokers (CAMH Monitor 2013).
- Among Ontarians aged 18 years or over in 2012, 15% reported being aware of a quit-smoking contest, statistically unchanged since 2005 (CAMH Monitor data).
- From 2012 to 2013, significantly fewer current smokers were aware of a quit-smoking contest (35.5% vs. 18%[xxx]), as well as former smokers (25% vs. 15%; CAMH Monitor 2013). This may be due to the absence of the *Driven to Quit Contest* running in 2013.

Figure 28: Awareness of a 1-800 Quitline (Past 30 Days) and Awareness of a Quit Smoking Contest (Past 30 Days), Ages 18+, Ontario, Select Years 2000 to 2013



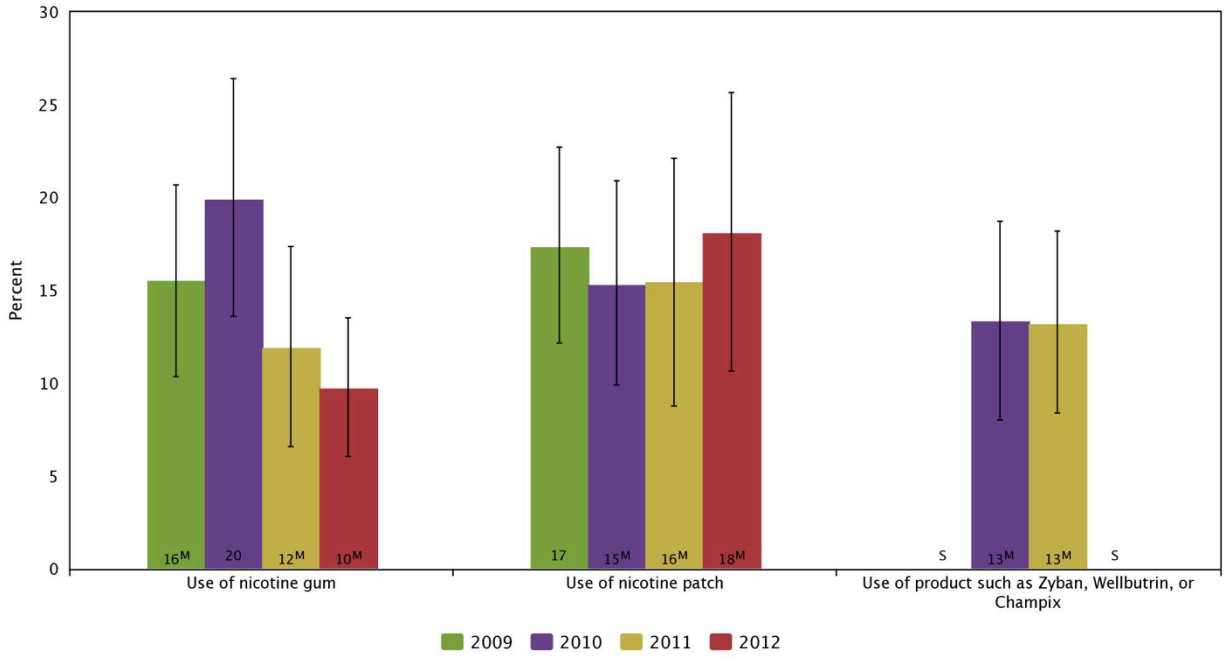
Note: Vertical lines represent 95% confidence intervals. Survey question not asked uniformly over reporting period.
Source: Centre for Addiction and Mental Health Monitor 2000, 2001, 2003-2007, 2009, 2010, 2012, 2013.

[xxx] Interpret with caution: subject to moderate sampling variability.

Use of Quit Aids

- In recent years, there has been a significant decline in the use of nicotine gum (20% in 2010 vs. 10% in 2012). Use of the nicotine patch has remained constant in recent years (CTUMS data; Figure 29).
- In 2011, 13% of smokers in Ontario aged 15 years and older representing 218,000 smokers used a product such as Zyban™, Wellbutrin™, or Champix™ (Figure 29). Note.12% of eligible smokers (or 25,503) received Zyban™ or Champix™ through the ODB Pharmacy program in 2011/2012. The number of smokers receiving medication through the ODB Pharmacy program has increased in recent years to 30,991 in 2012/13 and 27,358 in 2013/14.

Figure 29: Use of Smoking Cessation Aids (Past 2 Years), Ages 15+, Ontario, 2009 to 2012



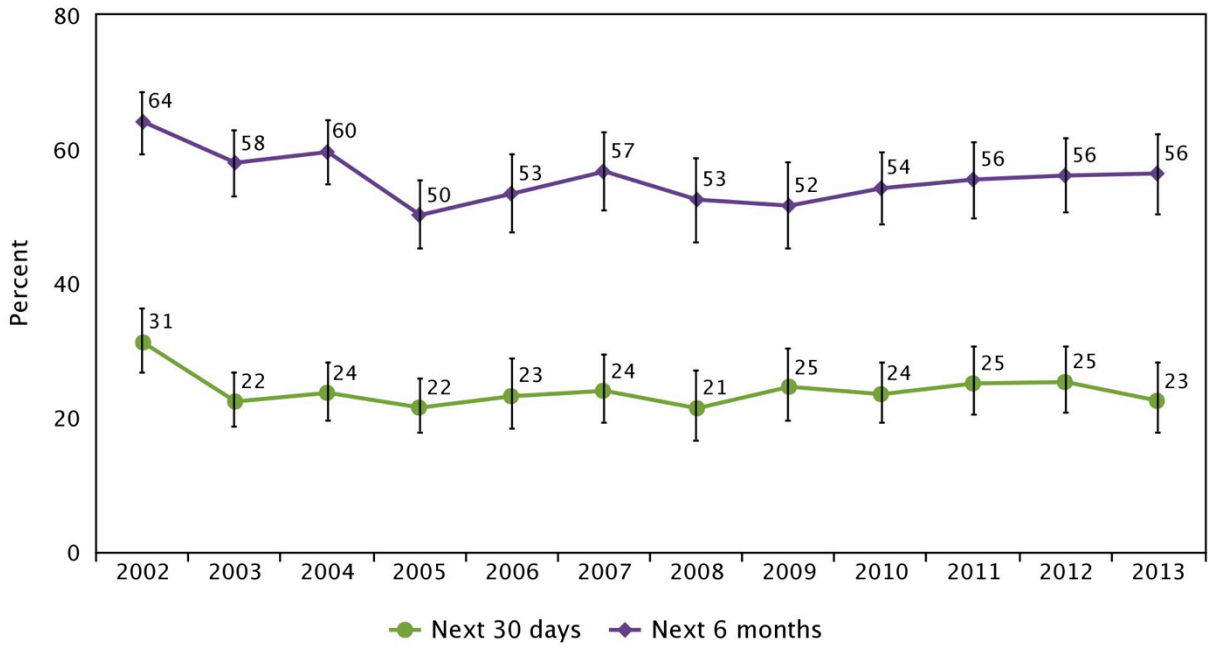
Note: M = Interpret with caution: subject to moderate sampling variability. Vertical lines represent 95% confidence intervals.
Source: Canadian Tobacco Use Monitoring Survey 2009–2012.

Quitting Behaviour

Intentions to Quit

- In 2013, more than half of all smokers intended to quit in the next six months (56%); there has been no statistically significant change in six-month quit intentions in recent years (CAMH Monitor data; Figure 30).
- Six-month quit intentions in 2013 are significantly lower in comparison to a peak in 2002 (56% vs. 64%; CAMH Monitor data)
- The prevalence of 30-day quit intentions among Ontario smokers in 2013 was 23%, which has not significantly changed statistically in recent years (CAMH Monitor data).

Figure 30: Intentions to Quit Smoking in the Next 6 Months and Next 30 Days, Ages 18+, Ontario, 2002 to 2013

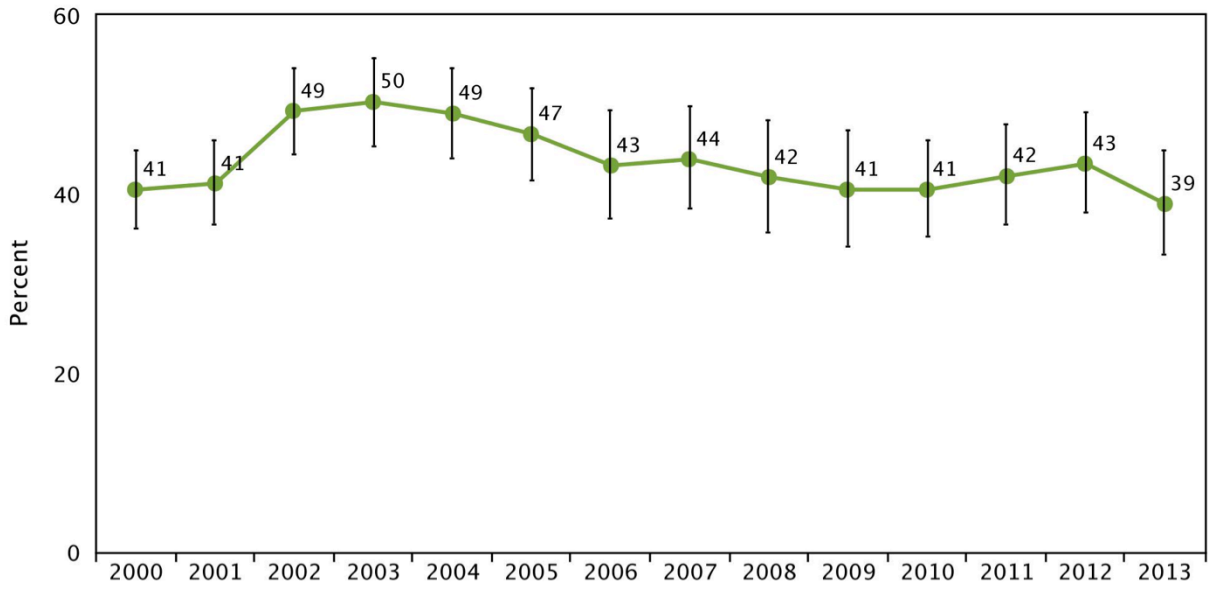


Note: Vertical lines represent 95% confidence intervals.
Source: Centre for Addiction and Mental Health Monitor 2002–2013.

