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

March 2018

Suggested Citation: Ontario Tobacco Research Unit. *Smoke-Free Ontario Strategy Monitoring Report*. Toronto: Ontario Tobacco Research Unit, Special Report, March 2018.

Acknowledgements

Many people were involved in the preparation of this report. Key authors are Robert Schwartz, Shawn O'Connor and Jolene Dubray.

Rita Luk conducted statistical analyses. Bo Zhang, Tracey Borland, Michael Chaiton and Pam Kaufman reviewed final drafts of chapters.

Sonja Johnston provided production assistance.

Chapter 1: Introduction

Chapter 2: Use of Tobacco and Alternative Products

Chapter 3: Infrastructure

Chapter 4: Youth Prevention

Chapter 5: Smoking Cessation

Chapter 6: Protection

Chapter 7: Pro-Tobacco Influences

Chapter 6: Concluding Note

Appendix

List of Acronyms and Abbreviations

AHAC	Aboriginal Health Access Centre
ATP	Aboriginal Tobacco Program
CAMH	Centre for Addiction and Mental Health
CCHS	Canadian Community Health Survey
CHC	Community Health Centre
ECA	*Electronic Cigarettes Act*
ESC	Executive Steering Committee
FHT	Family Health Team
FTI-PSP	Freeze the Industry-Plain and Standardized Packaging
FWCC	First Week Challenge Contest
LGBTQ	Lesbian, Gay, Bisexual, Transgender and Queer or Questioning
LHIN	Local Health Integration Network
LTPB	Leave The Pack Behind
MPOWER	World Health Organization's six indicators that include monitoring (prevalence data; M), smoke-free policies (P), cessation programs (O), health warnings on cigarette packages and anti-tobacco mass media campaigns (W), advertising bans (E), and taxation (R).
MOHLTC	Ministry of Health and Long-Term Care
JTI	Japan Tobacco International-MacDonald Corporation
NOT	N-O-T on Tobacco Ontario
NPLC	Nurse Practitioner-Led Clinic
NRT	Nicotine Replacement Therapy
ODB	Ontario Drug Benefit
Ottawa Model	Ottawa Model for Smoking Cessation
OPP	Ontario Provincial Police
OSDUHS	Ontario Student Drug Use and Health Survey
OTRU	Ontario Tobacco Research Unit
PHU	Public Health Unit
PTCC	Program Training and Consultation Centre
RBH	Rothmans, Benson & Hedges
RCMP	Royal Canadian Mounted Police
RNAO	Registered Nurses' Association of Ontario
SFO-SAC	Smoke-Free Ontario Scientific Advisory Committee
SFO	Smoke-Free Ontario
SFOA	*Smoke-Free Ontario Act*
SHAF	Smoking and Health Action Foundation
SHL	Smokers' Helpline

SHL TXT	Smokers' Helpline Text Messaging
SHO	Smokers' Helpline Online
SHS	Secondhand Smoke
STOP	Smoking Treatment for Ontario Patients
TCAN	Tobacco Control Area Network
TEACH	Training Enhancement in Applied Cessation Counselling and Health
TIMS	Tobacco Informatics Monitoring System
YATI	Youth Advocacy Training Institute
YCMIH	You Can Make It Happen

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:

Introduction

Table of Contents

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. Since 1994, the Ontario Tobacco Research Unit has provided an independent report on the annual progress of the Strategy. The report endeavours to bring evidence to bear on the continued development of comprehensive tobacco control in Ontario.

Report Structure

This report is organized around the four pillars of tobacco control—prevention, smoking cessation, protection, and pro-tobacco influences. These pillars are based on the strategic direction set by the 2003 Steering Committee of the Ontario Tobacco Strategy,[1] are consistent with earlier formulations of the Strategy[2] and more recent formulations as set out by the 2016 Smoke-Free Ontario Scientific Advisory Committee (SAC) report, *Evidence to Guide Action: Comprehensive Tobacco Control in Ontario (2016)*[3] and the Executive Steering Committee report, *Smoke-Free Ontario Modernization*.[4] The ultimate objective of the Strategy is to eliminate tobacco-related illness and death in Ontario.

The prevention, smoking cessation and protection chapters 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,[1] the then Ministry of Health Promotion's 2010 Comprehensive Tobacco Control Guidance Document for boards of health,[5] with the core outcomes identified by the National Advisory Group on Monitoring Tobacco Control[6] and with the Centers for Disease Control and Prevention's Key Outcome Indicators for Evaluating Comprehensive Tobacco Control Programs.[7] 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*.[8]

This report is organized as follows:

- Chapter 1: Introduction
- Chapter 2: Use of Tobacco and Alternative Products
- Chapter 3: Infrastructure
- Chapter 4: Youth Prevention
- Chapter 5: Smoking Cessation
- Chapter 6: Protection
- Chapter 7: Pro-tobacco Influences
- Chapter 8: Concluding Note
- Appendix

Methodological Approach

New this year, we have separated out SFO infrastructure into its own stand-alone chapter, which includes a description of infrastructure furnished by SFO partners. For the chapters on prevention, cessation, and protection, we describe interventions (policies, programs and social marketing campaigns), explore the reach and evaluative information about interventions and analyze population-level changes. The chapter on pro-tobacco influences touches on price and taxation, illicit tobacco, agriculture and production, distribution and consumption, availability, product and package innovation, and advertising and promotion.

This report presents information about Strategy activities and tobacco-control advances using 2016/17 Strategy partner reports (ending March 2017), select policy and program updates to December 2017, and the latest population survey data available including the 2016 CAMH Monitor, 2017 OSDUHS and 2015 CCHS (note: although Statistics Canada has released select indicators form the 2016 Canadian Community Health Survey, the raw data file has not yet been released).

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.

In the assessment of Strategy progress, reference is made to the 2016 Smoke-Free Ontario Scientific Advisory Committee (SAC) report, *Evidence to Guide Action: Comprehensive Tobacco Control in Ontario (2016)*[3] and the report of the Executive Steering Committee (*Smoke-Free Ontario Modernization)*,[4] who were appointed by the Minister of Health and Long-Term Care in 2017 to propose a modernized tobacco control strategy. We have included summary tables at the end of each chapter that compare the current status of SFO-funded initiatives to the relevant

assessments and recommendations from Scientific Advisory Committee and Executive Steering Committee reports.

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

- Variations in implementation including reach and dose of interventions
- Unknown time lags between implementation and population-level changes
- Economic and social perturbations and immigration
- Environmental variation—including pro-tobacco influences and contraband activity

Existing data for indicators for measuring long-term population-level outcomes—such as current smoking or successful quitting—do not always offer sufficient precision to identify small year-over-year changes, which is why we include multi-year data, as well as short- and intermediate-level outcomes. Statements of "significance" between two estimates (such as between years or between groups)—including any directional statement (e.g., increase, decrease, higher, lower, etc.)—are based on non-overlapping 95% confidence intervals or, in some cases, when confidence levels overlap, a formal significance test of two proportions. A comparison of two estimates that appear to differ in absolute magnitude from each other but are not reported as significant should be interpreted with caution. In general, to protect against misclassification of significance due to examining too many comparisons, we only compare the current year with: a) the previous year, b) a 5-year benchmark of 2012 if using 2016 data and 2013 if using 2017 data, and c) a pre-SFO benchmark year of 2005.

References

[1] Ontario Tobacco Strategy. Steering Committee. *Designing Ontario's Tobacco Strategy: Goals, Objectives, Logic Models, and Indicators*. Toronto, ON: OTS Steering Committee, February 2005.

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

[3] Smoke-Free Ontario. Scientific Advisory Committee, Ontario Agency for Health Protection and Promotion (Public Health Ontario). *Evidence to Guide Action: Comprehensive Tobacco Control in Ontario (2016).* Toronto, ON: Queen's Printer for Ontario, 2017. Accessed on December 18, 2017.

[4] Ontario Ministry of Health and Long-Term Care. *Smoke-Free Ontario Modernization: Report of the Executive Steering Committee.* Toronto, ON: Queen's Printer for Ontario, 2017. Accessed on November 30, 2017.

[5] Ontario. Ministry of Health Promotion. *Comprehensive Tobacco Control Guidance Document*. Toronto, ON: Queen's Printer for Ontario, 2010.

[6] Copley TT, Lovato C, O'Connor S. *Indicators for Monitoring Tobacco Control: A Resource for Decision-Makers, Evaluators and Researchers*. On behalf of the National Advisory Group on Monitoring and Evaluation. Toronto, ON: Canadian Tobacco Control Research Initiative, 2006.

[7] Starr G, Rogers T, Schooley M, Porter S, Wiesen E, Jamison N. *Key Outcome Indicators for Evaluating Comprehensive Tobacco Control Programs*. Atlanta, GA: Centers for Disease Control and Prevention, 2005.

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

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:

Use of Tobacco and Alternative Products

Table of Contents

List of Tables

List of Figures

Introduction

The long-term goal of the Smoke-Free Ontario (SFO) Strategy is to reduce the morbidity and mortality caused by tobacco use. The burden of tobacco use is large. Each year, cigarette smoking claims 15,970 lives in Ontario.[1] Based on 2012 estimates, total direct costs to health care due to smoking were $2.26 billion including 1.29 billion in hospital care costs, 565.5 million in prescription drug costs, and 401.3 million in physician care costs.[1]

Reducing the overall use of tobacco is one of the main objectives of the SFO Strategy. In recent years, Ontario has set a specific goal of having the lowest rate of smoking in Canada.[2] In addition to smoking cigarettes, Ontarians use a variety of other tobacco products—including cigars, pipes, snuff and chewing tobacco—as well as e-cigarettes and waterpipe shisha, both of which may contain nicotine. Federally, under the proposed *Cannabis Act*,[3] the legalization of cannabis is set for 2018. Given this context, the prevalence of cannabis use is of growing interest. It is also of relevance to this report on tobacco use given that 32% used cannabis mixed with tobacco at the same time, among past-year cannabis users (CAMH Monitor, data not shown). This chapter reports on all of these substances.

In this chapter, we present data about tobacco and other products from a variety of sources including administrative data (e.g., Health Canada) and survey data (e.g., 2017 Ontario Student Drug Use and Health Survey, 2016 Centre for Addiction and Mental Health Monitor and the 2015 Canadian Community Health Survey). At the time of writing, data from the Canadian Community Health Survey were only available for 2015 even though Statistics Canada has released select 2016 results.

Overall Tobacco Use

- According to the 2015 Canadian Community Health Survey (CCHS),[i] 20% of Ontario respondents aged 12 years or over reported current use of tobacco in the previous 30 days (the measure of tobacco includes cigarettes, cigars, pipes, snuff or chewing tobacco, and waterpipe; it excludes vaping products). This represents 2,268,300 tobacco users (CCHS 2015). Adding past 30-day use of a vaping product to all tobacco use results in a prevalence of 21%, representing 2,449,400 users.
- Among Ontarians 19 years of age or older, 21% (or 2,270,800) used some form of tobacco in the previous 30 days (CCHS 2015, data not shown), 22% when vaping products are included.
- In 2015, 17% of Ontarians aged 12 years or over smoked cigarettes,[ii] 2.1% smoked cigarillos, 1.3% smoked another form of cigar, 0.6% smoked pipes (marginal estimate, interpret with caution), 0.4% used smokeless tobacco (marginal estimate, interpret with caution), 1.2% used a tobacco waterpipe, and 3% used a vaping product (CCHS 2015; Note: these estimates include co-use and so do not sum to total tobacco use; to facilitate comparison, use is restricted to past 30 days only, which is different from the way that current smoking is reported in other sections of this report).[ii]

Cigarette Use

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

Canadian Community Health Survey

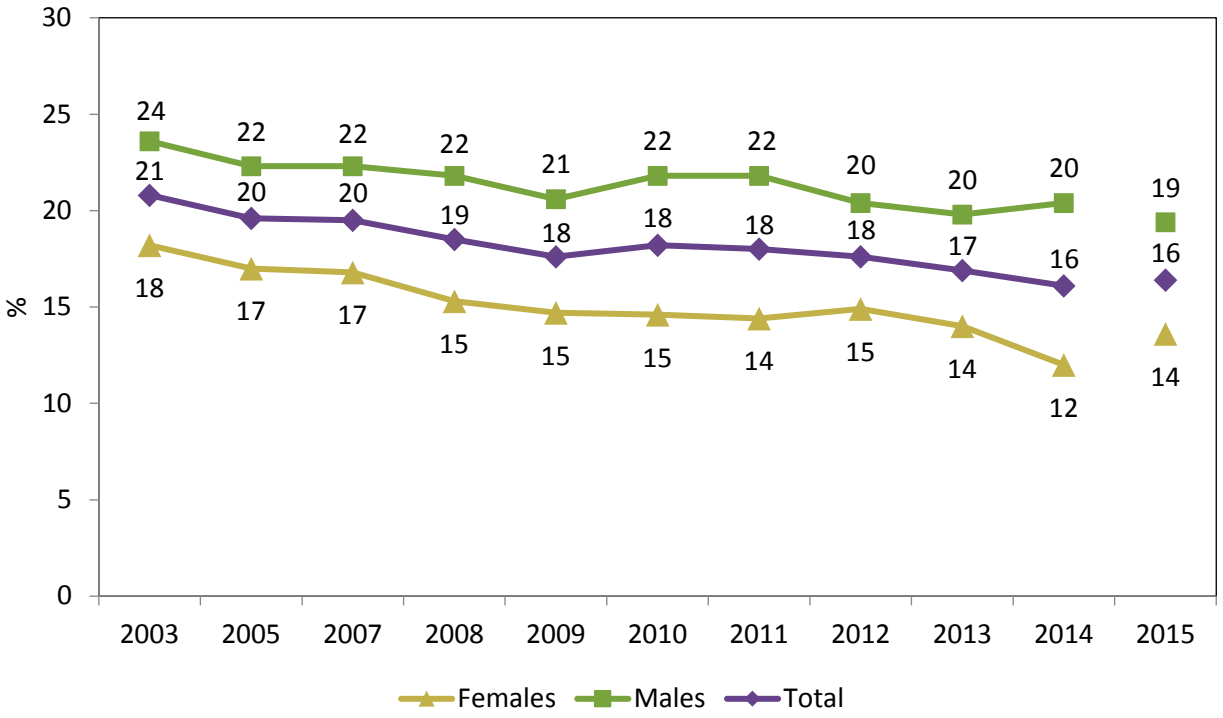
- In 2015, 16.4% of Ontarians aged 12 years or older were current smokers, representing 1,930,800 users (Figure 2-1). Males reported a significantly higher smoking rate compared to females (19% vs. 14%, respectively). The male smoking rate represented

[i] The 2016 and 2017 Canadian Community Health Survey data files were not available when this report was prepared.
[ii] In the Overall Tobacco Use section, "cigarette use" includes having smoked in the past 30 days but does not include having smoked 100 cigarettes in one's lifetime because lifetime quantity is not measured for the other forms of tobacco listed. In other sections of this report, we report current smoking as 16.4% (from CCHS 2015), which reflects past 30-day use and having smoked 100 cigarettes in one's lifetime.