Quit Attempts

- In 2013, four in ten smokers (39%) made one or more serious quit attempts in the past year (CAMH Monitor data; Figure 31).
- Over the last decade, there has been no statistically significant change in the proportion of adult smokers making quit attempts.

Figure 31: One or More Quit Attempts in the Past Year, Current Smokers, Ages 18+, Ontario, 2000 to 2013



Note: Vertical lines represent 95% confidence intervals.
Source: Centre for Addiction and Mental Health Monitor 2000-2013.

MPOWER Comparison with Ontario: Cessation

Eight MPOWER indicators relate to Cessation: Monitoring, Smoking Prevalence, Cessation Programs, Health Warning Labels, Mass Media Campaigns, Tobacco Advertising Bans, Compliance with Advertising Ban, and Taxation (Table 23).

Table 23: 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, 13.1% among 12+, 2013 (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 (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 cessation campaigns have been conducted in Ontario with duration longer than 3 weeks. There has been varied online and local campaigns and the MOHLTC 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 67% of the retail price in Ontario in 2014

Scientific Advisory Committee: Overview of Cessation Goals and Recommendations

The SAC 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 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. 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).

Table 24: Scientific Advisory Committee Recommendation for Cessation

Goal: To reduce the health and economic burden from tobacco industry products, at an individual and societal level, through cessation interventions.	
Recommendations	**Current Status**
Media Campaign	
[7.1] Implement a sustained and intensive mass media campaign to encourage smokers to quit, either on their own or with help.	Since January 2011, no sustained and intensive cessation campaigns have been conducted in Ontario with duration longer than 3 weeks. There have been varied online and local campaigns and the MOHLTC 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-User Support System	
[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.	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	
[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.	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.
[7.4] Provide free direct-to-tobacco-user smoking cessation medication in combination with varying amounts of behavioural support where indicated and appropriate.	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) and STOP with Addiction Agencies* (started in 2013) 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	
[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.	Initiatives include STOP, the Ottawa Model, Hospital Demonstration and Workplace-based Cessation Demonstration Projects; OHIP billing, and the Ontario Drug Benefit and Pharmacy Smoking Cessation Programs
[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.).	In progress
[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.	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.
[7.8] Target subpopulations 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.	The Ministry's Health System Research Fund promises to address several targeted populations once these awards are announced. The STOP program reaches clients of Addiction Agencies and Aboriginal Health Access Centres.
Cessation Training	
[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.	Continuing
Pharmaceutical Companies	
[7.10] Engage pharmaceutical companies to better understand their potential contribution to a tobacco-use cessation system for Ontario.	Unknown
Innovative Approaches	
[7.11] Support research and development of innovative social-ecological approaches to smoking cessation in various settings, including work place and community-based organizations.	MOHLTC funds research into a Workplace-based Cessation Demonstration Project Initiative and a Hospital Demonstration Project; provides funding to STOP and the Ottawa Model, which work in various settings.

Chapter Summary

There are close to 2 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 1.6%. While 7.6% 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 5 percentage-point decrease in the prevalence of smoking over five years (with past 30-day prevalence currently at 17%), 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 2014, tobacco taxes in Ontario remain among the lowest in Canada and are below even the minimal standard of 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,[91] we have already achieved most of the short-term benefits of this policy tool in regard to quitting behavior. Nevertheless, increased compliance with indoor bans, and extensions of smoke-free bans to outdoor settings, will undoubtedly positively impact some smokers in these settings to become nonsmokers.

Progress is being made on some key 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)

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.[92] Over many recent years, Ontario has invested less in marketing campaigns than that recommended by MPOWER. The Ontario government's *Quit the Denial* campaign, which has targeted young adult social smokers, may indicate a change in this trend. It is evident that in recent years, there have not been intensive, sustained, and well-funded province-wide campaigns directed toward promoting quit attempts in the general population of smokers.

It appears that only a small proportion of the 57% of smokers who were advised by physicians and to stop smoking the 45% who were advised to do so by dentists in 2013 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 and OHIP billing) reach approximately 7% 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.

Chapter 5: Protection

Protection: Smoke-Free Ontario Strategy Components

An important goal of tobacco control is to protect the population from exposure to secondhand smoke (SHS). Desired outcomes include eliminating nonsmokers' exposure to SHS in public places, workplaces, vehicles in which children are present, and in the home. In Ontario, the protection component of the Strategy is the main avenue by which progress toward these desired outcomes is expected to be achieved (Figure 32). 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).[8]

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.

Protection Infrastructure

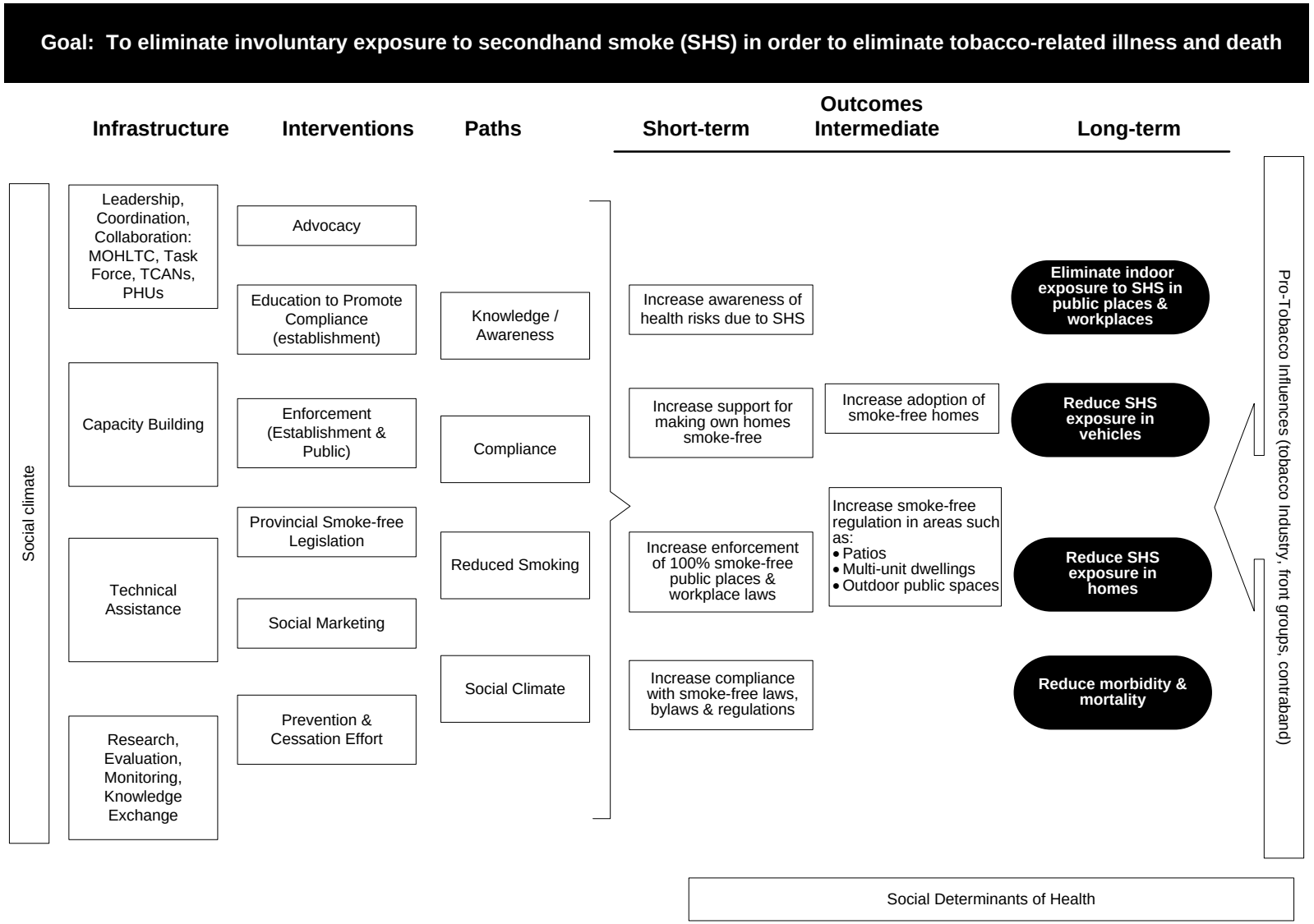
Public Health Units (PHUs) and Tobacco Control Area Networks (TCANs)

TCANs 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 Task Force, Community of Practices 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.

Ontario Tobacco Research Unit (OTRU)

In 2013/14, OTRU continued to monitor key protection indicators including outdoor smoking, smoking on patios, secondhand smoke exposure in multi-unit dwellings, and social exposure in movies [93,94,95,96] An additional project examined the literature on health effects of exposure to SHS in outdoor settings and the economic costs and impacts associated with outdoor smoking bans. In addition, OTRU provided rapid scientific consulting to the Ministry and SFO partners, and responded to 60 knowledge and evaluation support requests from partners in 2013/14. OTRU's online course (*Tobacco and Public Health: From Theory to Practice*) is a further resource on protection and is available to public health personnel across the province. In 2013/14, a total of 763 people enrolled in the protection module of the online course.

Figure 32: Protection Path Logic Model



Program Training and Consultation Centre (PTCC)

In 2013/14, a portion of PTCC's work centred on supporting protection initiatives of the Strategy. PTCC provided training and resources to support the development and implementation of protection initiatives in communities. This included the implementation of a multi-day training on foundations of enforcement which is required training for any PHU employee enforcing the *Smoke-Free Ontario Act*. The PTCC also facilitated a provincial Community of Practice addressing outdoor smoke-free spaces and tobacco-free sports and recreation. PTCC Health Promotion Specialists and Media and Communications Specialists also provided consultations to local PHUs, Tobacco Control Area Networks, and public health coalitions to support community education and policy development in the areas of smoke-free outdoor spaces, smoke-free multi-unit dwellings, and e-cigarettes.

Program Reach (All goals, combined): In 2013/14, the PTCC delivered 49 training events reaching over 1800 clients. Training events included 37 workshops and 12 webinars. PTCC's training programs were highly attended by staff of Ontario's 36 PHUs. Participants from Community Health Centres, the health care sector (e.g. hospitals,), community coalitions, non-governmental organizations and government were also well represented. Tobacco control consultations were also delivered to all local PHUs and TCANs. Approximately 260 public health practitioners and researchers were actively engaged in PTCC's provincial Communities of Practice.[xxxi]

Smoking and Health Action Foundation (SHAF)

In 2013/14, SHAF supported developments in municipal legislation related to protection, with an emphasis on policy analysis and provisions to further develop tobacco control policies in the province (e.g., waterpipe use, electronic smoking device use, MUDs, patios, beaches, parks). SHAF also tracked policies implemented by community/social housing providers in Ontario. The Smoke-free Laws Database received 27,900 visits in 2013/14.[97]

SHAF also contributed to building protection capacity in 2013/14. For instance, 6 workshops and 85 consultations were held on issues related to protection including smoke-free multi-unit dwellings, smoke-free outdoor spaces, and concerns about e-cigarettes and waterpipes. As chair of Smoke-Free Housing Ontario—a coalition of partners (PHUs, health agencies)—SHAF spearheaded the development of a 3-year strategic plan. The Smoke-Free Housing Ontario website, smokefreehousingon.ca, had 62,000 visits for the fiscal year. In addition, SHAF responded with in-depth support to 164 Ontario-specific inquiries from the general public regarding secondhand smoke in multi-unit dwellings, in the workplaces and other public places.

[xxxi] Steven Savvaidis, Personal Communication, December 2, 2014

Youth Advocacy Training Institute (YATI)

The Ontario Lung Association's 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 2013/14, YATI training sessions included information on tobacco-free initiatives including smoke-free movies, policy development, and tobacco free sports and recreation. In total, 56 general trainings and 22 partnership trainings were conducted in 2013/14 reaching 1,358 youth and 349 adults.[12]

Protection Interventions

Protection Interventions Contributing to Knowledge/Awareness and Compliance Paths

Smoke-Free Ontario Act (SFOA)

Much of the activity in protection is centered on the *Smoke-Free Ontario Act*, 2006 (the *Act*), a key piece of legislation in the province's protection strategy.

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

Before the *Act* came into force, 9 out of 10 Ontarians were covered by local smoke-free restaurant and bar bylaws (91% and 87%, respectively).[91] 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. Smoking is banned within 9 metres of a hospital entrance or exit. The *Act* entitles home healthcare workers to request no smoking in clients' homes while providing healthcare.

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

In November 2014, a new regulation was passed in Ontario that bans smoking on all restaurant and bar patios, within 20 metres of playgrounds, and within 20 meters of sports fields.[98] The new smoking prohibitions take effect January 1, 2015, replacing the patchwork municipal-level patio, playground and recreation field policies across the province.[30]

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

SFOA Enforcement

The Ministry's *Protocol for Smoke-Free Inspection for Enclosed Workplaces and Public Places* 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 *Act*.[99]

The province's 36 PHUs actively enforce the smoke-free provisions of the *Act*. In 2013, enforcement staff conducted 14,497 enclosed workplace and public place inspections across the province. Seventy-nine percent of premises were found to be in compliance with the *Act* at the time of inspection (Tobacco Inspection System, 2014).[31]

Local Policy Initiatives

The province's 36 PHUs play a pivotal role in efforts to reduce the population's exposure to secondhand smoke. These efforts include:

- Educating the public, workers, workplaces, and retail establishments about the dangers of secondhand smoke.
- Enforcing smoke-free provisions of existing legislation.
- Promoting more comprehensive protection (e.g., on outdoor patios, multi-unit dwellings, parks).

Local jurisdictions have the ability to extend protection beyond provincial legislation to other settings including:

- Outdoor parks, beaches
- Outdoor patios
- Transit shelters
- Hospital and long-term care grounds
- Buffer zones around doorways and windows
- Multi-unit dwellings

As of November 2014, many jurisdictions had strengthened smoke-free municipal bylaws in these settings beyond that covered by the *SFOA (*See Table B-1 in Appendix B for details on 53 leading jurisdictions).

Local jurisdictions also have the ability to extend protection beyond provincial legislation to the use of other forms of tobacco, such as:

- Waterpipes
- E-cigarettes

Waterpipe 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 what is being smoked in waterpipes can be difficult and may require testing. In a recent study conducted in Toronto, air quality levels hazardous to human health were observed in indoor waterpipe venues.[100]

Nine 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 (Peterborough, Orillia, Barrie, Bradeford West Gwillimbury); 9 meters from doorways to public buildings (Englehart, Orillia, Niagara Region); municipally-owned property (Ottawa, Peterborough, Mississauga); outdoor recreation fields (Hamilton, Ottawa, Orillia, Niagara Region); parks (Hamilton, Ottawa, Peterborough, Niagara Region); playgrounds (Hamilton, Ottawa, Orillia, Niagara Region); licensed outdoor patios (Peterborough); and, bus shelters (Niagara Region). All of the listed jurisdictions ban the use of waterpipes containing tobacco. However, Orillia, Ottawa, Peterborough, Barrie and Bradford West Gwillimbury have further extended the waterpipe ban to include waterpipes containing any non-tobacco/nicotine substance.[101]

E-cigarette use has also become a growing concern due to the increasing proportion of youth reporting e-cigarette use and the unknown health impacts of e-cigarettes. One small Canadian study found that the percentage of youth who reported ever trying e-cigarettes increased from 5% in 2012 to 10% in 2013.[102] In November 2014, Nova Scotia and Ontario introduced legislation to ban the use of e-cigarettes in locations where smoking is banned. Prior to the provincial bans, other jurisdictions across the country started implementing policies to regulate e-cigarette use. In May 2012, Hantsport, NS was the first jurisdiction that banned the use of e-cigarettes in outdoor public places (e.g., parks, playgrounds, recreational facilities, trails, bus stops) and within 9 meters of any doorway on municipally owned property.[103] Red Deer, AB,[104] Innisfil, ON,[105] Vancouver[106], and Nelson, BC[107] have implemented similar bans on e-cigarette use in outdoor public places. Use of e-cigarettes has been banned inside municipal workplaces in Toronto and Elgin County, ON[108]; while Red Deer, AB has extended their ban on e-cigarette use to all enclosed public places.

Other Local Interventions

Multi-Unit Dwellings

Some health units have focused attention on the issue of smoke-free multi-unit dwellings (MUDs). In the South West TCAN, packages were delivered to landlords by a Tobacco Enforcement Officer or SFO-staff member during a complaint-based or proactive inspection to inform them of the benefits of smoke-free policies, policy options and resources.

Smoke-free Workplaces

In support of smoke-free workplaces, the East TCAN developed and distributed a toolkit to help promote the implementation of voluntary outdoor workplace smoke-free policies.

Post-Secondary Campus Policies

In 2013/14, *Leave The Pack Behind* 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;[109] and establishing concrete, actionable approaches for policy enforcement by appropriate campus personnel.[110] All campuses engaged in some aspect of these actions, with advocacy work on five campuses directed toward stronger smoking restrictions.

Leave The Pack Behind's 2013/14 annual environmental scan of Ontario's 44 public colleges and universities revealed that all institutions banned smoking indoors, most restrict outdoor smoking to specific designated areas, and the vast majority (39/44 institutions) banned tobacco sales on campus. However, it appears that very few institutions formally address policy enforcement practices. LTPB protection activities conducted in 2013/14 included a training with campus health professionals on key components of a comprehensive campus tobacco control policy and raising awareness about the issue of smoking with students in campus residence buildings. Various consultations were held throughout the year with many campus health professionals.