1,112,600 male smokers, whereas the female rate represented 818,200 female smokers.

- In 2015, the Canadian Community Health Survey was redesigned. As a result, comparison of 2015 data to previous year's data needs to be made with caution. There does not appear to be any significant change over the last several years.
- In 2015, 17.6% of Ontarians (1,886,800 users) 19 years of age (the legal age to be sold cigarettes) or older were current smokers, among those 19 years of age or older, 21.0% of males (or 1,079,200) and 14.7% of females (or 807,600) smoked regularly (data not shown).

Figure 2-1: Current Smoking (Past 30 Days), by Sex, Ages 12+, Ontario, 2003 to 2015



Note: Year interval is not always uniform. The Canadian Community Health Survey was redesigned in 2015. Interpret trend with caution. Full data table for this graph provided in the Appendix (Table 2A-1).
Source: Canadian Community Health Survey 2003-2015.

Wholesale Sales Data

- In 2016, 10,307,189,350 cigarettes were sold in Ontario (wholesale sales data) compared to 10,380,708,260 in the previous year (a decline of less than 1%); 11,143,878,995 cigarettes were sold in the 2012 five-year benchmark year,[4] a relative

decline of 7.5%. (Note: Annual sales data may be influenced by wholesale shipment dates. Fine-cut tobacco sales excluded).

- In 2016, menthol cigarettes comprised 6.68% of all cigarette wholesale sales, up from 4.2% in 2015. (Note: Menthol tobacco products were banned as of January 1, 2017, which may explain, in part, the increased sales in 2016).

Cigar Use

On May 28, 2015, Bill 45 (*The Making Healthier Choices Act*) received Royal Assent. This Bill prohibits the sale of flavoured tobacco at retail stores in the province, with exceptions. Specifically, regulations consolidated on November 13, 2015 (and in effect as of January 2016) mandated that the Act does not apply to flavouring agents in cigars that impart a flavour or aroma of wine, port, whiskey or rum; nor does it apply to the flavour or aroma of menthol, a regulation that was revoked January 1, 2017 thus prohibiting menthol as a flavouring agent.[5]

Canadian Community Health Survey

- In 2015, 3% of Ontarians aged 12 years and over (or 349,200 people) had smoked cigars in the past 30 days, making cigars the second-most prevalent form of tobacco use after cigarettes (and tied with vaping) (CCHS 2015).
- Past 30-day cigar use was significantly higher among adults aged 19 to 29 (4.8%) compared to those aged 30 and older (2.6%; CCHS 2015, data not shown).
- In 2015, past 30-day cigar use was significantly higher among males compared to females (CCHS): 5.4% (or 308,800) of males aged 12 years and over had smoked cigars in the past 30 days compared to 0.7% (or 40,400) of females (marginal estimate, interpret with caution).

Wholesale Sales Data

- In 2016, Ontario wholesale sales of the total cigar category (little cigars/cigarillos and cigars) was 130,495,924 units.[iii] This represents a 6.8% relative fall from 2015 sales (140,090,699 units) and a 14.8% relative decline from 2012 sales (153,137,662 units) reported 5 years earlier. (Note: Annual sales data may be influenced by wholesale

[iii] Health Canada, Personal Communication, February 8, 2018.

shipment dates).

- In 2016, 51.4% of the Ontario cigar market was estimated to be flavoured, down from 82.6% in 2015, an apparent result of the partial flavour ban put in place on January 1, 2016 (menthol and alcohol flavoured cigars excepted). Menthol sales in 2016 comprised 8.1% of all cigar sales[iv] compared to the previous year's estimate of 4.15%, an increase that may have been a result of retailers purchasing product before the menthol ban came into force January 1, 2017.

Smokeless Tobacco Use

In Ontario, recent legislation received Royal Assent on May 28, 2015 (*Bill 45: The Making Healthier Choices Act, 2015*), which banned the sale of flavoured smokeless products as of January 1, 2016, with a delayed implementation date of January 1, 2017 for menthol-flavoured tobacco products.

Canadian Community Health Survey

- In 2015, less than one per cent (0.4%) of Ontarians aged 12 years and over (or 48,000) used smokeless tobacco in the past month (marginal estimate, interpret with caution).

Wholesale Sales Data

- The overall volume of wholesale sales in smokeless tobacco is low (Table 2-1), with 48,049 kg of sales in 2016.[iv] In 2016, there was a 6.9% relative decrease in sales compared to 2015 (48,049 vs. 51,621, respectively). The 2016 sales were 25% relatively lower than the five-year benchmark of 2012 (48,049 in 2016 vs. 64,255 in 2012). (Note: Annual sales data may be influenced by wholesale shipment dates).

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

Year	Smokeless Tobacco Sales (kg)
2007	52,253
2008	46,198
2009	52,328
2010	57,439
2011	58,777
2012	64,255
2013	61,826
2014	53,244
2015	51,621
2016	48,049

Source: Health Canada.

Use of Other Alternative Products

Waterpipe Use

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

Canadian Community Health Survey

- In 2015, 1.2% of Ontarians aged 12 years and older used a tobacco waterpipe in the past 30 days, representing 141,600 people. Similarly, among adults 19 years of age or older, 1.2% used a tobacco waterpipe, representing 125,200 people.

Vaping Devices

Vaping devices are also known as electronic cigarettes, e-cigarettes, vapes, mods and hookah pens. They are battery-operated devices that heat e-liquid or e-juice to create a vapour. Some are one-time, disposable products. Others are reusable with a cartridge or tank system. (We do NOT include vapourizers used for cannabis, unless specifically mentioned in the question.)

Canadian Community Health Survey

- In 2015, 3.0% of Ontarians aged 12 years and older used a vaping product in the past 30 days, representing 351,400 people. Similarly, among adults 19 years of age or older, 2.9% used a vaping product, representing 305,600 people.

Centre for Addiction and Mental Health Monitor

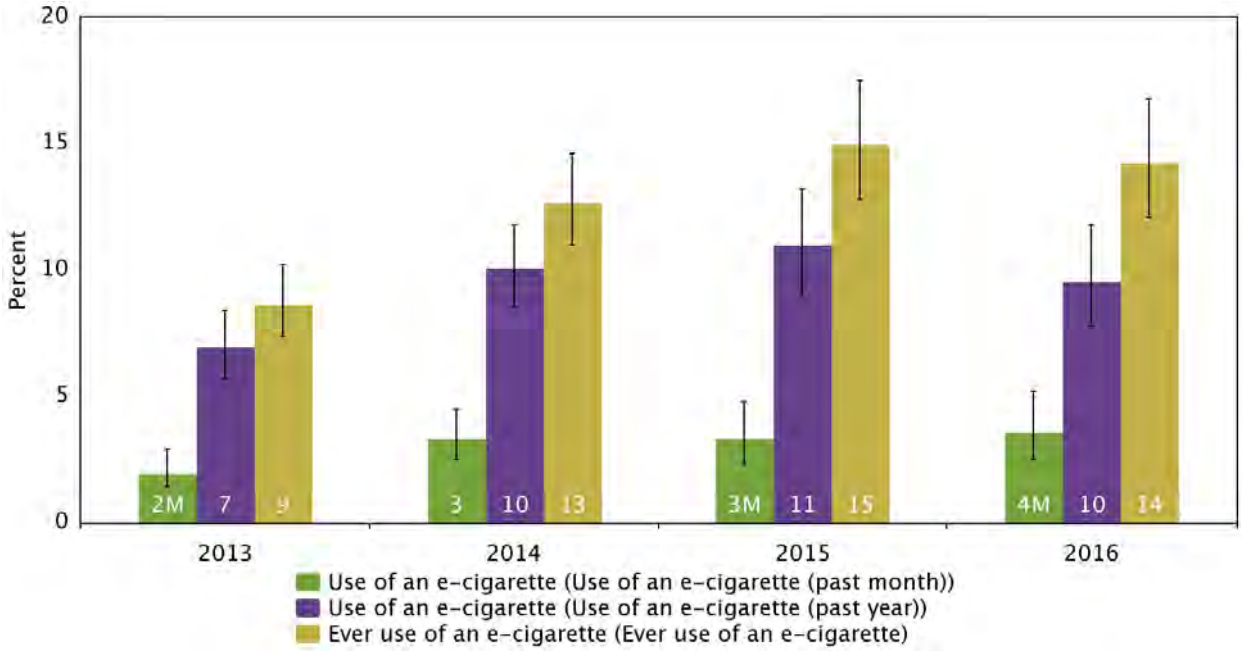
The Centre for Addiction and Mental Health Monitor is a useful survey to monitor vaping behaviour given that it has multiple questions on the topic (the Canadian Community Health Survey has only past 30-day use).

- Among adults in Ontario 18 years and older, vaping has remained constant over the past several years (Figure 2-2). However, lifetime use in 2013 was significantly lower than that reported in 2014, 2015 and 2016.
- Past 30-day vaping was 3.6%[iv] in 2016, statistically unchanged from 2015.
- In 2016, past-year vaping was 9.6%, statistically unchanged over that reported in 2015 (11%). However, the gender difference was particularly pronounced: 13.5% of males compared to 5.9% of females vaped in the past year.
- In 2016, 14% of adults aged 18 years and older vaped at some point in their life, which is not statistically different from that reported in 2015 (15%).[v]
- In 2016, 18 to 29 year olds had a statistically higher rate of lifetime vaping than all other age groups examined: 18 to 29 year olds (29%) versus 30 to 44 (16%), 45 to 64 (11.5%) and 65 and over (2.6%, Figure 2-3).
- In Canada, e-cigarettes and e-liquid are not permitted to contain nicotine, yet in Ontario, 61% of past-year vapers aged 18 and over reported using nicotine in their last e-cigarette (Centre for Addiction and Mental Health 2016, data not shown).

[iv] M = Marginal estimate. Interpret with caution: subject to moderate sampling variability.

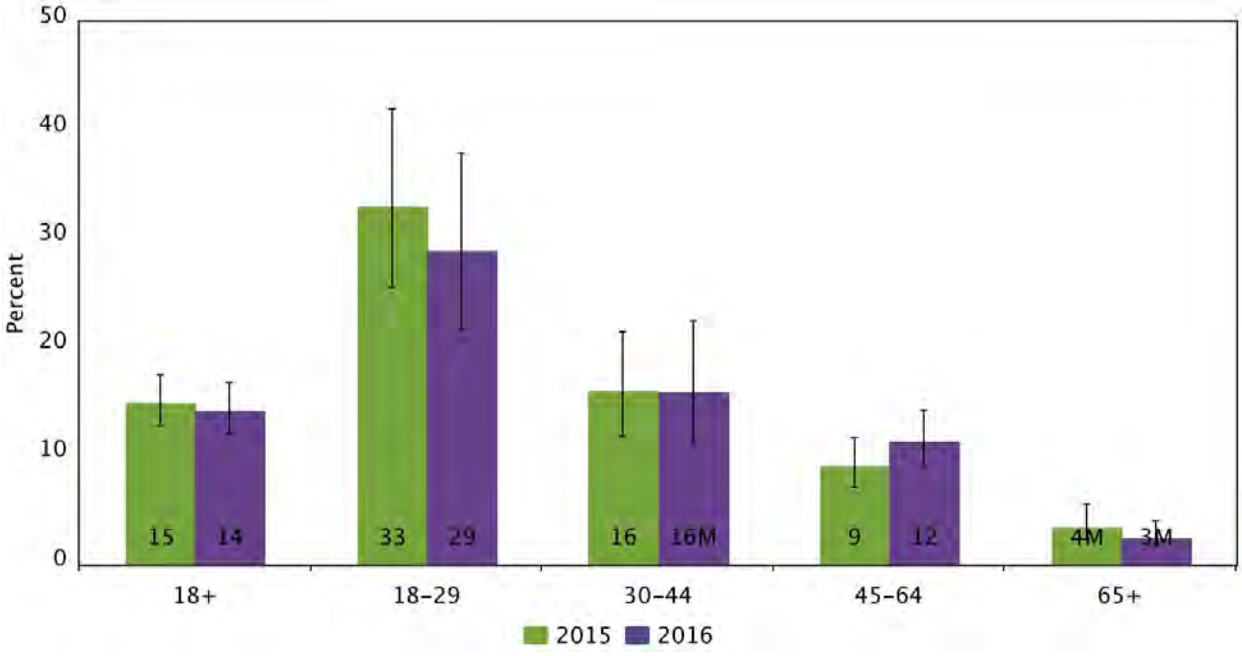
[v] E-cigarette use was not asked in our benchmark year of 2012.

Figure 2-2: E-Cigarette Use, Ages 18+, Ontario, 2013 to 2016



Note: M = Marginal. Interpret with caution: subject to moderate sampling variability. Full data table for this graph provided in the Appendix (Table 2A-2).
Source: Centre for Addiction and Mental Health Monitor 2013-2016.

Figure 2-3: Ever Use of an E-Cigarette, by Age, Ontario, 2015 and 2016



Note: M = Marginal. Interpret with caution: subject to moderate sampling variability. Full data table for this graph provided in the Appendix (Table 2A-3).
Source: Centre for Addiction and Mental Health Monitor 2015-2016.

Cannabis Use

Cannabis—also known as marijuana, weed, pot, grass, hashish, hash and hash oil—is a psychoactive drug derived from the cannabis plant. The federal government is expected to legalize combustible cannabis for recreational use mid-2018. At present, it is widely available on the black market.