Prevention and Cessation Interventions Contributing to Protection

Progress toward Strategy prevention and cessation goals is expected to result in fewer smokers in the province.[111,112,113,114] 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

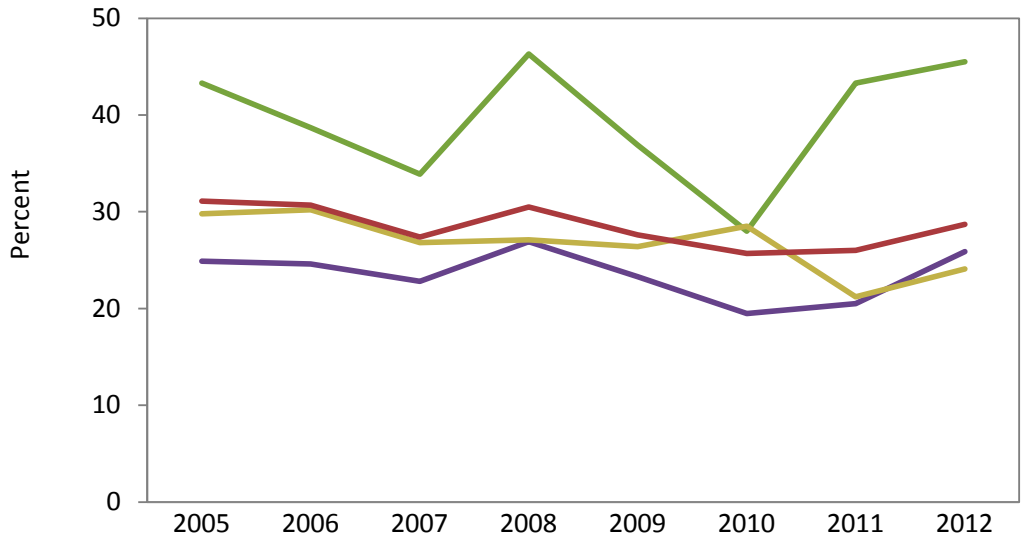
Workplace Exposure

- In 2012, 29% of workers (aged 15+) reported being exposed to secondhand smoke indoors or outdoors at the workplace in the past 30 days (CTUMS 2012). There has been no significant change in overall workplace exposure from 2005 to 2012 (31% in 2005 and 29% in 2012; Figure 33).
- In recent years, blue-collar workers had a significantly higher level of exposure to secondhand smoke at work compared to other workers. (Figure 33).
- According to the 2013 CAMH Monitor, 10% of adult workers (aged 18 years or older) were exposed to SHS indoors at work or inside a work vehicle for 5 or more minutes in the past week, unchanged from 2012 (13%; data not shown).

Public Opinion about Smoking in the Workplace

- In 2012, 95% of respondents agreed that there should be no smoking indoors in a workplace—that is, 59% responded that smoking should only be allowed in designated outdoor areas and 36% responded that it should not be allowed anywhere (CTUMS data; Figure 34), unchanged in recent years.

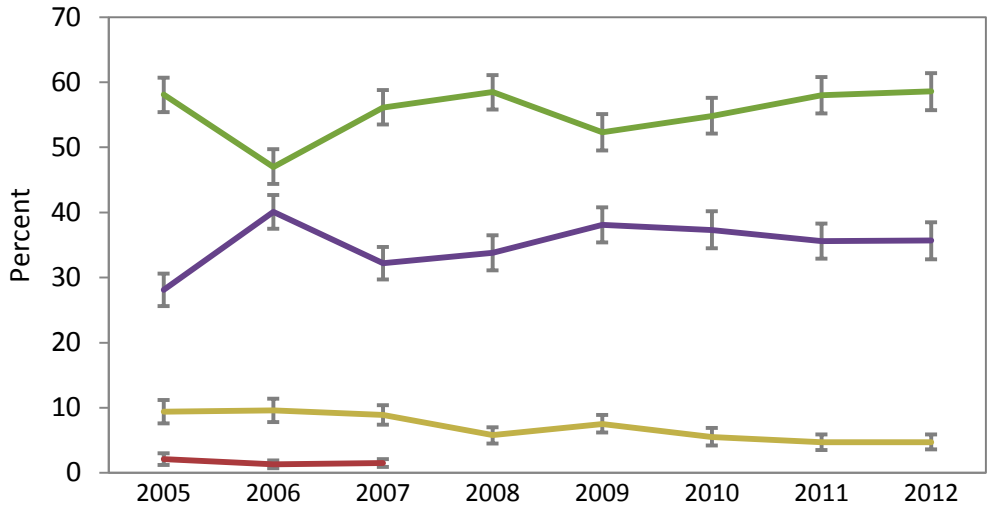
Figure 33: Workplace Exposure (Past 30 Days), by Occupation, Ages 15+, Ontario, 2005 to 2012



	2005	2006	2007	2008	2009	2010	2011	2012
Blue-collar	43	39	34	46	37	28	43	46
Sales and service	25	25	23	27	23	20	21	26
White-collar	30	30	27	27	26	29	21	24
Total	31	31	27	31	28	26	26	29

Source: Canadian Tobacco Use Monitoring Survey 2005–2012.

Figure 34: Views on Smoking in the Workplace, Ages 15+, 2005 to 2012



	2005	2006	2007	2008	2009	2010	2011	2012
Allowed only in designated outdoor areas	58	47	56	59	52	55	58	59
Not allowed anywhere (indoors or outdoors)	28	40	32	34	38	37	36	36
Allowed only in enclosed areas	9	10	9	6	8	6	5	5
Smoking should be allowed anywhere in the workplace, whether indoor or outdoor	2[M]	1[M]	2[M]	Not reportable	Not reportable	Not reportable	Not reportable	Not reportable

Note: Vertical lines represent 95% confidence intervals. M=Marginal. Interpret with caution: subject to moderate sampling variability.
Source: Canadian Tobacco Use Monitoring Survey 2005-2012.

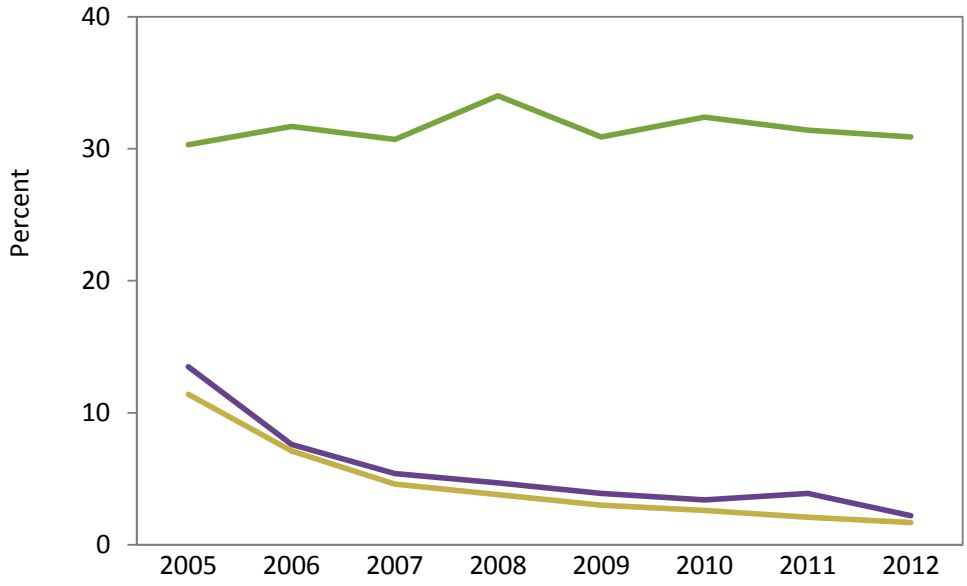
Exposure in Public Places

Restaurants and Bars

- In 2005, the year before the *Smoke-Free Ontario Act* was implemented, 11% of Ontarians aged 15 years and over reported exposure to secondhand smoke inside a restaurant. Since that time, exposure has decreased significantly, with reported exposure at 2% in 2012 (Figure 35).
- Among the total population, secondhand smoke exposure in bars was 14% in 2005 (the year prior to the *Act*), falling to 2% in 2012 (seven years following implementation) (Figure 35).
- The *Act* has prohibited smoking on outdoor patios if a portion of a patio is covered or partially covered by a roof until November 2014, when smoking on patios was banned. Among the total population, exposure to secondhand smoke on any restaurant and bar patio was 30% in 2005 (the year prior to the *Act*). Since then, similar rates of exposure have been reported (Figure 35).

- In 2013, 62% of Ontario adults (including 77% of never-smokers) agreed that smoking should be banned on outdoor patios of restaurants and bars, unchanged from 2012 levels (61%) (CAMH Monitor, data not shown in the figure).

Figure 35: Exposure to SHS at Restaurants or Bars, Ages 15+, Ontario, 2005 to 2012



	2005	2006	2007	2008	2009	2010	2011	2012
Patio exposure	30	32	31	34	31	32	31	31[M]
Bar exposure	14	8	5	5	4	3	4	2
Restaurant exposure	11	7	5	4	3	3	2[M]	2[M]

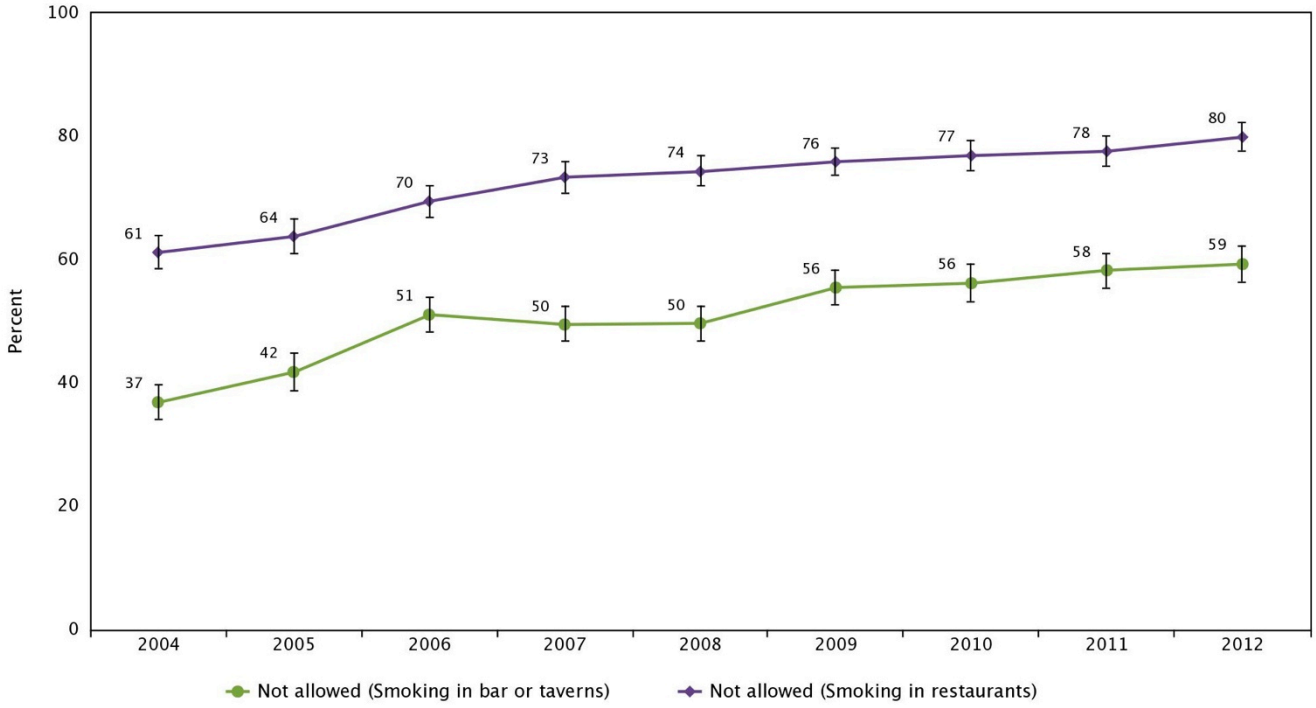
M = Marginal. Interpret with caution: subject to moderate sampling variability.
Note: The Smoke-Free Ontario Act was implemented May 31, 2006.
Source: Canadian Tobacco Use Monitoring Survey 2005–2012.

Public Opinion about Smoking in Restaurant and Bars

- In 2012, 59% of Ontarians aged 15 years and over felt that smoking should not be allowed in bars or taverns, a significant increase from 2008 (59% vs. 50%; CTUMS data; Figure 36). In 2012, females were significantly more likely to feel that smoking should not be allowed in bars or taverns (65% for females and 54% for males).
- Support was significantly higher in 2012 for prohibiting smoking in restaurants at 80%, a significant increase from 2008 (74%). In 2012, females were significantly more likely to feel that smoking should not be allowed in restaurants (84% for females and 76% for males).
- In 2013, 61.5% of Ontario adults (including 77% of never-smokers and 19% of current smokers) agreed that smoking should be banned on outdoor patios of restaurants and bars, similar to the 2011 levels (61%; CAMH Monitor, data not shown). In 2013, there was

no statistically significant difference in support for a ban between females and males (66.5% vs. 55.5%, data not shown).

Figure 36: Views on Smoking in Bars and Restaurants, Ages 15+, Ontario, 2004 to 2012



Note: Vertical lines represent 95% confidence intervals.
Source: Canadian Tobacco Use Monitoring Survey 2004-2012.

Other Public Places

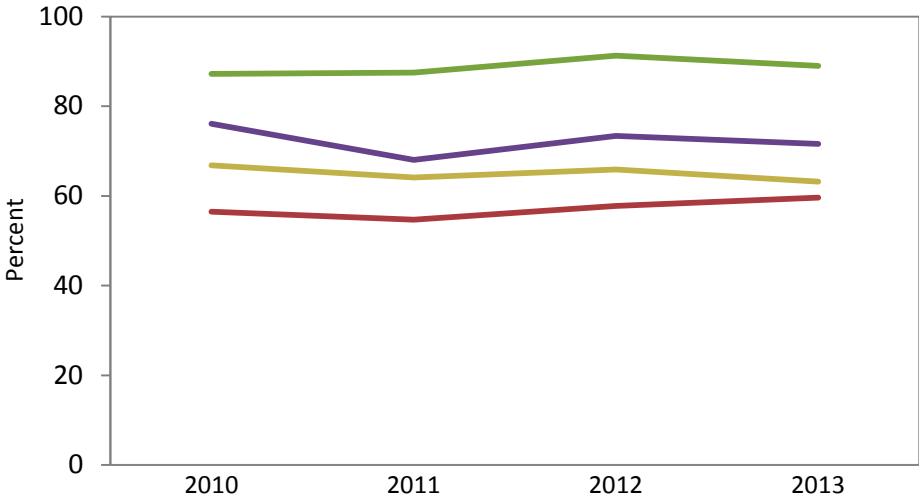
- In 2012, half of all Ontarians reported being exposed to secondhand smoke at entrances to buildings in the previous month (49%), a level of exposure that has remained steady in recent years (CTUMS, data not shown).
- Reported past-month exposure to secondhand smoke in outdoor settings (e.g., on a sidewalk or at a park) has also remained relatively stable in recent years (52% in 2006 and 58% in 2012; CTUMS, data not shown).

Public Opinion about Smoking in Outdoor Places

- Among the general population, support for smoking bans in public parks and on beaches, at outdoor special events, at outdoor recreational facilities, and outdoor playgrounds has remained unchanged in recent years (Figure 37).

- Current smokers were significantly less likely to agree that smoking should be banned in public parks and on beaches (36%), at outdoor special events (such as concerts, festivals or parades, 34%), or near outdoor recreation facilities (such as sports fields, stadiums, and entrances to arenas, 47%) compared to former smokers (54%, 61%, and 67%, respectively) and never-smokers (69%, 73%, and 81%, respectively; CAMH Monitor 2013; data not shown).
- Support for banning smoking at outdoor children's playgrounds and wading pools is high at 89% among all respondents (Figure 37). Support is similar among never smokers (92%), current smokers (91%) and former smokers (82%; data not shown).
- Public support for smoking bans on public sidewalks, bus stops/transit shelters and entrances to public buildings has also remained unchanged in recent years (Figure 38).
- Current smokers were significantly less likely to agree that smoking should be banned on public sidewalks (19%) or bus stops/transit shelters (53%) compared to former smokers (48% and 70%, respectively) or never-smokers (62% and 81%, respectively) based on Z-test for two population proportions, $p<0.05$; data not shown.
- Support for banning smoking in entrances to public buildings was similar for current smokers (81%), former smokers (80%), and never smokers (92%) in 2013 (data not shown).

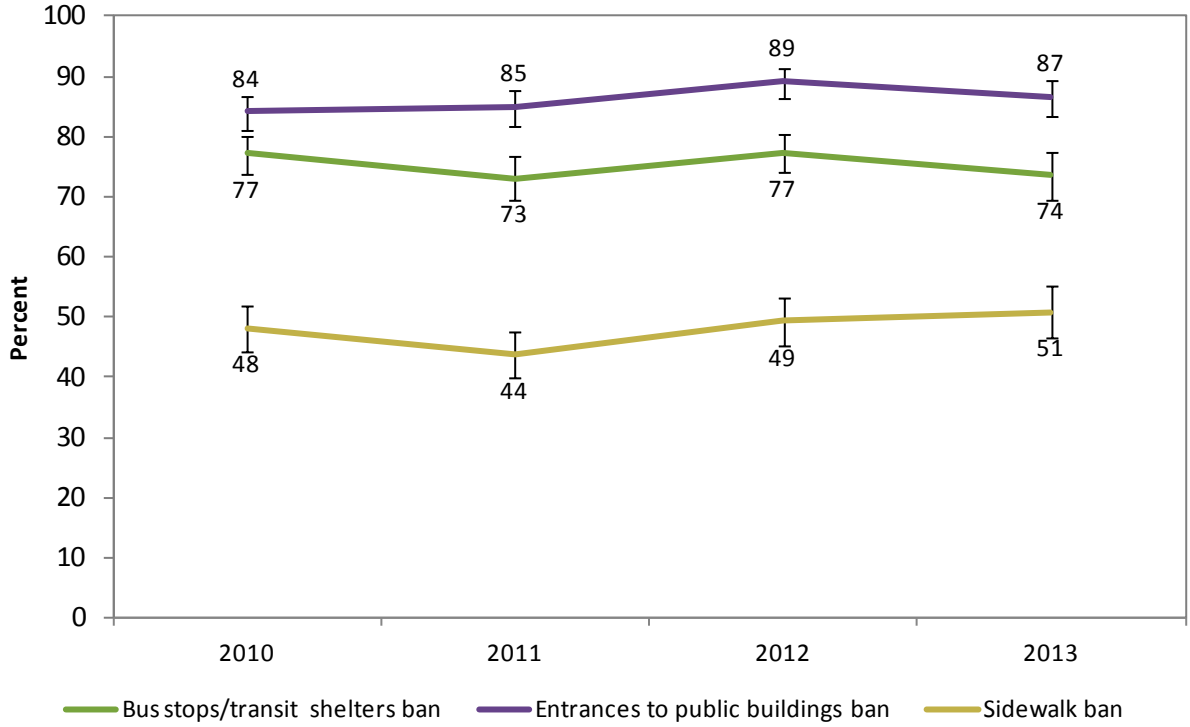
Figure 37: Agreement that Smoking should be Banned in Select Outdoor Settings, Ages 18+, Ontario, 2010 to 2013



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

Source: Centre for Addiction and Mental Health Monitor (Full Year) 2010 –2013.