Centre for Addiction and Mental Health Monitor

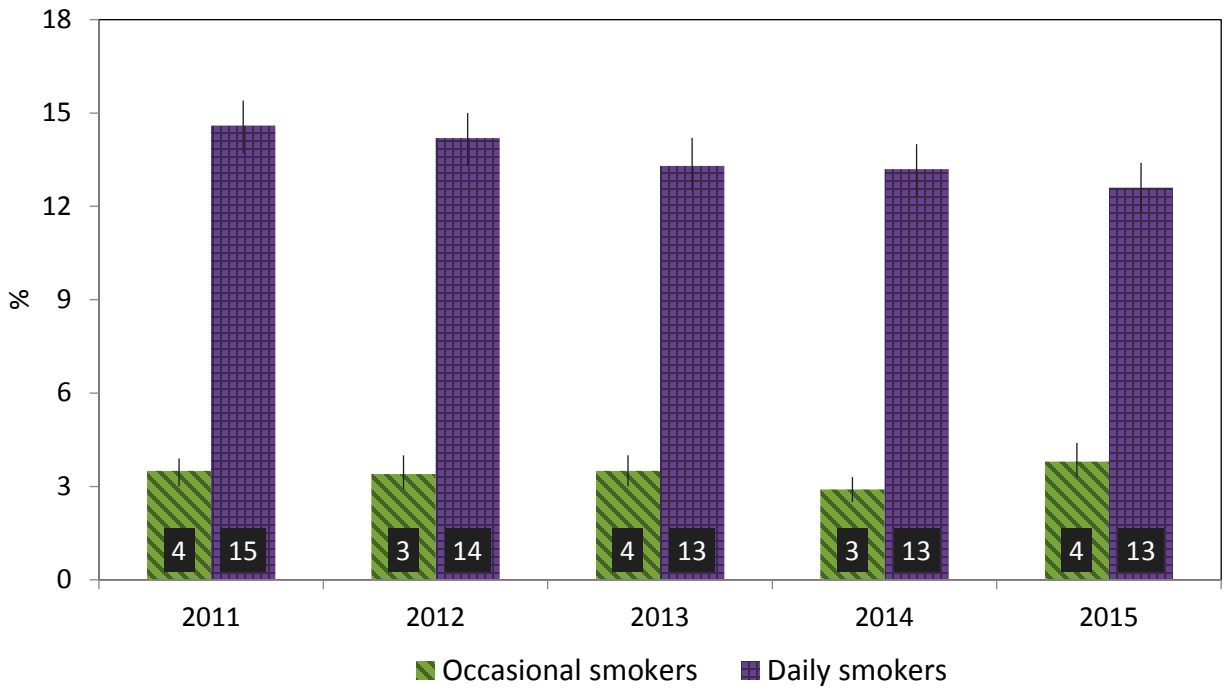
- In 2016, among adults aged 18 years or older, 47% (or 4,748,600 people) have ever used cannabis. Ever use of cannabis significantly differed by sex, with 41% of females and 54% of males having used cannabis.
- Those aged 65 and over were significantly less likely to have ever tried cannabis compared to younger adults: 25% for adults aged 65 and over versus 44.5% for adults aged 18 to 24, 56% for adults 25 to 44 and 51% for adults 45 to 64. No other statistically significant age differences were noted.
- Among adults aged 18 years or older, 16% used cannabis in the past year. Past-year cannabis use significantly differed by sex, with 10% of females and 22% of males using cannabis.
- Among adults aged 18 years and older, past 30-day cigarette smokers were more likely to use cannabis in the past year (35%) compared to former (16%) and never smokers (11%).
- Among past-year cannabis users, 32% used cannabis mixed with tobacco at the same time.

Patterns of Cigarette Use

Daily and Occasional Smoking (Past 30 Days)

- According to the 2015 Canadian Community Health Survey, the prevalence of current smoking was 16.4% among Ontarians 12 years or older, with daily smoking at 12.6% and past-month occasional smoking at 3.8% (Figure 2-4).
- The proportion of current smokers who smoke daily has remained constant over the past several years–at about 77%.
- In 2015, the mean number of cigarettes smoked per day among daily smokers aged 12 years or older was 13.9, with a significant sex difference (12.8 for females vs. 14.7% for males; CCHS, data not shown).

Figure 2-4: Daily and Occasional Smoking, Ages 18+, Ontario, 2011 to 2015



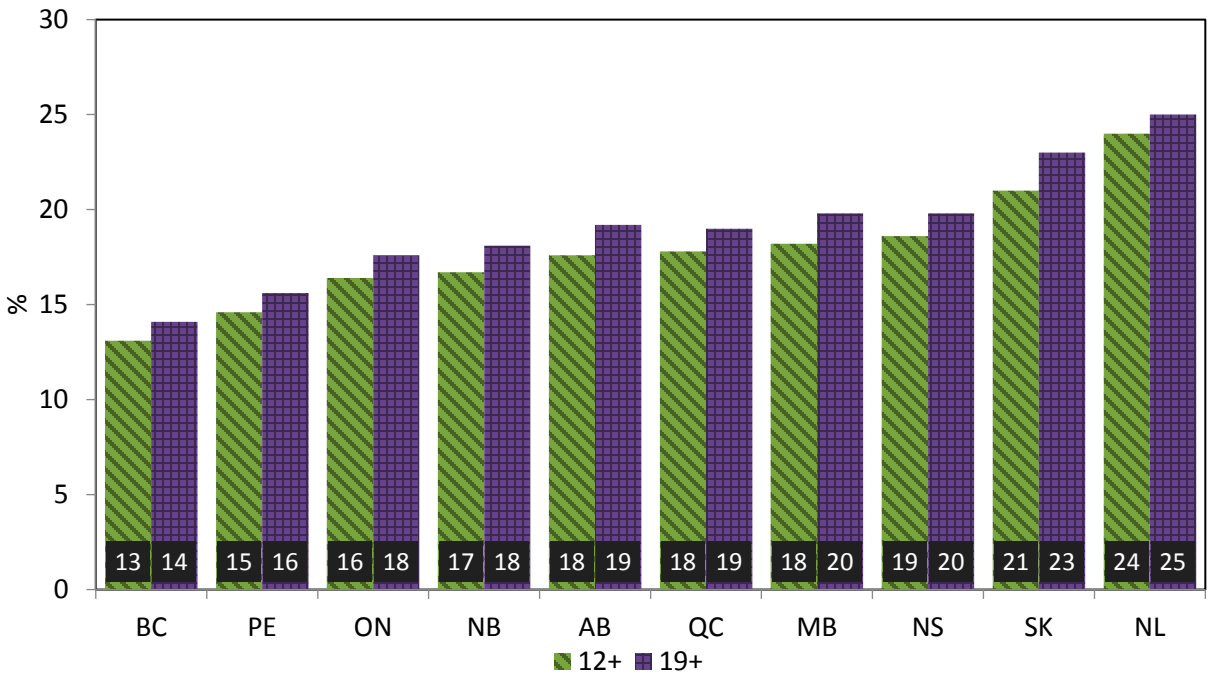
Note: Vertical lines at top of bars represent 95% confidence intervals. The Canadian Community Health Survey was redesigned in 2015. Interpret trend with caution. Full data table for this graph provided in the Appendix (Table 2A-4).
Source: Canadian Community Health Survey 2011-2015.

Current Smoking (Past 30 Days), by Location

Federal, Provincial, Territorial

- Across Canada in 2015, past 30-day current smoking among respondents aged 12 and over ranged from 13% in British Columbia to 24% in Newfoundland and Labrador (Figure 2-5). (The Territories were not sampled in 2015.) Current smoking was slightly higher among respondents 19 years of age or older compared to that among respondents 12 years of age or older (Figure 2-5).
- The prevalence of current smoking in Ontario was not significantly different from the national average (for 12+, 16.4% vs. 16.8% and for 19+, 17.6% vs. 18.1%, respectively; Figure 2-5).
- In recent years, Ontario's goal has been to have the lowest rate of smoking in Canada.[2] As shown in Figure 2-5, the rate of current smoking in British Columbia (but not Prince Edward Island) is significantly lower than Ontario (for residents aged 12 years and older, as well as 19 years or older).

Figure 2-5: Current Smoking (Past 30 Days), by Jurisdiction, Ages 12+ and 19+, 2015



Note: Ordered lowest to highest, by region. Full data table for this graph provided in the Appendix (Table 2A-5).
Source: Canadian Community Health Survey 2015.

Health Regions

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

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

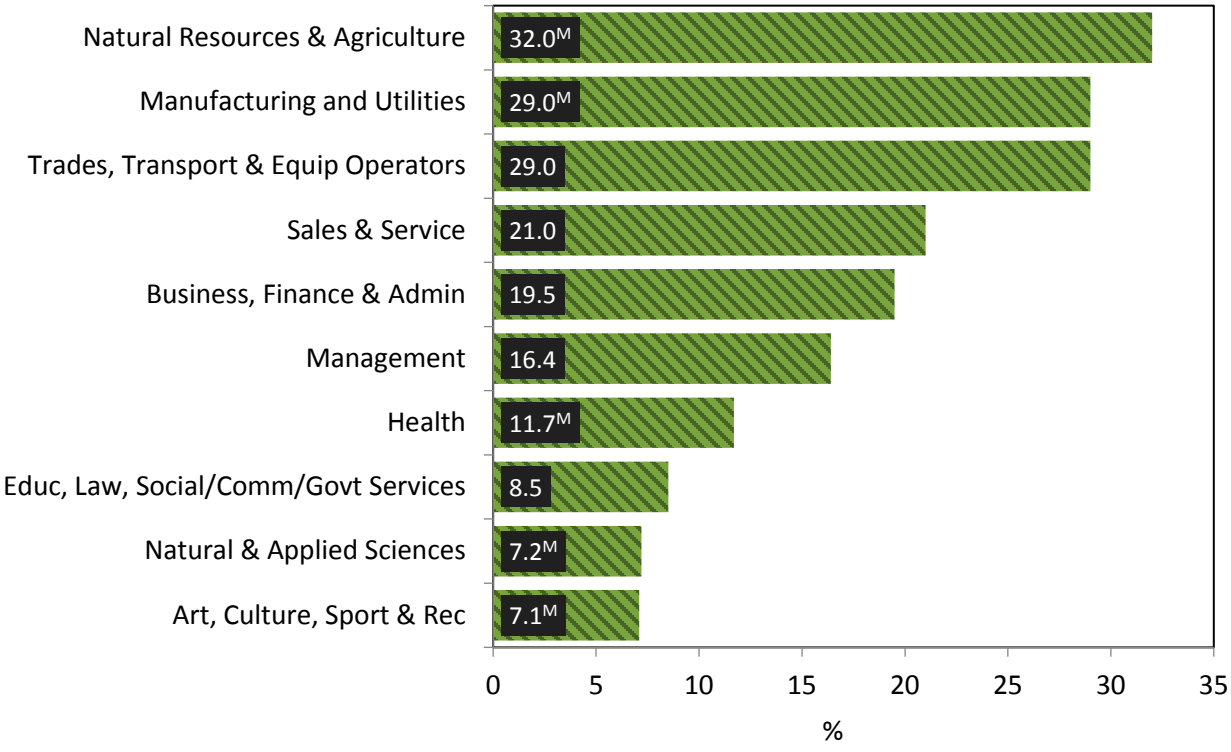
Public Health Unit	Current Smoking[a] (%)				
	2005	2007/08	2009/10	2011/12	2013/14
Peel	17.4*	15.3	14.8	14.2	10.9*
Halton Regional	17.2	17.7	16.1	17.4	13.6
Ottawa	16.9	16.3	14.3	14.1	14.1
Toronto	17.0	16.2	15.0	15.3	14.6
Middlesex-London	16.7	18.9	19.5	18.4	15.0
York Regional	14.5	13.6	15.2	14.7	15.1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

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

Current Smoking (Past 30 Days), by Occupation

- In 2015, current smoking was highest among workers in natural resources & agriculture (32%M); manufacturing and utilities (29%M); and trades, transport & equipment operators (29%), representing a combined total of 345,800 (or 29%) of the 1,187,400 employed smokers in Ontario aged 15 to 75 years (CCHS 2015; Figure 2-6).
- Sales and service workers had a smoking rate of 21% (343,800 workers), which was significantly higher than workers in art, culture, sport & recreation; natural & applied sciences, education, law, social/community/government services (Figure 2-6).
- Those working in art, culture, sport & recreation; natural & applied sciences; education, law, social/community/government services had a significantly lower rate of smoking than all other workers, health excepted.

Figure 2-6: Current Smoking (Past 30 Days), by Occupation, Ages 15 to 75, Ontario, 2015

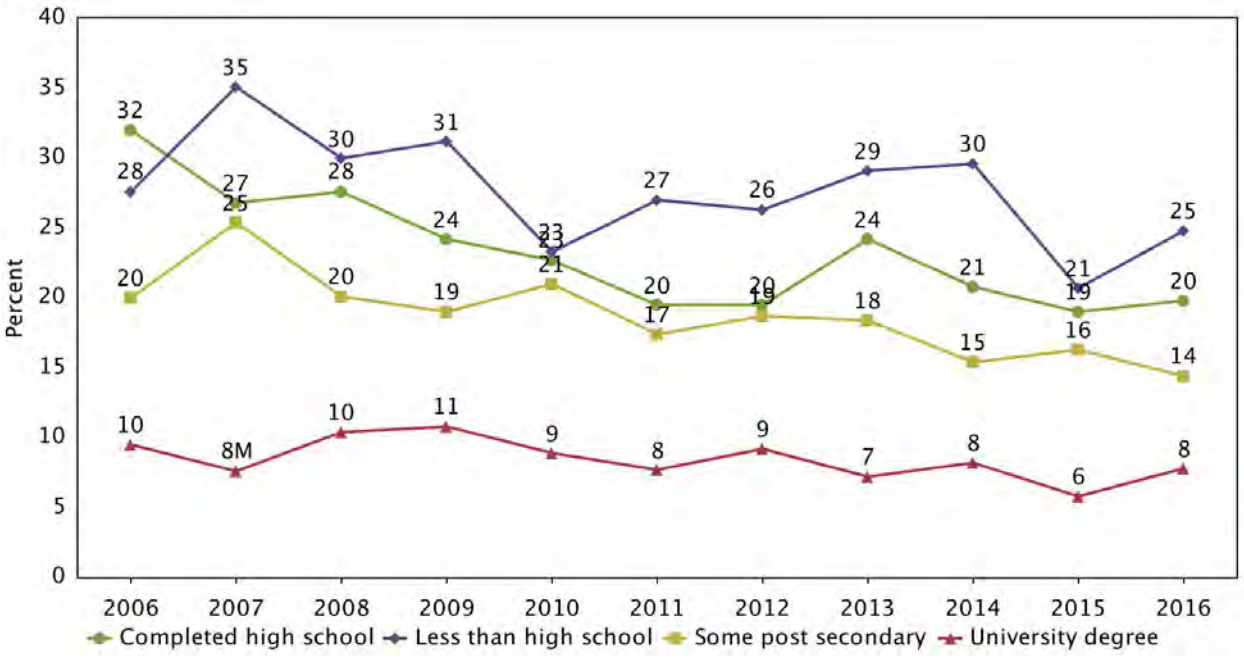


Note: M = Marginal. Interpret with caution: subject to moderate sampling variability. Full data table for this graph provided in the Appendix (Table 2A-6).
Source: Canadian Community Health Survey 2015.