Figure 38: Agreement that Smoking should be Banned on Sidewalks, Entrances, and Bus Stops, Ages 18+, Ontario, 2010 to 2013



Note: Vertical lines represent 95% confidence intervals. M=Marginal. Interpret with caution: subject to moderate sampling variability.
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2010 – 2013.

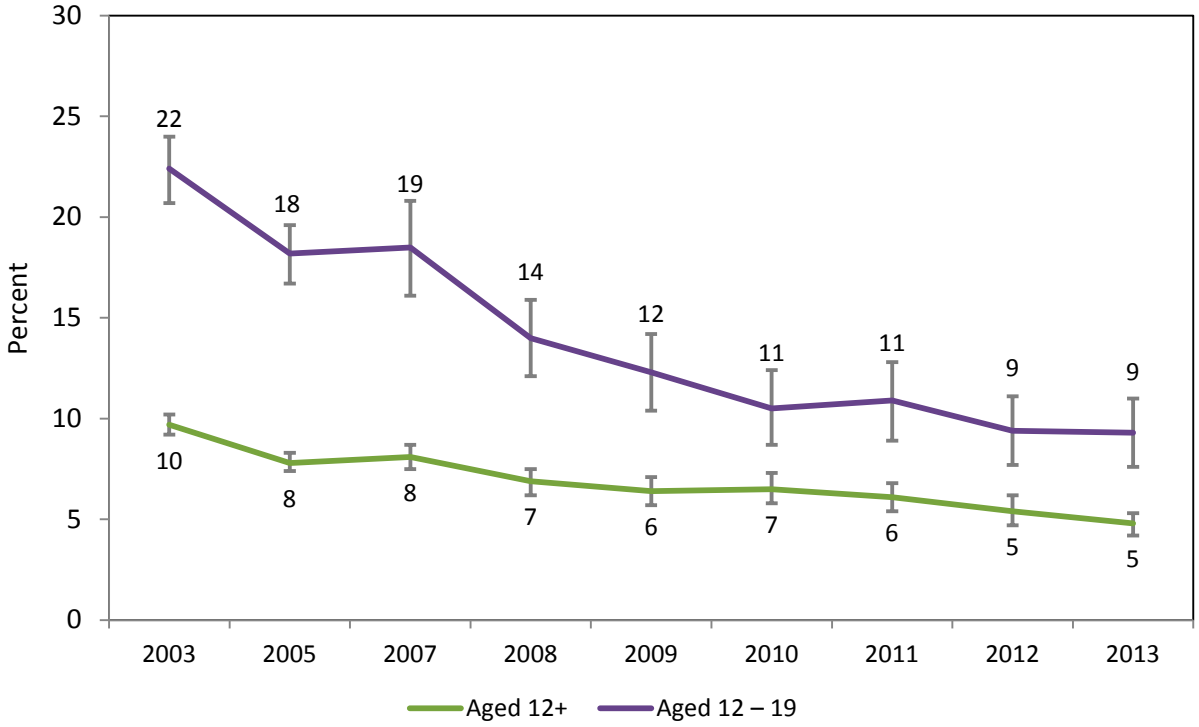
Exposure in Vehicles

One objective of the Strategy is the reduction of secondhand smoke exposure in vehicles, with particular emphasis on protecting children and youth from secondhand smoke. 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 lower in 2013 (5% or 450,800 Ontarians) than in 2011 (6% or 549,600 Ontarians) and earlier (CCHS data; Figure 39).
- In 2013, exposure to secondhand smoke in vehicles among young nonsmokers aged 12 to 19 was 9% (or 109,300 Ontarians), which is significantly lower compared to 2008 (14% or 172,900 Ontarians) and earlier (Figure 39).

- In 2013, exposure among youth 12 to 19 year old was significantly higher compared to all Ontarians aged 12 years and older (9% vs. 5%).
- In 2011/12,[xxxiii] 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 Peel Regional Health Unit to a high of 13% in Eastern Ontario Health Unit (See Appendix C, Table C-1).

Figure 39: Nonsmokers' Exposure to Secondhand Smoke in Vehicles (Every Day or Almost Every Day), by Age, Ontario, 2003 to 2013



Note: Vertical lines represent 95% confidence intervals. X-axis scale (Year) not uniform—interpret with caution.
Source: Canadian Community Health Survey 2003, 2005, 2007-2013.

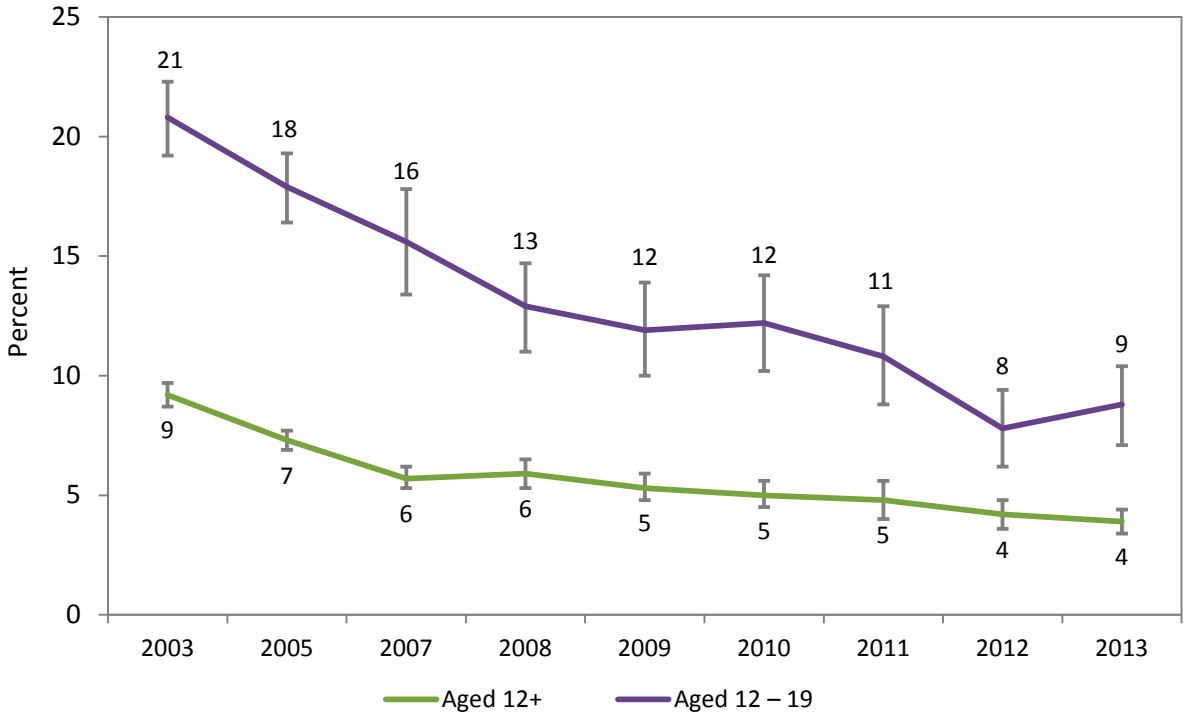
[xxxiii] Note: There are 36 health regions in Ontario. Because the majority of the CCHS 2013 data for health regions was flagged with suppression or marginal release criteria for this indicator, we present only the 2011/12 combined results.

Household Exposure

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

- In 2013, 4% (or 364,800) of nonsmoking Ontarians aged 12 years and older were exposed to secondhand smoke in their home every day or almost every day (Figure 40). There has been no significant change since 2008 (6% or 518,000 Ontarians).
- Among 12 to 19 year old nonsmokers, 9% (or 103,200 Ontarians) were exposed to secondhand smoke in their home in 2013, which is double the exposure reported by all respondents aged 12 and over (4%). Respondents aged 12 to 19 had a significantly lower rate of exposure in 2013 compared to levels reported in 2010 (12% or 146,700) and before.
- In 2011/12,[xxxiv] exposure to secondhand smoke in the home among nonsmoking Ontarians aged 12 years and over ranged from a low of 2% in Peterborough County-City Health Unit to a high of 9% in Timiskaming Health Unit (Appendix C, Table C-2).

Figure 40: Nonsmokers' Exposure to Secondhand Smoke at Home (Every Day or Almost Every Day), by Age, Ontario, 2003 to 2013



Note: Vertical lines represent 95% confidence intervals. X-axis scale (Year) not uniform—interpret with caution.
Source: Canadian Community Heath Survey 2003, 2005, 2007-2013.