Current Smoking (Past 30 Days), by Educational Attainment

- According to the CAMH Monitor, in 2016, 13.5%[vi] of Ontarians aged 18 years and over were past 30-day current smokers.[vii] In recent years, Ontarians with a university degree were significantly less likely to be current smokers than those with less education (Figure 2-7).
- Over the past few years, levels of smoking have remained relatively steady among all educational attainment levels (Figure 2-7). (Note: The apparent drop from 2014 to 2015 among those with less than a high school education—from 30% to 21%—is not statistically significant.)

Figure 2-7: Current Smoking (Past 30 Days), by Educational Attainment, Ages 18+, Ontario, 2006 to 2016



Note: M = Marginal. Interpret with caution: subject to moderate sampling variability. Full data table for this graph provided in the Appendix (Table 2A-7).
Source: Centre for Addiction and Mental Health Monitor 2006-2016.

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

Risk Factors and Social Determinants of Health in Relation to Smoking

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

Table 2-3 lists a number of subpopulations that have a rate of current smoking of 25% or more, as observed in the 2015 CCHS. Some of the reported subpopulations have high rates of smoking but represent very few Ontarians (e.g., low levels of income), whereas other subpopulations with high rates represent a large number of Ontarians (e.g., exceed low-risk drinking, self-reported mood disorder). The high rate of cigarette smoking for certain subpopulations is of concern from an equity perspective irrespective of the (population) number of this group.

To explore the association of risk factors and social determinants of health with smoking status (current smoker vs. nonsmoker) by age, we conducted separate analyses for youth (students in grades 7 to 12 using the Ontario Drug Use and Health Survey—OSDUHS data), young adults (aged 18 to 29 years using CCHS data) and adults (18 years and older using CCHS data), as reported below. The analysis for youth explored smoking status among subpopulations 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 subpopulations 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.

Youth

- According to the 2015 Ontario Student Drug Use and Health Survey,[viii] current smokers in grades 9 to 12 were significantly more likely than nonsmokers to have a drug-use problem (80% vs. 14%), be a hazardous drinker (71% vs. 18%), employed outside of home (work for pay) (70% vs. 43%), visit a health professional for a mental health problem (41% vs. 19%), engage in delinquent behaviour (38%[M] vs. 5%), feel no social

[viii] The indicators listed in this section are from the 2015 OSDUHS. The 2017 data is embargoed until the release of the Mental Health and Well-Being report in the summer of 2018.

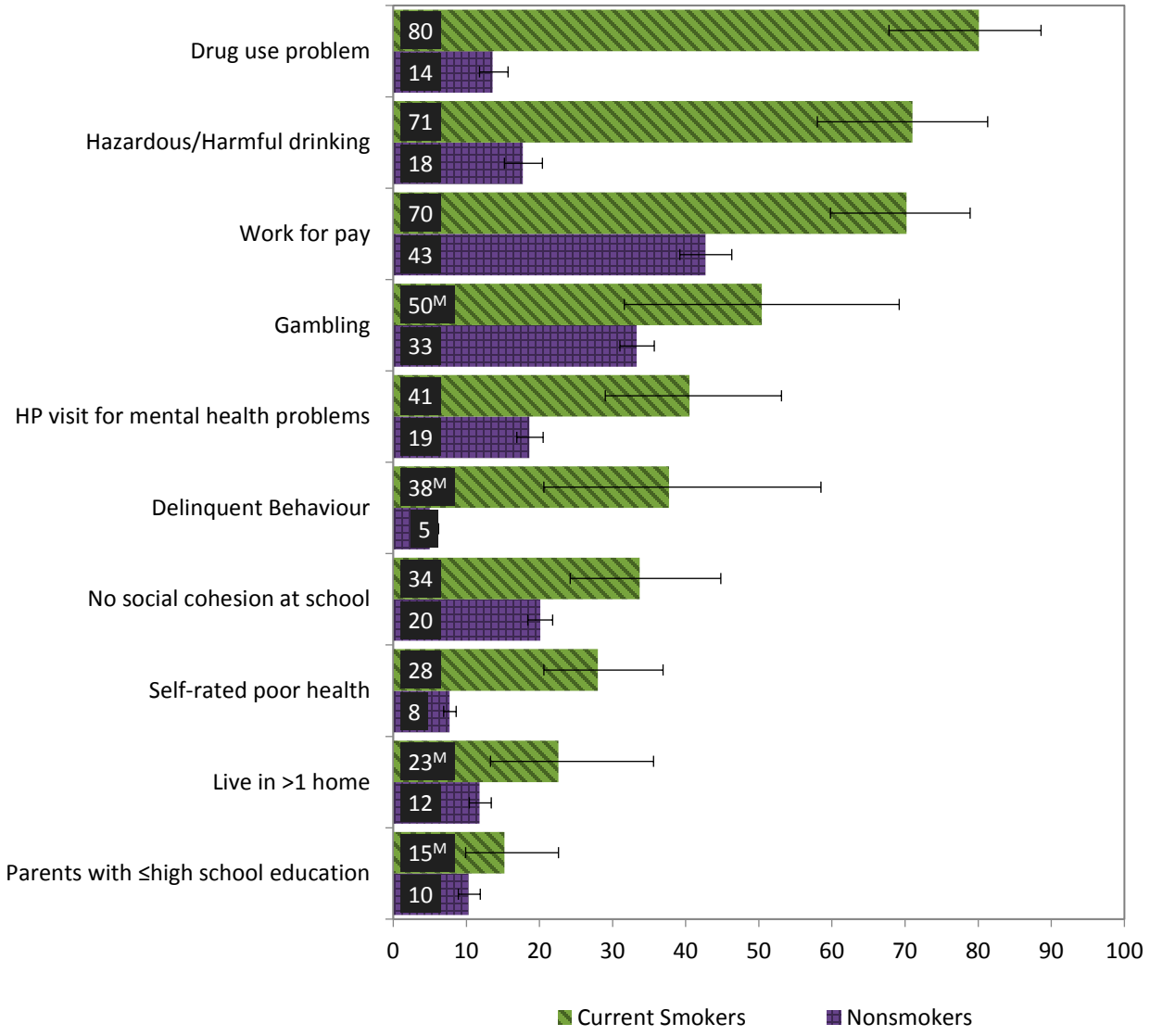
cohesion at school (34% vs. 20%), have poor self-rated health (28% vs. 8%). (M = Marginal. Interpret with caution: Subject to moderate sampling variability (Figure 2-8).

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

Group	Smoking (%)	Population Estimate of Smokers (n)
12+ (baseline)	16	1,930,800
18+ (baseline)	17.5	1,905,400
Household income: $5,000 – $9,999 (Age18+)	37[M]	45,600
Cultural background: Aboriginal[a] identity (Age 12+)	34	104,800
Age 30-44, male	32	150,400
Household income: less than $5,000 (Age 18+)	32[M]	17,000
Occupation: natural resources, agriculture or related production (Age 15-75)	32[M]	28,000
Chronic disease: mood disorder (Age 12+)	31	314,400
Household income: no income or income loss (Age 18+)	S	S
Occupation: trades, transport & equipment operators + related (Age 15-75)	29	226,800
Manufacturing and utilities (Age 15-75)	29[M]	91,000
Household income: $20,000 to $29,999 (Age 18+)	28	226,400
Age 55-59, male	27	130,600
Less than secondary school graduation (Age 18+)	27	292,400
Household income: $10,000 – $14,999 (Age 18+)	27	69,000
Unemployed (Age 15-75)	27[M]	80,400
Sexual orientation: homosexual (lesbian or gay)/bisexual (Age 15+)	27	94,800
Chronic disease: exceed low-risk drinking (Age 19+)	27	776,800
Age 25-29, male	26[M]	107,000
Household income (Age 18+): $15,000 to $19,999	26	81,000
Age 35-39, male	25	98,600
Age 30-44, male	25	328,600

[a] Residents of Indian reserves are excluded from the survey's coverage, therefore the numbers reflect First Nations people living off reserve, Métis and Inuit. Other survey exclusions include health-care institutions, some remote areas, and full-time members of the Canadian Forces (living on or off military bases).
Note: Subpopulations ordered by value from highest to lowest. M = Marginal. Interpret with caution: subject to moderate sampling variability. S = Suppressed due to small sample size.
Source: Canadian Community Health Survey 2015.

Figure 2-8: Factors[a] Associated with Smoking Status among Students in Grades 9 to 12, Ontario, 2015



[a] Indicator definitions and information on data analysis provided in Appendix A.
Note: Horizontal lines represent 95% confidence intervals. M = Marginal. Interpret with caution: subject to moderate sampling variability. Full data table for this graph provided in the Appendix (Table 2A-8).
Source: Ontario Student Drug Use and Health Survey 2015.

Young Adults Aged 18 to 29

- In 2015, among those aged 18 to 29 years, current smokers and nonsmokers were equally born in Canada (74% vs. 73%). The majority of current smokers and nonsmokers identified as White (68% vs. 61%; CCHS 2015, data not shown).
- Among young adults, 65% of current smokers were male, whereas only 48% of

nonsmokers were male.

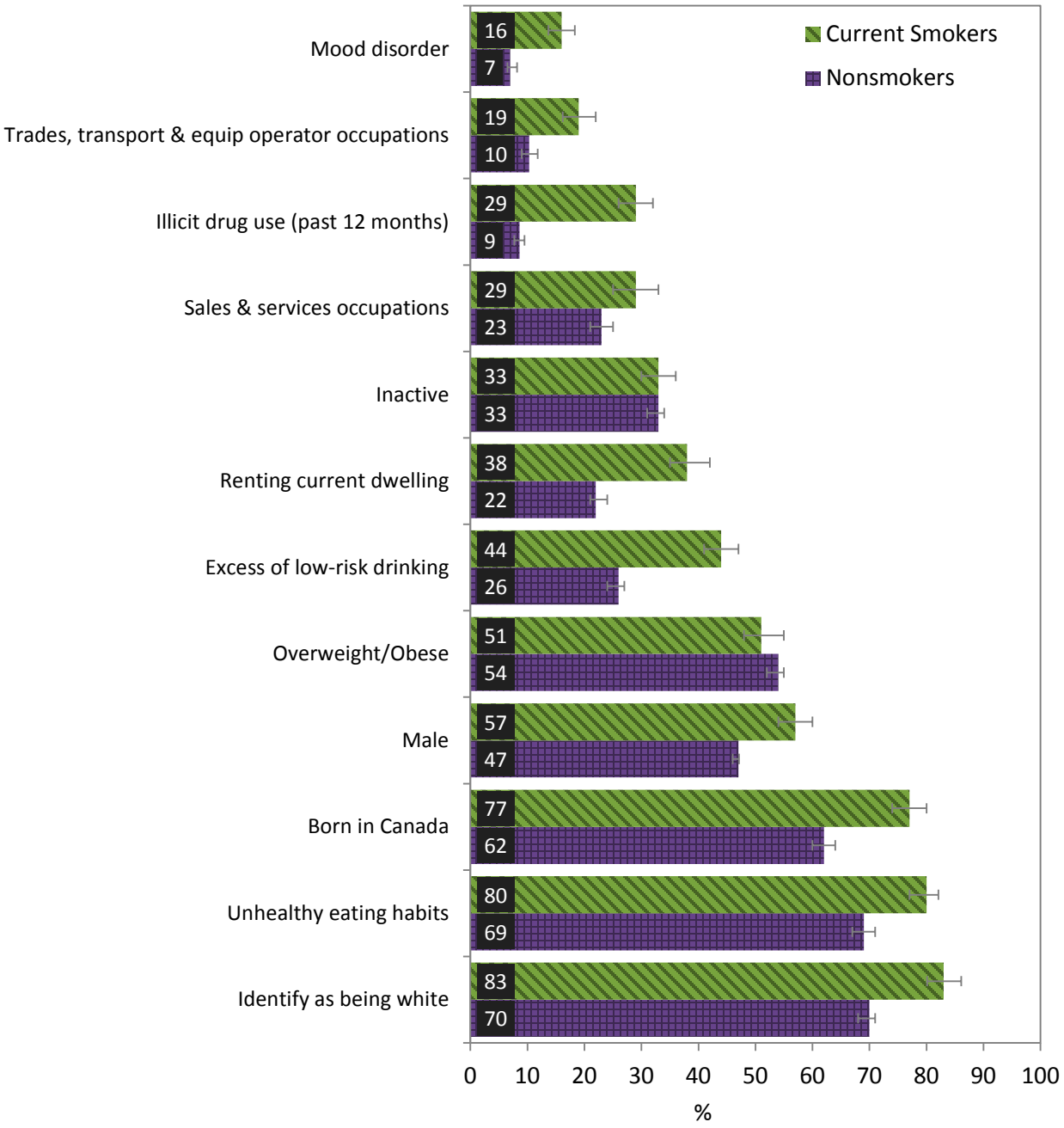
- Current smokers did not differ from nonsmokers in unhealthy eating habits (eating less than five fruits or vegetables per day: 74% vs. 76%).
- Current smokers had a higher rate of drinking in excess of the low-risk drinking guidelines compared to nonsmokers (59% vs. 37%).
- A greater proportion of current smokers than nonsmokers used illicit drugs in the past 12 months including cannabis (50% vs. 23%; CCHS 2015, data not shown).
- Current smokers did not differ from nonsmokers in being clinically diagnosed with a mood disorder (11% vs. 7%, marginal estimates: interpret with caution; CCHS 2015, data not shown).
- A similar proportion of current smokers and nonsmokers aged 18 to 29 reported having a low activity level (sedentary or somewhat active)[ix] in leisure time (19% vs. 22%) or being overweight/obese (32% vs. 32%; CCHS 2015, data not shown).
- The proportion of respondents not having a family doctor was not significantly different among current smokers compared to nonsmokers (30% vs. 21%). A larger number of current smokers reported having less than a high-school education compared to nonsmokers (11.5% vs. 4.5%; CCHS 2015, data not shown).