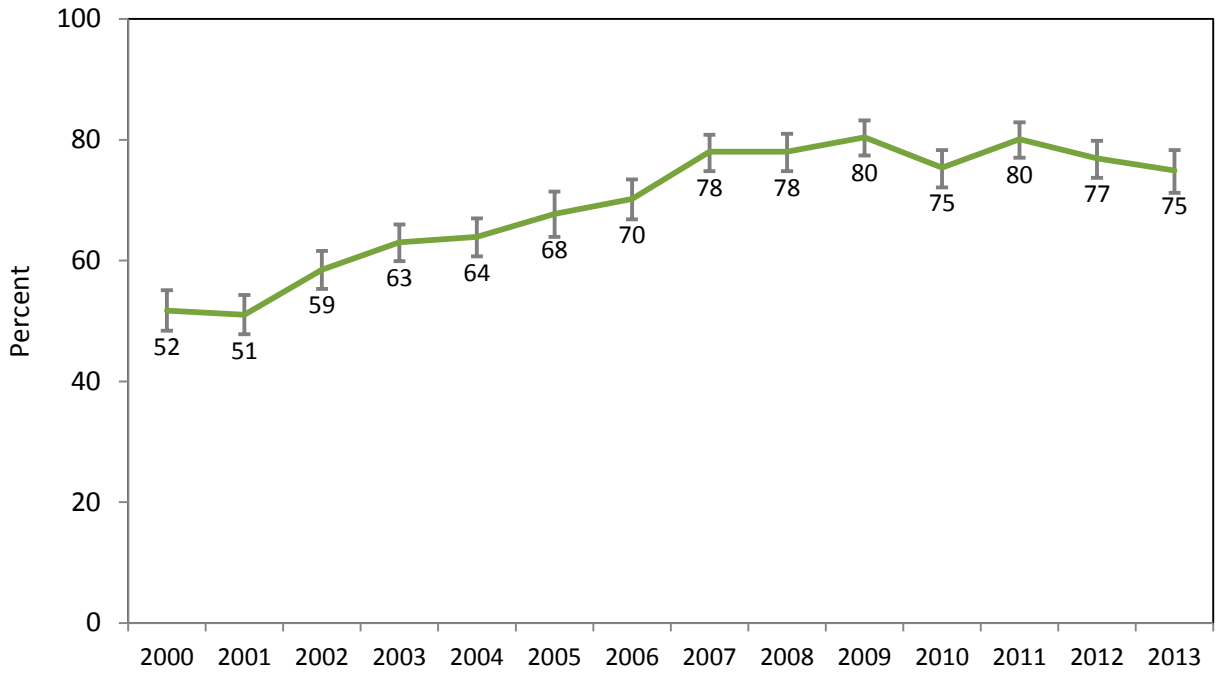
[xxxiv] Note: There are 36 health regions in Ontario. Because the majority of the CCHS 2013 data for health regions was flagged with suppression or marginal release criteria for this indicator, we present only the 2011/12 combined results.

Public Opinion about Smoking in Homes

In 2013, three-quarters of respondents (75%) agreed that there should be a law that parents cannot smoke inside their home if children are living there; this is significantly higher than the level of agreement reported in 2005 (68%) and earlier (Figure 41).

- Approximately 1 million Ontarians were exposed to secondhand smoke in multi-unit dwellings in 2012.[6] In that same year, 87% of adults in Ontario believed that smoking should not be allowed inside multi-unit dwellings including apartment buildings, rooming houses, and retirement homes with shared ventilation; the level of support has increased significantly since 2006 (87% vs. 73%, respectively; CAMH Monitor, data not shown).

Figure 41: Agreement That There Should Be a Law that Parents Cannot Smoke Inside Their Home if Children Are Living There, Ages 18+, Ontario, 2000 to 2013



Note: Vertical lines represent 95% confidence intervals.
Source: Centre for Addiction and Mental Health Monitor 2000–2009 (half year sample); 2010 – 2013 (full year sample).

Risk Perception about Secondhand and Third-hand Smoke

In 2013, 85% of adults in Ontario believed that exposure to secondhand smoke posed a moderate or great risk of physical or other harm. Fewer adults in Ontario (58%) believed third-hand smoke posed a moderate or great risk to harming themselves physically or in other ways (CAMH Monitor, data not shown).

MPOWER Comparison with Ontario: Protection

Three MPOWER indicators relate to Protection: Monitoring, Smoke-Free Policies, and Smoke-Free Policy Enforcement (Table 25).

Table 25: 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 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 SAC goal for Protection is: "To protect Ontarians from all physical and social exposure to tobacco products." The 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 (Table 26). Progress has been made in many of these areas, but work remains to address several shortcomings (e.g., multi-unit dwellings) 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).

Table 26: Scientific Advisory Committee Recommendation for Protection from Tobacco Smoke and Social Exposure to Tobacco Use

Goal: To protect Ontarians from all physical and social exposure to tobacco products	
Recommendations	**Current Status**
Smoke-free Policies	
[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 multi-unit dwellings. [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.	Comprehensive legislation on Protection exists; proposed legislation announced to prohibit smoking on bar and restaurant patios, playgrounds, public sports fields and surfaces, and outdoor grounds of hospitals. This 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 No action on protection from combustible waterpipe preparations was announced.
Media and Social Marketing	
[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.	No provincial action
Social Action	
[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.	No province-wide program specific to Protection. Various programs at the local and regional level.
Smoke-free Compliance and Enforcement	
[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.	Comprehensive legislation on Protection promoted and enforced No change in enforcement protocol.
Learning System	
[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.	Provincial monitoring conducted by OTRU. Regional projects run by TCANs and PHUs, with OTRU providing knowledge and evaluation support.

Professional Development	
[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.	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.

Chapter Summary

Ontario meets all of the minimum standards for protection that are 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. More than half the population continues to be exposed outdoors at entrances to buildings (49%) and on sidewalks or in parks (58%); 31% of Ontarians who visited restaurants or bars reported being exposed on patios; 29% of workers reported being exposed to secondhand smoke indoors or outdoors at the workplace in the past 30 days; 10% of workers are exposed to secondhand smoke indoors at work or inside a workplace vehicle; 9% of nonsmokers aged 12 to 19 are exposed in their home and 9% are exposed in vehicles.[xxxv]

The US Surgeon General's review of scientific evidence concluded that there is no risk-free level of exposure to secondhand smoke.[114] In addition to the adverse health effects of SHS, 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.[115,116]

The Scientific Advisory Committee recommended possible next steps to offer further protection for Ontarians including eliminating smoking in priority settings: unenclosed bar and restaurant patios, not-for-profit multi-unit dwellings, selected outdoor public settings (e.g., parks, transit shelters, doorways, etc.). Recent announcements by the Government of Ontario indicate that some of these gaps in protection are now being closed. Select municipalities have closed other gaps.

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

Chapter 6: 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.

In recent years, there has been substantial progress in decreasing tobacco use among high school students. Despite this success, the rate of tobacco use increases sharply after high school, with one in every four young adults (aged 25-29) a current smoker, and males with an even higher rate of smoking. Moreover, there has not been a statistically significant change in the prevalence of tobacco use in the overall population over the past five years: 21% of Ontarians have used some form of tobacco in the past 30 days, and 17% currently smoke cigarette.

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. 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 SAC and those being adopted in other leading jurisdictions. There are a number of unrealized 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 show advertisements preceding movies and video games that contain tobacco imagery; 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 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 to targeting youth and young adults who are most at risk of becoming established tobacco users.

Cessation

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, and
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

SAC recommended possible next steps to offer further protection for Ontarians including eliminating smoking in a number of priority settings: unenclosed bar and restaurant patios, not-for-profit multi-unit dwellings, selected outdoor public settings (e.g., parks, transit shelters, doorways, etc.). Recent announcements by the Government of Ontario indicate that some of these gaps in protection are now being closed. 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: the proportion of smokers who are advised to quit and assisted in quitting has risen; new demonstration projects are seeking innovations for further improvements in smoking cessation in workplace and hospital settings; and significant strides are being taken at the provincial and local levels to further both physical and social protection from smoking in outdoor settings and to curtail the availability of flavoured tobacco.

Appendix A: Technical Information about Population Surveys

Data Sources

Canadian Tobacco Use Monitoring Survey (CTUMS)

Health Canada's Canadian Tobacco Use Monitoring Survey (CTUMS) is an ongoing cross-sectional nationwide, tobacco-specific, random telephone survey, conducted every year since 1999. Annual data are based on two cycles, the first collected from February to June, and the second from July to December. The sample design is a two-stage, stratified, random sample of telephone numbers. To ensure that the sample is representative of Canada, each province is divided into strata or geographic areas (Prince Edward Island has only one stratum). As part of the two-stage design, households are selected first and then, based on household composition, one, two, or no respondents are selected. The purpose of this design is, in part, to over-sample individuals 15 to 24 years of age. In general, CTUMS samples 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 2013, estimates were based on telephone interviews with 3,021 adults (48% 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 7% of Ontario students. In total, 9,372 students participated in the survey in 2011, with a student participation rate of 62%. In 2013, 10,398 students participated in the survey, with a student participation rate of 63%. (In 2013, participation rate was influenced by 11% of students who were absent and 26% 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, 64,346 Canadians aged 12 or older participated in the 2013 survey (including 21,550 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 7 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 2011 Ontario Student Use Drug Use and Health Survey (OSDUHS). The sample consisted of 9,372 students from 40 school boards, 181 schools, and 581 classes. 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, OSDUHS

Indicator	Definition
Current smoker	A current smoker is someone who has smoked at least 100 cigarettes in his or her life and smoked within the last 30 days
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
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
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
Low Self-Esteem	Report at least 3 out of 5 items from the Rosenberg Self-Esteem Scale. Score was given when respondents reported "always" or "often true" for negative statements ("sometimes I feel that I can't do anything right", "I feel I do not have much to be proud of", "sometimes I think I am no good at all") and "never" or "seldom true" for positive statements ("I feel good about myself", "I am able to do most things as well as other people can")

Adults

A segmentation analysis of young adult (aged 18 to 29 years) and adult (18+ years) current smokers and nonsmokers was conducted among sub-populations defined by 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 2013 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, 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 [a]	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
Woking 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] Calculated using the Canadian Centre on Substance Abuse's 'Canada's Low-Risk Alcohol Drinking Guidelines.[117]

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.