Adults Aged 18 Years and Older

- Current smokers aged 18 years and older were more likely to identify themselves as White (83%) compared to nonsmokers (70%); they were also more likely to be Canadian born (77%) compared to nonsmokers (62%; CCHS 2015; Figure 2-9).
- A greater proportion of current smokers than nonsmokers were male (57% vs. 47%).
- Current smokers compared to nonsmokers were more likely to report working in trades, transportation and equipment operation occupations (19% vs. 10%) and working in sales and service occupations (29% vs. 23%).
- A greater proportion of current smokers than nonsmokers reported having low education (less than high school: 16% vs. 9%). (Data not shown.)

[ix] Low activity level coded as sedentary or somewhat active relative to a high activity level, which was coded as active or moderately active.

Figure 2-9: Factors[a] Associated with Smoking Status, Ages 18+, Ontario, 2015



[a] Indicator definitions and information on data analysis provided in Appendix A.
Note: Horizontal lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 2A-9).
Source: Canadian Community Health Survey 2015.

- More current smokers reported living in a rented dwelling compared to nonsmokers (38% vs. 22%).
- A greater proportion of current smokers than nonsmokers were more likely to report

engaging in other behaviours that are risk factors for the development of chronic disease including: having unhealthy eating habits (eating less than five fruits or vegetables per day: 80% vs. 69%), drinking in excess of the low-risk drinking guidelines (44% vs. 26%), and using illicit drugs over the last 12 months including cannabis (29% vs. 9%).

- Similar proportions of current smokers and nonsmokers reported being overweight/obese (51% vs. 54%) and having a low activity level (sedentary or somewhat active) in leisure time (33% vs. 33%).
- A greater proportion of current smokers than nonsmokers were more likely to report having a mood disorder (16% vs. 7%), and not having a regular family doctor (17% vs. 11%; data not shown).

Chapter Summary

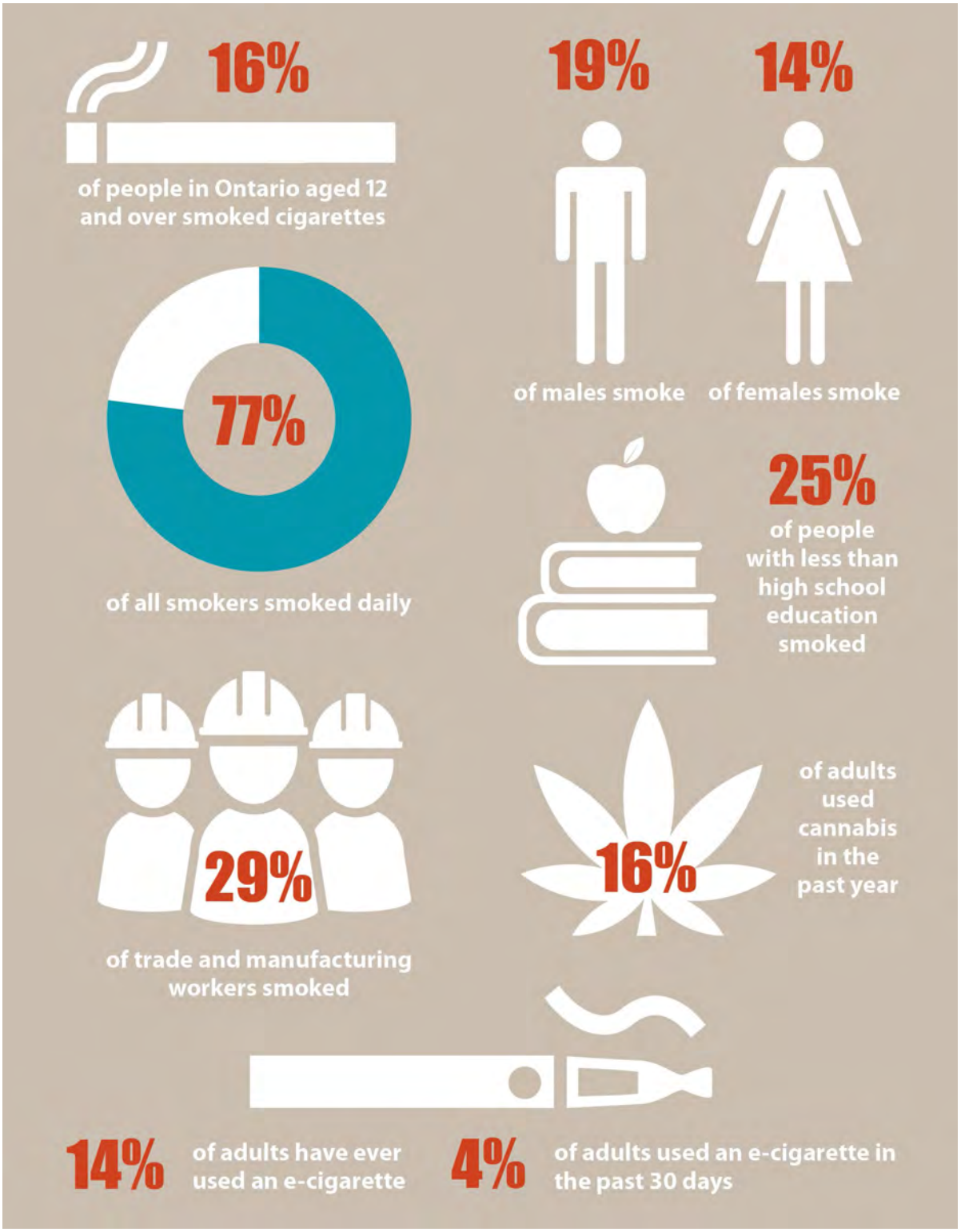
Tobacco use rates continue to decline at a painfully slow pace. Over the past five years, the rate of decline in current cigarette smoking is only one-third of a percentage point per year. This slow rate of progress is insufficient to achieving Ontario's stated goal of becoming the Canadian jurisdiction with the lowest smoking rate. It is far too slow to obtaining the federal government's desire to reach less than 5% prevalence of tobacco use by 2035. With past 30-day tobacco use rates of 20% (2,268,300 Ontarians 12 years and over), the less than 5% goal is very far away.

In addition to the 20% prevalence of past 30-day tobacco use, is the 3% of Ontarians (or 351,400 people) who have vaped e-cigarettes in the past 30 days. Vaping by young non-smokers presents new public health risks, from potential addiction and long-term regular vaping behaviours and from the potential of converting vapers who would have not otherwise smoked to tobacco users.

The impending legalization of cannabis presents additional public-health risks from smoking[6] and from mixing tobacco with cannabis, as is done by 32% of current cannabis smokers.

Data in this chapter demonstrate that there has not been progress in alleviating inequities in the burden of tobacco use, as lower SES Ontarians remain far more likely to use tobacco.

Visual Summary of Key Indicators



Appendix: Data Tables

Table 2A-1: Current Smoking (Past 30 Days), by Sex, Ages 12+, Ontario, 2003 to 2015

Group	Year	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Females	2003	951,100	18.2	17.4	18.9
	2005	912,400	17.0	16.3	17.7
	2007	928,200	16.8	15.9	17.7
	2008	858,000	15.3	14.3	16.3
	2009	835,200	14.7	13.6	15.8
	2010	839,800	14.6	13.5	15.7
	2011	835,100	14.4	13.3	15.4
	2012	873,800	14.9	13.6	16.2
	2013	831,300	14.0	12.9	15.1
	2014	721,200	12.0	11.1	13.0
	2015	818,200	13.6	12.5	14.8
Males	2003	1,189,900	23.6	22.7	24.5
	2005	1,156,900	22.3	21.4	23.1
	2007	1,188,800	22.3	21.1	23.5
	2008	1,177,600	21.8	20.3	23.3
	2009	1,128,000	20.6	19.3	21.9
	2010	1,204,000	21.8	20.3	23.3
	2011	1,218,100	21.8	20.2	23.4
	2012	1,153,200	20.4	18.9	21.9
	2013	1,132,600	19.8	18.4	21.3
	2014	1,167,800	20.4	18.9	22.0
	2015	1,112,600	19.4	17.9	21.0
Total	2003	2,141,100	20.8	20.2	21.4
	2005	2,069,300	19.6	19.0	20.1
	2007	2,117,000	19.5	18.8	20.2
	2008	2,035,600	18.5	17.6	19.4
	2009	1,963,200	17.6	16.7	18.5
	2010	2,043,700	18.2	17.2	19.1
	2011	2,053,200	18.0	17.1	19.0
	2012	2,027,000	17.6	16.6	18.6
	2013	1,963,800	16.9	16.0	17.8
	2014	1,889,000	16.1	15.2	17.0
	2015	1,930,800	16.4	15.5	17.4

Note: Data table is for Figure 2-1.
Source: Canadian Community Health Survey 2003-2015.

Table 2A-2: E-Cigarette Use, Ages 18+, Ontario, 2013 to 2016

Year	Year	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Past-Month Use	2013	207,700	2[M]	1.4	2.9
	2014	343,300	3.4	2.5	4.5
	2015	341,000	3.4[M]	2.3	4.8
	2016	360,900	3.6[M]	2.5	5.2
Past-Year Use	2013	703,500	7	5.7	8.4
	2014	1,021,600	10.1	8.5	11.8
	2015	1,113,000	11	9.0	13.2
	2016	954,500	9.6	7.8	11.8
Ever Use	2013	881,500	8.7	7.4	10.2
	2014	1,291,700	12.7	11.0	14.6
	2015	1,524,800	15	12.8	17.5
	2016	1,420,200	14.3	12.1	16.8

Note: M = Marginal. Interpret with caution: subject to moderate sampling variability. Data table is for Figure 2-2.
Source: Centre for Addiction and Mental Health monitor 2003-2016.

Table 2A-3: Ever Use of an E-Cigarette, by Age, Ontario, 2015 and 2016

Year	Year	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
18+	2015	1,524,800	15	12.8	17.5
	2016	1,420,200	14.3	12.1	16.8
18-29	2015	664,700	33.2	25.5	42.0
	2016	544,900	29.1	21.6	37.9
30-44	2015	397,200	16.1	11.8	21.5
	2016	406,000	16[M]	11.2	22.4
45-64	2015	327,900	9.2	7.2	11.7
	2016	420,500	11.5	9.2	14.3
65+	2015	64,700	3.6[M]	2.3	5.6
	2016	48,700	2.6[M]	1.7	4.1

Note: M = Marginal. Interpret with caution: subject to moderate sampling variability. Data table is for Figure 2-3.
Source: Centre for Addiction and Mental Health Monitor 2015 and 2016.

Table 2A-4: Daily and Occasional Smoking, Ages 18+, Ontario, 2011 to 2015

Primary Indicator	Year	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Occasional smokers	2011	394,200	3.5	3	3.9
	2012	394,700	3.4	2.9	4
	2013	409,500	3.5	3	4
	2014	343,300	2.9	2.5	3.3
	2015	446,800	3.8	3.3	4.4
Daily smokers	2011	1,659,100	14.6	13.7	15.4
	2012	1,632,300	14.2	13.3	15
	2013	1,554,400	13.3	12.5	14.2
	2014	1,545,600	13.2	12.3	14
	2015	1,484,000	12.6	11.8	13.4

Note: Data table is for Figure 2-4.
Source: Canadian Community Health Survey 2011-2015.

Table 2A-5: Current Smoking (Past 30 Days), by Jurisdiction, Ages 12+ and 19+, 2015

Geography	Age	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
British Columbia	12+	522,800	13.1	11.9	14.4
	19+	515,400	14.1	12.9	15.5
Prince Edward Island	12+	18,400	14.6	12.1	17.6
	19+	18,000	15.6	12.9	18.8
Ontario	12+	1,930,800	16.4	15.5	17.4
	19+	1,886,800	17.6	16.7	18.7
New Brunswick	12+	107,800	16.7	14.4	19.4
	19+	107,000	18.1	15.5	21.0
Alberta	12+	612,400	17.6	16.1	19.2
	19+	607,000	19.2	17.6	21.0
Quebec	12+	1,254,400	17.8	16.8	18.9
	19+	1,232,600	19.0	17.9	20.0
Manitoba	12+	186,800	18.2	16.2	20.0
	19+	182,800	19.8	17.6	22.0
Nova Scotia	12+	150,800	18.6	16.6	21.0
	19+	147,400	19.8	17.6	22.0

Geography	Age	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Saskatchewan	12+	191,200	21.0	18.6	24.0
	19+	189,000	23.0	20.0	26.0
Newfoundland and Labrador	12+	111,000	24.0	21.0	27.0
	19+	107,600	25.0	22.0	29.0

Note: Ordered from lowest to highest Value for age 12+. Data table is for Figure 2-5.
Source: Canadian Community Health Survey 2015.

Table 2A-6: Current Smoking (Past 30 Days), by Occupation, Ages 15 to 75, Ontario, 2015

Group	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Natural Resources & Agriculture	28,000	32.0[M]	21.0	46.0
Trades, Transport & Equip Operators	226,800	29.0	25.0	34.0
Manufacturing and Utilities	91,000	29.0[M]	21.0	38.0
Sales & Service	343,800	21.0[M]	18.4	25.0
Business, Finance & Admin	210,800	19.5	16.3	23.0
Management	111,200	16.4	12.7	21.0
Health	55,600	11.7[M]	8.4	16.2
Education, Law, Social/Comm/Gov't Services	61,800	8.5	6.3	11.3
Natural & Applied Sciences	44,600	7.2[M]	4.8	10.6
Art, Culture, Sport & Recreation	13,800	7.1[M]	4.3	11.5

Note: M = Marginal. Interpret with caution: subject to moderate sampling variability. Data table is for Figure 2-6.
Source: Canadian Community Health Survey 2015.

Table 2A-7: Current Smoking (Past 30 Days), by Educational Attainment, Ages 18+, Ontario, 2006 to 2016

Year	Group	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2006	Completed high school	NA	32.0	27.0	37.5
	Less than high school	NA	27.6	21.6	34.4
	Some post-secondary	NA	20.0	16.7	23.8
	University degree	NA	9.5	7.0	12.6
2007	Completed high school	NA	26.8	22.4	31.8
	Less than high school	NA	35.1	28.4	42.4
	Some post-secondary	NA	25.4	21.6	29.5
	University degree	NA	7.6[M]	5.1	11.1
2008	Completed high school	NA	27.6	22.7	33.1
	Less than high school	NA	30.0	23.4	37.4
	Some post-secondary	NA	20.1	16.7	24.1
	University degree	NA	10.4	7.8	13.7
2009	Completed high school	NA	24.2	19.6	29.6
	Less than high school	NA	31.2	24.4	38.9
	Some post-secondary	NA	19.0	15.7	22.8
	University degree	NA	10.8	8.0	14.4
2010	Completed high school	NA	22.7	18.9	27.0
	Less than high school	NA	23.3	18.1	29.4
	Some post-secondary	NA	21	18.1	24.2
	University degree	NA	8.9	6.9	11.4
2011	Completed high school	NA	19.5	16.1	23.5
	Less than high school	NA	27.0	21.0	34.0
	Some post-secondary	NA	17.4	14.7	20.5
	University degree	NA	7.7	5.9	9.9
2012	Completed high school	410,700	19.5	16	23.7
	Less than high school	243,700	26.3	20.6	33.0
	Some post-secondary	706,600	18.7	16.0	21.8
	University degree	295,400	9.2	7.1	11.8
2013	Completed high school	510,900	24.2	19.8	29.1
	Less than high school	281,500	29.1	22.6	36.6
	Some post-secondary	661,900	18.4	15.4	21.7
	University degree	240,300	7.2	5.4	9.4
2014	Completed high school	430,400	20.8	16.5	25.8
	Less than high school	239,800	29.6	23	37.2
	Some post-secondary	535,300	15.4	12.8	18.5
	University degree	299,600	8.2	5.9	11.2

Year	Group	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2015	Completed high school	401,300	19	15.9	22.6
	Less than high school	108,300	20.7	16	26.4
	Some post-secondary	606,900	16.3	14	18.9
	University degree	216,200	5.8	4.6	7.3
2016	Completed high school	396,400	19.8	15.9	24.3
	Less than high school	149,300	24.8	18.7	32.2
	Some post-secondary	498,600	14.4	11.8	17.6
	University degree	312,600	7.8	6.1	10

Note: M = Marginal. Interpret with caution: subject to moderate sampling variability. Data table is for Figure 2-7.
Source: Centre for Addiction and Mental Health Monitor 2006-2016.

Table 2A-8: Factors Associated with Smoking Status among Students in Grades 9 to 12, Ontario, 2015

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

Note: Indicator definitions and information on data analysis provided in Appendix A. M = Marginal. Interpret with caution: subject to moderate sampling variability. Data table is for Figure 2-8.
Source: Ontario Student Drug Use and Health Survey 2015.

Table 2A-9: Factors Associated with Smoking Status, 18+, Ontario, 2015

Occupation	Current Smokers (%)	Nonsmokers (%)
Identify as being White	83	70
Unhealthy eating habits	80	69
Born in Canada	77	62
Male	57	47
Overweight	51	54
Excess of low-risk drinking	44	26
Renting current dwelling	38	22
Inactive	33	33
Sales & services occupations	29	23
Illicit drug use (past 12 months)	29	9
Trades, transport & equip operator occupations	19	10
Mood disorder	16	7

Note: Data table is for Figure 2-9.
Source: Canadian Community Health Survey 2015.

References

[1] Dobrescu A, Bhandari A, Sutherland G, Dinh T. *The Costs of Tobacco Use in Canada, 2012*. Ottawa: The Conference Board of Canada, 2012

[2] Government of Ontario. *Ontario's Action Plan for Health*. Queen's Printer for Ontario (Cat. #016827), 2012. Accessed February 12, 2018.

[3] Parliament of Canada. *Bill C-45: An Act Respecting Cannabis and to Amend the Controlled Drugs and Substances Act, the Criminal Code and other Acts. Short Title: Cannabis Act*. Accessed February 12, 2018.

[4] Health Canada. National and Provincial/Territorial Tobacco Sales Data 2016: Ontario Cigarette Sales from 2001-2016. Accessed February 12, 2018.

[5] Government of Ontario. *Ontario Regulation 336/15 made under the Smoke-Free Ontario Act.* Printed in the Ontario Gazette: November 28, 2015. Accessed March 8, 2017.

[6] Schwartz R. Legalize marijuana without the smoke. Canadian Medical Association Journal, 2017 January 30; 189:E137-8. doi: 10.1503/cmaj.161203.

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:

Infrastructure

Table of Contents

List of Tables

List of Figures

Smoke-Free Ontario Strategy Infrastructure

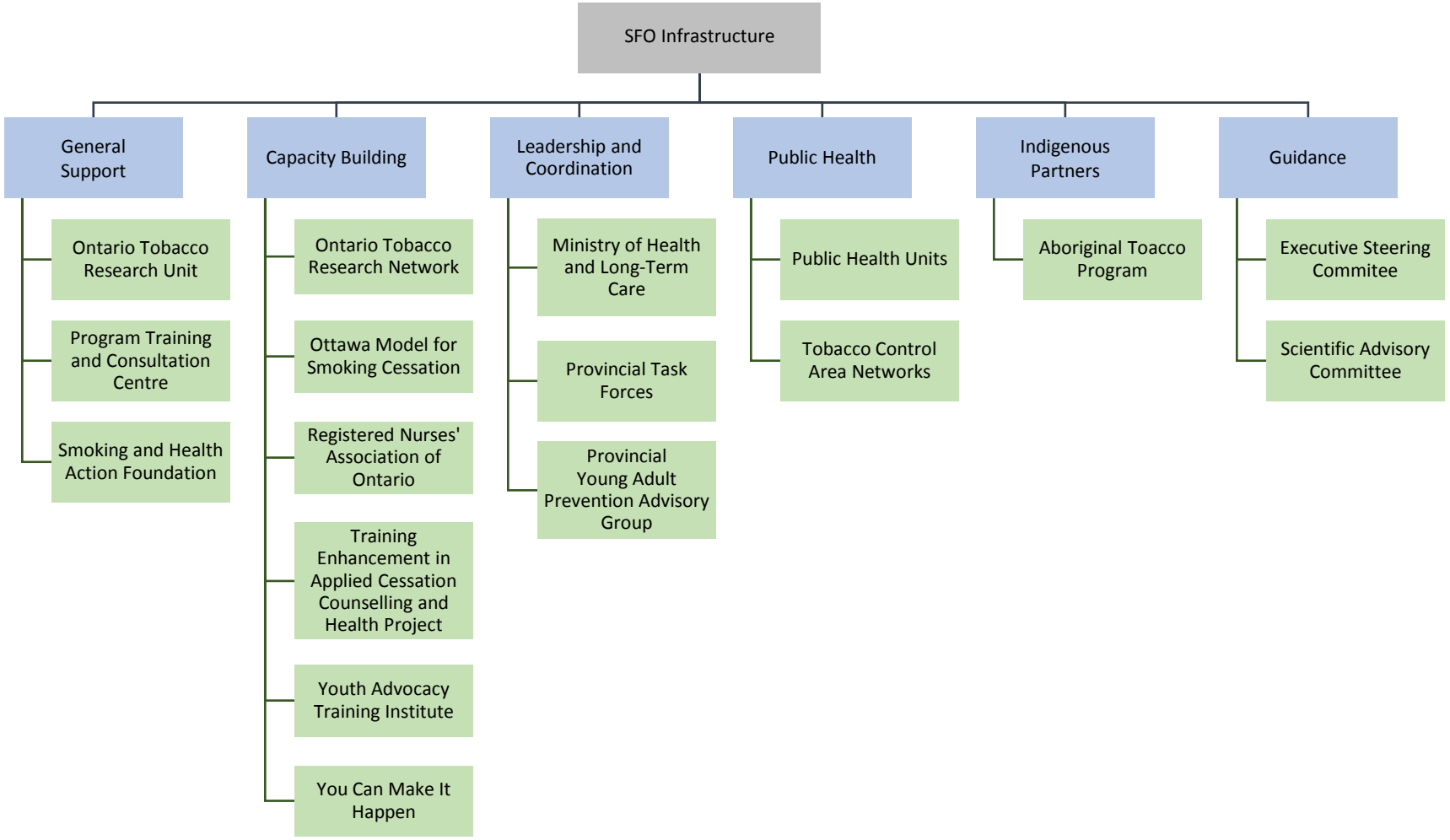
An effective strategy and its interventions must be based on evidence, integrated into a forward-looking campaign, delivered by skilled people and supported by key leaders and an engaged public.[1] To this end, the Smoke-Free Ontario (SFO) Strategy includes an infrastructure component that supports the goals of the Strategy by providing:

- Leadership and coordination
- Technical assistance
- Capacity building
- Learning through research, evaluation, monitoring and surveillance

Infrastructure initiatives are offered to key stakeholders—including public health unit staff, educators and service providers—in the areas of prevention, cessation, protection and tobacco industry denormalization by a wide array of organizations. In this chapter, we provide an overview of the infrastructure initiatives delivered in the 2016/17 fiscal year. The initiatives are presented in the following thematic groupings: general support, capacity building, leadership and coordination, public health, Indigenous partners and guidance (Fig 3-1).

Throughout the chapter we highlight the infrastructure-related recommendations from the Executive Steering Committee report, *Smoke-Free Ontario Modernization*.[1] In addition, we have included a summary table at the end of the chapter that compares the current status of SFO-funded initiatives to the infrastructure-related recommendations from the Executive Steering Committee report.

Figure 3-1: Smoke-Free Ontario Strategy Infrastructure Initiatives, by Thematic Grouping,[a] 2016/17



[a] Thematic groupings were created solely for the purpose of presenting the SFO infrastructure initiatives in this report. We acknowledge that several initiatives are involved in multiple aspects of the SFO infrastructure (i.e., leadership and coordination, technical assistance, capacity building, research, evaluation, monitoring and surveillance).

General Support

The Executive Steering Committee identified the following priority actions to ensure the best evidence is used to guide the Strategy:

- Ensure up-to-date research findings are readily available to inform policy and practice
- Evaluate Strategy initiatives, activities and enablers
- Conduct ongoing surveillance

The Executive Steering Committee identified the provision of technical assistance as a priority action to build capacity to implement the Strategy.

Ontario Tobacco Research Unit

The Ontario Tobacco Research Unit (OTRU) is a Canadian leader in tobacco control research, monitoring and evaluation, capacity building and knowledge exchange. Over the 2016/17 fiscal year, activities conducted by OTRU included:

- Rapid scientific consulting on a variety of prevention, cessation and protection topics. In 2016/17, OTRU fulfilled 76 rapid scientific consulting requests for the Ministry of Health and Long-Term Care, Public Health Ontario, public health units, health charities and an industrial workplace
- Knowledge and evaluation support—including consultation, design, ethics' protocols, data collection, analysis/interpretation, and reporting—to SFO partners. In 2016/17, OTRU responded to 48 requests (21 cessation-related, 17 prevention-related, and 10 protection-related). Examples of knowledge and evaluation support projects include environmental scans of smoking cessation practices among health professionals[2] and workplace tobacco control activities,[3] and evaluations of a pharmacy smoking cessation pilot project,[4] dental professional youth tobacco prevention education program[4] and the Love My Life prevention-focused campaign[5]
- Tobacco and Public Health: From Theory to Practice online course for health professionals. The online course incorporates evidence-based knowledge in the areas of

cessation, protection, prevention and evaluation. In 2016/17, the number of health professionals across Ontario enrolled in each module was 1240 for cessation, 812 for protection, 800 for prevention and 738 for evaluation (note: enrollment numbers are not mutually exclusive)

- Tobacco Informatics Monitoring System (TIMS) online population data site. TIMS provides easy access to reliable, up-to-date data on 140 key tobacco control indicators in the topic areas of tobacco use, e-cigarettes, cannabis, cessation, prevention, protection, public opinion and the Tobacco Industry. In 2017, there were 813 unique users who accessed TIMS in over 1929 sessions with a total of 28,049 page views
- An ongoing evaluation of recently implemented policy measures, such as the ban on flavoured and menthol tobacco,[6] youth access to e-cigarettes,[7] and the outdoor smoking regulations on playgrounds, sporting areas, restaurant and bar patios and hospital grounds[8]
- Recruitment of current smokers and recent quitters to participate in surveys and special studies through Smokers' Panel. As of November 10, 2017, there were 6377 smokers registered in Smokers' Panel. At the time of registration, the majority of panelists were current smokers (60.2%), half of whom had tried to quit smoking in the previous 12 months (55.7%). The most common cessation methods reported by panelists included the nicotine patch (35.2%), nicotine gum (25.8%), cold turkey (23.5%), Champix (15.6%) and Zyban (14.9%)
- Analyses of the Ontario Tobacco Survey data
- OTRU SFO Scientific Advisory Group that is comprised of 24 scientists and researchers who support the ongoing review of current literature and updates of the evidence statements published in the 2016 Scientific Advisory Committee report. The 2017 Scientific Advisory Group Evidence Update included the appraisal of 51 new articles and added recommendations for two new potential interventions: cessation in prisons and cessation among individuals living with HIV. The evidence update also suggested a change in the evidence statement for cessation in individuals with substance use issues from 'Undetermined' to 'Promising Direction'[9]
- Annual Strategy Monitoring Report that documents the evidence base for the SFO Strategy —including trends in tobacco use and tobacco control—and summarizes the SFO-funded tobacco control initiatives in the areas of prevention, protection, and cessation

- Knowledge exchange products such as OTRU Updates, Project Newsletters and Special Reports that provide updates on current tobacco control issues (e.g., Heated Tobacco Products),[10] updates on current OTRU projects (e.g., Vaping in Ontario)[11] and summaries of findings (e.g., Youth Exposure to Tobacco in Movies)[12]
- Monthly curated lists of current abstracts on tobacco control
- Support for the Executive Steering Committee in the development of modeled forecasts and fact checking the report
- Leveraging tobacco control research through five new grants
    - Research on Electronic Cigarettes and Waterpipe (RECIG-WP)[13]
    - Research on Advancing Cessation Treatment (REACT)[14]
    - Research on Commercial Reduction in Aboriginal Communities (RETRAC2)
    - New Ontario Menthol Tobacco Ban Evaluation
    - Provide In-Depth Analysis of Data to Examine the Impact of Ontario's Bans on Flavored and Menthol Tobacco Products on Consumer and Industry Behavior in the Tobacco Retail Environment

OTRU staff are also actively involved in Communities of Practice and other provincial committees relevant to the SFO Strategy.