Appendix B: NSRA's Smoke-Free Laws Database

Table B-1: NSRA's Smoke-Free Laws Database: Leading Edge Legislation or Bylaws, Ontario (November 2014)

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	
Callander	By-law No. 2013-1369 being a By-law to regulate smoking in Public Places and Workplaces within the Municipality of Callander	23/04/2013	
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 Licencing Requirements Also known as Bylaw No. 2012-003, Smoke-free and Tobacco Control Bylaw	10/01/2012	
Cochrane (ON)	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 #2012-15, Being a By-Law to Prohibit Smoking at Certain Locations on Municipal Property	21/03/2012	
Elliot Lake	Bylaw No. 03-4, A Bylaw to Regulate Smoking in Public Places and Workplaces	11/05/2009	
Englehart	Bylaw No. 2012-06, Smoke-Free and Tobacco Control By-Law	23/04/2012	

Name of Jurisdiction	Legislation and Bylaw Name	Date Passed (dd/mm/yyyy)	Date Last Amended
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
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	
Mattawa	Bylaw No. 08-25, Smoke-free Hospital Bylaw Bylaw No. 09-20, Being a Bylaw to amend Bylaw No. 08-25	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.	23/04/2014	
Newmarket	Bylaw 2011-73, A Bylaw to prohibit smoking of tobacco products at all town playgrounds, sports and playing fields and other outdoor youth related spaces.	28/11/2011	
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	

Name of Jurisdiction	Legislation and Bylaw Name	Date Passed (dd/mm/yyyy)	Date Last Amended
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	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	By-law No. 2004 - 276 - Parks and Facilities 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. 2012-46, 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	
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	
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 No. 11-074, Being a By-Law to Repeal By-Law 07-126, By-Law 07-168, By-Law 09-034 and By-Law 10-123 and Being a By-Law to Establish a By-Law Respecting Smoking in the City of Peterborough By-law Number 13-002, Being a By-law to Amend By-Law 11-074, Being a By-Law Respecting Smoking in the City of Peterborough	16/05/2011	04/02/2013

Name of Jurisdiction	Legislation and Bylaw Name	Date Passed (dd/mm/yyyy)	Date Last Amended
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	
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	
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	

Name of Jurisdiction	Legislation and Bylaw Name	Date Passed (dd/mm/yyyy)	Date Last Amended
Thunder Bay	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 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).	10/05/2010	21/10/2013
Timmins	Bylaw No. 2012-7250, Being a bylaw to amend Bylaw No. 2011-7123 to Prohibit Smoking at Timmins and District Hospital 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. 2009-6844, Being a bylaw to amend Bylaw 2003-5815 (both repealed)	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	
Trent Hills	By-law 2012-75, to prohibit smoking and holding lighted tobacco products within defined Municipal-owned outdoor public spaces	17/07/2012	
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	05/06/2008	02/04/2009

Appendix C: Nonsmokers' Exposure to Secondhand Smoke, by Public Health Unit

Table C-1: 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

	Exposure to Secondhand Smoke in Private Vehicles		
Public Health Unit	**2007/08**	**2009/10**	**2011/12[a]**
Peel Regional	7.2	7.3	4.0[Y]
District of Algoma	13.8	5.8[M,Y]	4.1[M]
City of Toronto	6.7	5.1	4.4[M]
Chatham-Kent	9.9	6.6[M]	4.4[M]
Leeds, Grenville and Lanark District	8.1	6.4[M]	4.6[M]
Peterborough County-City	7.9[M]	10.2[M]	4.8[M,Y]
Waterloo Health Unit, Ontario	6.4	6.0	5.1[M]
Halton Regional	6.9[M]	5.6[M]	5.1[M]
Wellington-Dufferin-Guelph	8.0	8.0[M]	5.1[M]
York Regional Health Unit, Ontario	5.6	5.9[M]	5.2[M]
Grey Bruce	7.4[M]	6.2[M]	5.2[M]
Lambton	7.3[M]	7.7	5.4[M]
Middlesex-London	6.9	8.1	5.6[M]
Perth District	7.5[M]	9.3[M]	5.7[M]
Niagara Regional Area	7.6	6.2[M]	5.7[M]
Northwestern	8.8[M]	10.8[M]	5.7[M,Y]
City of Ottawa	3.4[M]	4.3[M]	5.9
Huron County	8.3[M]	8.8[M]	6.1[M]
City of Hamilton	9.0	4.8[M,Y]	6.2
Kingston, Frontenac and Lennox and Addington	6.7	7.2[M]	6.5[M]
Simcoe Muskoka District	8.7	8.1	7.0
Oxford County	7.6[M]	6.8[M]	7.1[M]
Haldimand-Norfolk	9.2[M]	7.8[M]	7.2[M]
Brant County	10.4	12 M	7.2[M]
North Bay Parry Sound District	10.7	6.2[M,Y]	7.2
Renfrew County and District	6.7[M]	7.3[M]	7.7[M]
Durham Regional	11.2	8.3	7.7[M]
Hastings and Prince Edward Counties	12.2[M]	8.7	8.5
Haliburton, Kawartha, Pine Ridge District	6.7[M]	6.3[M]	8.6[M]
Elgin-St. Thomas	15.9	10.1[M,Y]	8.7[M]
Windsor-Essex County	7.2	8.7[M]	8.8[M]
Thunder Bay District	8.0	7.2	9.8[M]
Sudbury and District	11.9	6.0[M,Y]	9.8[M]

Porcupine	12.2	8.8[M]	11.0[M]
Eastern Ontario	10.2	7.4[M]	12.9[+Y]
Timiskaming	7.1[M]	[F]	[F]
Ontario	7.5	6.5[Y]	5.8

[a] = Ordered by 2011/12 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 and 2011/12 (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.
http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=1050502&p2=17.

Table C-2: 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

	Exposure to Secondhand Smoke in Private Vehicles		
Public Health Unit	**2007/08**	**2009/10**	**2011/12[a]**
Peterborough County	5.9[M]	6.9[M]	2.1[M,Y]
Halton Regional	5.4	3.4[M]	2.8[M]
Waterloo	6.2	5.5	2.9[M,Y]
Peel Regional	3.7[M]	4.9	3.0[Y]
City of Ottawa	4.1	3.6[M]	3.2[M]
Perth District	6.2[M]	6.2[M]	3.2[M]
York Regional	2.9[M]	3.5[M]	3.2[M]
Elgin-St. Thomas	7.6[M]	5.9[M]	3.5[M]
Chatham-Kent	7.8[M]	7.0[M]	3.9[M]
Middlesex-London	4.8	5.9[M]	4.0[M]
Brant County	8.3[M]	7.8[M]	4.2[M]
Kingston, Frontenac and Lennox and Addington	6.9[M]	5.9[M]	4.7[M]
Thunder Bay District	7.6	7.6	4.7[M]
District of Algoma	8.6	8.0[M]	4.7[M]
Windsor-Essex County	6.9	5.2[M]	4.8
Huron County	7.2[M]	5.3[M]	4.8[M]
City of Toronto	4.5	4.8	4.8[M]
Simcoe Muskoka	7.5	4.5[M,Y]	5.0
Wellington-Dufferin-Guelph	6.0[M]	5.6[M]	5.0[M]
Grey Bruce	7.5	3.8[M,Y]	5.2[M]
Niagara Regional Area	7.6	5.5[M]	5.2[M]
Renfrew County and District	6.3[M]	7.4[M]	5.3[M]
North Bay Parry Sound District	8.3[M]	5.4[M]	5.4[M]
City of Hamilton	7.7	6.1[M]	5.5[M]
Haldimand-Norfolk	9.6	8.7[M]	5.6[M]
Northwestern	8.1[M]	6.8[M]	5.6[M]
Lambton	6.3[M]	7.9[M]	6.0[M]
Durham Regional	8.2	4.3[M,Y]	6.3[M]
Oxford County	8.8	6.6[M]	6.4[M]
Haliburton, Kawartha, Pine Ridge District	8.6	6.8[M]	6.6[M]
Leeds, Grenville and Lanark District	9.2	9.6	6.7[M]
Porcupine	9.4[M]	7.4[M]	7.2[M]
Sudbury and District	10.3	7.1[M]	7.4[M]
Hastings and Prince Edward Counties	12.0	9.2[M]	8.1[M]
Eastern Ontario	12.7	7.4[M]	8.4
Timiskaming	10.7[M]	8.5[M]	9.4[M]
Ontario	5.8	5.2[Y]	4.5[Y]

[a] = Ordered by 2011/12 exposure (lowest to highest).
[M] = Marginal. Interpret with caution: subject to moderate sampling variability.
[Y] = Significantly lower than the previous year.

Source: Canadian Community Health Survey 2007/08, 2009/10 and 2011/12 (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
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