Program Training and Consultation Centre

The Executive Steering Committee identified facilitating learning through Communities of Practice as a priority action to build capacity to implement the Strategy.

The Program Training and Consultation Centre (PTCC) is responsible for providing training and technical assistance to health professionals working in tobacco control in Ontario.

In 2016/17, PTCC provided a variety of capacity building activities on topics related to cessation, prevention and protection.

- Cessation: PTCC offered training workshops that were tailored to meet the needs of local public health units and their community partner agencies, on topics such as Brief Counselling Techniques for Smoking Cessation, Integrating a Motivational Interviewing

Approach into Tobacco Treatment and Taking an Equity-Informed Approach to Tobacco Treatment with Priority Populations

- Prevention and protection: PTCC provided its annual four-day training course on the foundations of tobacco control enforcement. This course is offered in collaboration with the Ministry of Health and Long-Term Care and is required training for any public health unit employee enforcing the *Smoke-Free Ontario Act* and *Electronic Cigarettes Act*. PTCC also offered conflict resolution training for tobacco enforcement officers and supported the Central East Tobacco Control Area Network in hosting a regional tobacco enforcement knowledge exchange forum through PTCC's special request training process

The PTCC also supported province-wide knowledge exchange through two Communities of Practice and media capacity project.

- Cessation: A new Community of Practice focusing on the topic of increasing quit attempts in local communities was launched. In addition, a new provincial media capacity building project was launched to support the use of personal testimonials to promote quit attempts. Through this project, the PTCC supported five local public health units and one Tobacco Control Area Network to develop local media campaigns through training, technical assistance, capacity building grants, and a knowledge exchange working group
- Prevention and protection: The tobacco-free policy Community of Practice encourages and supports the use of evidence in the development, implementation and enforcement of comprehensive tobacco control policies at community and organizational levels. Some examples of policy addressed by the Community of Practice include tobacco-free conservation areas, tobacco-free policies in workplaces, and post-secondary campuses. In partnership with the Propel Centre for Population Health Impact, the PTCC also completed a documentation of tobacco-free policy development on post-secondary campuses[15]

PTCC Health Promotion Specialists and Media and Communications Specialists provided consultations to local public health units, Tobacco Control Area Networks and tobacco coalitions.

- Cessation: Consultations helped local public health units to develop and engage local cessation networks, to plan and implement training opportunities for community partners, and to develop local cessation media campaigns. In partnership with the Propel Centre for Population Health Impact, the PTCC also completed two evidence summaries on the topics of relapse prevention[16] and the role of public health influencers in smoking cessation[17]
- Prevention: Consultations provided planning support to a provincial working group on the development of a young adult prevention strategy, and with campaign planning and message development for the provincial smoke-free movies coalition and the 'Freeze the Industry' youth coalition
- Protection: Consultations helped advance local policy efforts including smoke-free multi-unit housing, hospitals and conservation areas

Reach: In 2016/17, the PTCC delivered 59 training events on all aspects of tobacco control, which reached 2,300 clients. Training events included 46 workshops, 12 webinars and 1 special request workshop. PTCC's training programs were attended by staff of Ontario's 36 public health units, Community Health Centres, the health care sector (e.g., hospitals), non-governmental organizations and government. A total of 130 public health practitioners were actively engaged across PTCC's two provincial Communities of Practice. In addition, 497 consultations were delivered by PTCC Health Promotion Specialists and Media and Communication Specialists.[i]

Effects: In standardized post-event questionnaires conducted after all workshops and webinars, 80% of workshop participants and 73% of webinar participants rated the usefulness of these services as high or very high. Three quarters of workshop participants (77%) and webinar participants (78%) reported increased knowledge. In addition, increased confidence to apply the content after the event was also reported by 75% of workshop participants and 66% of webinar participants.

Most tobacco-free policy Community of Practice members indicated that their knowledge, confidence and intentions to apply what they learned from the Community of Practice to their work increased moderately or "a great deal" in an annual survey conducted in January 2017.

[i] Steven Savvaidis, Senior Manager, Program Training and Consultation Centre, Personal communication, September 28, 2017.

Most members also reported improvements in their ability to carry out their tobacco control work (e.g., ability to solve problems at work, find relevant information, work more efficiently, etc.).[ii]

Smoking and Health Action Foundation

The Smoking and Health Action Foundation (SHAF) is a non-profit health organization that conducts public policy research and education designed to reduce tobacco-related disease and death.

In 2016/17, SHAF provided a variety of prevention- and protection-related training, technical assistance and knowledge exchange to SFO partners.

- Prevention: 95 consultations and 16 presentations were held on topics such as plain packaging, taxes and pricing, smoke-free movies (SHAF co-chairs the Ontario Coalition for Smoke-Free Movies), retailer licencing and display, butt litter, tobacco-free post-secondary campuses and the tobacco industry
- Protection: 93 consultations, 15 presentation and 3 workshops were held on topics such as smoke-free multi-unit housing, smoke-free policies, secondhand marijuana smoke, waterpipes and e-cigarettes

SHAF continued to support developments in municipal legislation with an emphasis on policy analysis provisions to further develop tobacco control policies in the Province (e.g., waterpipe use, e-cigarettes and other weeds and substances). The online Smoke-free Laws Database, which includes the identification of leading edge bylaws and bylaws that exceed the *Smoke-Free Ontario Act*, received 13,265 visits in 2016/17.

As the Chair of Smoke-Free Housing Ontario—a coalition of partners (public health units, health agencies)—SHAF:

- Maintained and regularly updated the Smoke-Free Housing Ontario website with a comprehensive list of available smoke-free housing in Ontario. The Smoke-Free Housing Ontario website received 52,759 visits in 2016/17
- Posted and distributed over 2,000 hard copies of an updated guide for landlords and

[ii] Steven Savvaidis, Senior Manager, Program Training and Consultation Centre, Personal communication, January 12, 2018.

property managers about smoke-free housing[18] in response to requests
- Conducted over 300 public education outreach activities through social media campaigns, media coverage, education sessions for housing providers and booths at trade shows
- Offered technical assistance to 180 housing providers and the public

In addition, SHAF responded to 147 Ontario-specific inquiries from the general public regarding smoke-free multi-unit housing, plain packaging, e-cigarette legislation, smoke-free hospitals and smoke-free post-secondary campuses.[19]

Capacity Building

The Executive Steering Committee identified the need for providers to have the core skills and competencies to provide high quality evidence-based cessation services as a priority action towards implementing a visible network of high quality, person-centred cessation services.

The Executive Steering Committee identified the enhancement of knowledge and skills of all involved in implementing the Strategy as a priority action to build capacity to implement the Strategy.

Ontario Tobacco Research Network

The Ontario Tobacco Research Network is a platform established by the Ontario Tobacco Research Unit that provides Ontario tobacco control researchers the opportunity to:

- Share research currently in progress
- Provide and receive input on ongoing studies
- Identify research gaps
- Facilitate collaboration
- Enable trainees to both learn and gain experiencing in presenting their work

The network's main activity is the annual meeting during which presentations on current research are delivered and the findings are discussed. The inaugural meeting was held in March 2017, where 21 Ontario scientists and three trainees from 11 academic, mental health and public

health institutions participated. Eight current research projects were presented and discussed during the inaugural meeting covering topics such as real-world effectiveness of bupropion and varenicline for smoking cessation, health equity and secondhand e-cigarette aerosol.[20]

Ottawa Model for Smoking Cessation

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

In January 2017, the University of Ottawa Heart Institute hosted the ninth annual Ottawa Conference: State of the Art Clinical Approaches to Smoking Cessation. Prior to the conference, the University of Ottawa Heart Institute partnered with the Canadian Mental Health Association to host a pre-conference workshop focused on implementing systematic tobacco cessation approaches within mental health and addiction programs.

Reach: In 2016/17, a total of 2,443 health professionals (physicians, nurses and nurse practitioners, pharmacists, respiratory therapists, social workers, dieticians, medical residents, and other allied health professionals) participated in Ottawa Model knowledge translation events. Outreach facilitators and program coordinators trained 728 front-line staff on-site, 278 health professionals completed the e-learning modules and 122 health professionals attended Ottawa Model workshops. A total of 46 invited presentations (e.g., Grand Rounds and senior management meetings) were delivered on the topic of smoking cessation, reaching

approximately 835 audience members. In addition, 372 health professionals, researchers and policy makers attended the ninth annual Ottawa Conference.[iii]

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

A summary of the Ottawa Model's clinical interventions offered in primary care, hospital and specialty care sites can be found in the Smoking Cessation chapter.

Registered Nurses' Association of Ontario

The Tobacco Intervention Initiative is a program undertaken by the Registered Nurses' Association of Ontario (RNAO). One of the main goals of the Initiative is to strengthen and sustain the capacity of nurses and other health care practitioners to reduce the prevalence of tobacco use among Ontarians and to increase the number of clients who attempt to quit, stay quit and/or reduce their tobacco use. This includes the adoption of the evidence-based RNAO Best Practice Guideline *Integrating Tobacco Interventions into Daily Practice* recommendations at the individual and organizational levels. Since 2007, a multi-pronged approach has been used to support health practitioners and organizations to encourage assessment and documentation of tobacco and nicotine use by every client.

Key programmatic components of the Tobacco Intervention Initiative include:

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

[iii] Kerri-Anne Mullen, Program Manager, Ottawa Model for Smoking Cessation Network, Personal communication, October 2, 2017.

Reach: Since 2007, the RNAO Tobacco Intervention Initiative has trained over 4,000 health practitioners and has been adopted in over 75 Implementation sites. In 2016/17, 115 health practitioners were trained through one of the Tobacco Intervention workshops.[21]

Effects: Evaluation studies of the RNAO Initiative were conducted in 2010, 2011, 2012, 2014 and 2015 using a mixed-methods approach (web survey of Champions, case studies of public health and health care organizations). [22,23,24,25,26] These studies demonstrated that project-specific components, such as the Champion Workshops and Tobacco Intervention Specialists' support, as well as the uptake of RNAO evidence-based cessation resources, had been instrumental in increasing nurses' capacity in smoking cessation. Champions reported an increase in knowledge and confidence in delivering tobacco cessation strategies after attending a Tobacco Intervention Workshop with sustained increased levels of confidence and knowledge 6 and 12 months after the workshop. The evaluation studies also show that most Champions deliver at least the Ask and Advise components of the minimal intervention recommended by the guideline (e.g., Ask, Advise, Assist and Arrange). At the organization level, fewer Champions reported that their organization revised or developed a new cessation policy/program or cessation documentation tool despite the Champions' engagement in promoting the RNAO guideline among colleagues.

Management buy-in and support has been consistently shown in the evaluation studies as being crucial to ensuring successful implementation of the RNAO Initiative, increasing nurses' and other health practitioners' engagement in the provision of tobacco cessation services and adopting cessation policies and practices at the organizational level. Lack of staff, lack of time and lack of patient interest were consistently identified as barriers to implementation. These findings need to be interpreted with caution due to survey response bias and limitations on generalizing from information gathered through case studies.

Training Enhancement in Applied Cessation Counselling and Health Project

The Training Enhancement in Applied Cessation Counselling and Health Project (TEACH) aims to enhance treatment capacity for tobacco cessation interventions by offering evidence-based, accredited, accessible and clinically relevant curricula to a broad range of health practitioners

such as registered nurses, addiction counsellors, social workers, respiratory therapists and pharmacists. The core-training course focuses on essential skills and evidence-based strategies for intensive cessation counselling. The project also offers specialty courses targeting interventions for specific populations (e.g., clients with mental illness and/or substance use disorders; youth and young adults; First Nations, Inuit and Métis populations), settings (e.g., cancer care settings) and monthly one-hour webinars, known as Educational Rounds, for health practitioners.

Other key elements of the TEACH Project include: collaboration and partnership with other cessation training groups, hospitals and agencies, community stakeholders and government agencies; Community of Practice activities to provide health practitioners with clinical tools and applications, as well as opportunities for networking and continuing professional education; regional practice leaders who provide support for tobacco dependence treatment initiatives across Ontario; and an evaluation component to examine project impact and knowledge transfer. TEACH training is considered the training standard for primary-care settings and community-based services planning to offer cessation services including Family Health Teams, Community Health Centre, Nurse Practitioner-Led Clinics, Addiction Agencies, and Aboriginal Health Access Centres.

Reach: Since the project's launch in 2006, TEACH has trained 5,490 unique health practitioners from diverse disciplines in intensive cessation counselling across Ontario. In 2016/17, TEACH trained 469 practitioners in five core courses (one classroom and four online). Participants included registered nurses, nurse practitioners, addiction counsellors, health promoters/educators, social workers, pharmacists and respiratory therapists who came from a variety of settings including public health units (n=68), hospitals (n=114), Family Health Teams (n=46), Community Health Centres (n=47), Addiction Agencies (n=31), Aboriginal Health Access Centres (n=11), Nurse Practitioner-Led Clinics (n=3) and other settings. In 2016/17, 1066 practitioners attended the 12 webinars for health and allied health practitioners offered by TEACH.[27]

Effects: In 2016/17, practitioners rated measures of feasibility, importance and confidence on TEACH core course topic areas (e.g., tobacco use and dependence, evidence-based screening and assessment tools, psycho-social interventions and pharmacotherapy, etc.) significantly higher following TEACH training. The perceived feasibility to incorporate cessation practices into practitioners' own practices increased from a mean score of 7.2/10 at baseline to 8.4/10 post-training; the perceived level of importance for the cessation practices increased from a mean score of 8.8/10 at baseline to 9.3/10 post-training; and the perceived confidence in using the knowledge and skills gained at TEACH increased from a mean score of 5.5/10 at baseline to 8.2 post-training).

In 3- and 6-month follow-up surveys from the July 2016 Core Course cohort, practitioner engagement in intensive cessation counselling or brief interventions with clients (either group or individual) increased following TEACH training (97.4% at 3 months and 100% at 6 months). (Note: Interpret with caution due to moderate response rates at follow-up; approximately 56% at 3 months and 38% at 6 months).

TEACH participants identified barriers to engaging in smoking cessation including lack of practitioners' time, lack of client motivation to participate, lack of funding and the need for more practice.[27]

Youth Advocacy Training Institute

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

In 2016/17, YATI delivered 123 trainings and events across Ontario to address four objectives: Education, Awareness and Training; Engaging Youth and Young Adults; Collaboration and Capacity Building (Partnership Projects); and Knowledge Exchange. In total, 4,267 youth and young adults and 1032 adults attended the trainings and events outlined below.

Education, awareness and training:

- 43 general trainings (588 youth and young adults, 167 adults) that focused on tobacco industry denormalization, smoke-free movies, advocacy, youth engagement, youth social identities and creating effective health promotion campaigns
- 6 custom trainings (142 young adults, 23 adults)
- 4 keynote speaking engagements (96 young adults)
- 16 trainings were facilitated through eight regional and provincial summits (259 youth and young adults, 53 adults)
- 2 trainer orientation and professional development days (42 young adult and adult trainers)

Engaging youth and young adults in all facets of the YATI program:

- 1 youth and young adult leadership retreat (21 youth and young adults, 2 adults)
- 5 YATI Talks, a collection of one hour-long tobacco-related presentations developed and presented for youth by youth (195 youth and young adults, 29 adults)
- 10 volunteer/recruitment opportunities (2,569 youth and young adults, 56 adults)

Collaboration and capacity building:

- 31 trainings were delivered as part of 13 partnership collaborations (373 youth and young adults, 534 adults), including the Aboriginal Tobacco Program's First Nation, Métis and Inuit Youth Ambassador Tobacco-Wise Forum; TEACH tobacco interventions for youth and young adults online specialty course; LGBTQ+ tobacco youth programs; N-O-T on Tobacco Program and N-O-T Train the Trainer, amongst others. For more information about YATI's N-O-T on Tobacco youth smoking cessation program, please refer to the summary in the Smoking Cessation chapter

Knowledge exchange:

- 1 two-day in-person Networking and Knowledge Exchange event (63 adults)
- 2 teleconference/webinars Knowledge Exchange opportunities (80 nonspecific)
- 2 special events[28]

The YATI website was active in 2016/17, with the English site having 11,510 visits (8,470 unique visitors) and 33,556 page views and the French site having 567unique visitors and 732 page views. The YATI Facebook account had 484 friends; their Twitter feed had 1,645 followers and 5,110 tweets; their Instagram account had 134 followers and 51 posts; and the YATI YouTube channel had 24 subscribers and 18,236 views.

Effects: Participants from YATI's 2016/17 trainings and events reported significant increases in pre- and post-training knowledge and self-efficacy mean scores across several trainings and events, including the youth and young adult general training, adult general training, trainings that were part of summits and trainings delivered as part of partnership collaborations. Participant satisfaction with the trainings and events was also high (range: 4.1/5-4.85/5).[29]

You Can Make It Happen

You Can Make It Happen is an initiative of Ontario public health units 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, public health unit 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 Tobacco Control Area Networks and targets various health professionals including nurses, pharmacists, dental professionals and optometrists.

Reach: In 2017, the You Can Make It Happen website received a total of 3,689 visits, the majority of which (2,362) were from accounts hosted by Canadian internet service providers, suggesting that the site is reaching its target audience.[iv] Per website visit, visitors looked at an average of 2.57 pages and spent 2 minutes 30 seconds per page view. A total of 640 PDF documents were downloaded from the website between January and June (information not available for July to December). The three most commonly downloaded products were the Ontario Drug Benefit Formulary form, 5A's Overview Staff Pocket Card, and the Tips and Quit Plan Handout.

[iv] Google Analytics. Distributed by Donna Kosmack, Southwest TCAN. Personal communication, January 25, 2018.

A province-wide evaluation of You Can Make It Happen conducted by the Ontario Tobacco Research Unit found that 14,833 materials were distributed through trainings, meeting, mail-outs and information booths to 4,014 health practitioners in 2017 (based on responses from across 20 public health units). The most commonly distributed You Can Make It Happen resources were the Assist Tips and Quit Plan handout (7,701 copies distributed to 814 health practitioners) and the 5A's Overview Staff Pocket Card (1,146 copies distributed to 906 health practitioners).

Effects: 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.

Leadership and Coordination

The Executive Steering Committee identified the creation of an intense, compelling multi-faceted, multi-year mass media-based public education and social marketing campaign as a priority action to engage the public.

The Executive Steering Committee identified that a comprehensive learning system be established as a priority action to ensure the best evidence is used to guide the Strategy.

The Executive Steering Committee identified the need to establish the most effective mechanism(s) to provide leadership, assign responsibility, ensure coordination, and hold people and organizations accountable for executing the strategy as priority actions to ensure strong leadership, coordination and accountability.

Ministry of Health and Long-Term Care

The Ministry of Health and Long-Term Care is the central leader and funder of the SFO Strategy and all the Strategy initiatives. In particular, the Ministry of Health is responsible for coordinating the implementation and enforcement of the *Smoke-Free Ontario* and *Electronic Cigarettes Act*, including the maintenance of the Tobacco Inspection System administrative database (for more information about enforcement, please refer to the Protection chapter).

In addition, the Ministry of Health creates and promotes provincial-level tobacco-related mass media campaigns. In 2016/17, only two provincial cessation-focused media campaigns were run between January and May 2017 (for more information about enforcement, please refer to the Smoking Cessation chapter). Other local and regional stakeholders have run smaller public education campaigns on an ad hoc or intermittent basis to further promote smoke-free policies, the harmful effects of tobacco use, tobacco use prevention and cessation services.

Provincial Task Forces

The Protection and Enforcement, Prevention, Cessation and Tobacco Control Systems Committee were comprised of representatives from the tobacco control community who have considerable expertise and experience working in the related tobacco control areas. The Task Forces provided information and advice in developing and supporting programs, services and policies in the Province. As of June 2016, the Task Forces were put on hold by the Ministry of Health and Long-Term Care. Without the involvement from these Task Forces, the SFO Strategy has suffered from lack of coordination, opportunities for cross-learning and planning for efficient and effective execution of interventions.

Provincial Young Adult Prevention Advisory Group

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

- Review evidence related to young adult tobacco use
- Move components of the Smoke-Free Ontario Strategy forward by supporting the work of any Advisory Group working group

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

Public Health

Public Health Units

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

Public health units are responsible for the following requirements of the recently revised Ontario Public Health Standards:[30]

- Work with school boards and/or staff of elementary, secondary, and post-secondary educational settings to influence the development and implementation of comprehensive tobacco control policies
- Increase the capacity of workplaces to develop and implement comprehensive tobacco control programs and policies
- Collaborate with local food premises to provide information and support environmental changes through policy development related to the protection from environmental tobacco smoke
- Work with municipalities to support comprehensive tobacco control policies in recreational settings and the built environment
- Increase capacity of community partners to coordinate and develop regional/local comprehensive tobacco control programs and services through promoting access to community resources
- Increase public awareness about comprehensive tobacco control through regional/local communication strategies
- Provide advice and information to link people to comprehensive tobacco control community programs and services
- Implement and enforce the *Smoke-Free Ontario Act* and *Electronic Cigarettes Act* in accordance with provincial protocols

In the area of prevention, many public health units have chosen to hire a Youth Engagement Coordinator to facilitate the achievement of prevention-focused requirements. These coordinators work collaboratively across risk factor-related programs within the public health unit and externally through community partnerships with youth organizations. They also work with Youth Development Specialists and other regional stakeholders within the Tobacco Control Area Networks to establish regional plans and priorities for tobacco use prevention programming. Youth Engagement Coordinators focus their work on a number of activities including: training on the principles of youth engagement across public health unit programs, funding of youth-led health promotional activities, ongoing engagement of youth in tobacco control and creating opportunities for peer networking and learning.

Specific public health unit initiatives are discussed in the Youth Prevention, Smoking Cessation, and Protection chapters.

Tobacco Control Area Networks

The seven Tobacco Control Area Networks, regional groupings of one to nine neighbouring public health units, have a mandate to provide leadership, coordination and collaborative opportunities related to all components of the SFO Strategy. Tobacco Control Area Network Coordinators and Youth Development Specialists are actively involved in Communities of Practice and committees to represent the local level in the planning of policies and interventions. Tobacco Control Area Network staff also assist in assessing local public health unit training and technical assistance needs, and they help communicate Ministry of Health and Long-Term Care policies and activities.[31] One of the more important roles Tobacco Control Area Networks play is to plan and execute large regional projects and coordinate regional media activities. Please refer to the Youth Prevention, Smoking Cessation, and Protection chapters for information about regional initiatives.

Indigenous Partners

The Executive Steering Committee identified the following as priority actions to work with Indigenous partners to develop strategies specific to First Nations, Métis and Inuit communities building on existing approaches:

- Establish mechanisms to engage First Nations, Métis and Inuit communities to have further dialogue on the recommendations in the Executive Steering Committee report
- Ensure that no part of this Strategy impinges on the use of tobacco by Indigenous people and communities when used for traditional or ceremonial purposes
- Support development, implementation and further expansion of Indigenous-specific approaches within an integrated health promotion/chronic disease risk factor approach, in a sustainable way

Aboriginal Tobacco Program

As a part of the Aboriginal Cancer Control Unit at Cancer Care Ontario, the Aboriginal Tobacco Program (ATP) works with and for First Nation, Inuit, Métis and other Indigenous and non-Indigenous partners to enhance knowledge, build capacity and empower communities with the skills and tools needed to address commercial tobacco prevention, cessation and protection. The ATP encourages and partners with communities to become “Tobacco-Wise” and to use tobacco in a traditional and sacred way while breaking free from commercial tobacco addiction.

As part of its programming, the ATP employed four Aboriginal Tobacco-Wise Leads who engaged directly with First Nation, Inuit and Métis communities (with one-time funding in 2016/17, the ATP hired its fourth Tobacco-Wise Lead, as well as a Coordinator, to significantly enhance capacity and reach in the field). The Tobacco-Wise Leads support First Nation, Inuit and Métis communities by identifying and addressing distinct community based needs through tailored campaigns and workshops on commercial tobacco prevention, cessation, and protection.

Below are some of the key infrastructure activities that took place in the 2016/17 fiscal year.

The ATP engaged with youth by partnering with other organizations to facilitate culturally relevant training and interventions:

- Two Tobacco-Wise Youth Ambassador Forums were held (June 2016 and March 2017) in collaboration with the Youth Advocacy Training Institute. In attendance were youth and young adult participants representing communities and organizations across Ontario. The youth shared their knowledge and vision for future Tobacco-Wise communities, received training from the Youth Advocacy Training Institute and took part in knowledge sharing sessions involving First Nations, Inuit and Métis Traditional Knowledge Keepers

The ATP also partnered with a number of other organizations in order to support First Nation, Inuit, Métis communities address the impact of commercial tobacco:

- In 2016/17, the ATP reached a total of 5,892 community members and health care providers through commercial tobacco smoking prevention and cessation workshops.
- Provided 38 non-First Nations, Inuit and Métis partner consultations via phone, email and partnership/collaboration at in-person events (partners include the Centre for Addictions and Mental Health, Leave the Pack Behind, Public Health Units, Ontario Lung Association, Smokers' Helpline).
- Tobacco-Wise Leads have completed ATP-Training Enhancement in Applied Cessation Counselling and Health (TEACH) training through the Centre for Addiction and Mental Health, and serve as Faculty for the TEACH Specialty Course 'Tobacco Interventions with First Nations, Inuit and Métis Populations.' In 2016/17, four Tobacco-Wise leads served as Faculty, providing guidance and expertise to participants over a six-week period in February-March, 2017
- The ATP facilitated promotion, awareness, and capacity building with First Nations, Inuit and Metis communities through the Aboriginal Tobacco Partnership Table (ATPT). The ATPT was comprised of regional and national partners who provide subject matter expertise to increase understanding of the challenges and complexity of tobacco prevention, cessation and protection among First Nations, Inuit and Métis populations. In 2016/17, two meetings were held (June 23rd 2016 and February 15th 2017) and consensus from ATPT members provided direction to expand the ATPT to address the four key risk factors identified within Cancer Care Ontario's Path to Prevention report: healthy eating, active living, alcohol consumption and tobacco

use. While addressing commercial tobacco use with/for First Nations, Inuit and Métis populations in Ontario will remain a core priority of the table, the expansion will allow for additional partners to be engaged in addressing other priority areas identified in Path to Prevention

The ATP website (tobaccowise.com) was re-designed and launched. The website hosts pages with information on the ATP, success stories (prevention, cessation, and protection), ATP partners (and how to reach them), harms of commercial tobacco, getting help to quit smoking, and downloadable resources.[v]

Specific initiatives offered by ATP are discussed in the Youth Prevention, Smoking Cessation, and Protection chapters.

Guidance

Executive Steering Committee

The Executive Steering Committee for the Modernization of Smoke-Free Ontario was established by the Minister of Health and Long-Term Care in Spring 2017. The committee comprised a group of leaders and experts in tobacco and other harmful inhaled substances and products. The committee's report outlined 53 recommendations that were grounded in evidence and best practices, culturally appropriate, responsive to priority issues, and aligned with the government's strategic vision and priorities. One of the key mandates of the report was for the findings to be used in consultation with partners and stakeholders in order to form the basis for a new Smoke-Free Ontario Strategy. To this end, the report has been shared publically,[1,32] in a Technical Briefing to the Members of Provincial Parliament and through a webinar hosted by PTCC to the broader tobacco control community.[33]

Scientific Advisory Committee

In 2017, the Smoke-Free Ontario Scientific Advisory Committee released their second report, *Evidence to Guide Action: Comprehensive Tobacco Control in Ontario (2016)*.[34] Based on a

[v] Richard Steiner, Group Manager, Aboriginal Cancer Control Unit/Aboriginal Tobacco Program. Personal communication, December 11, 2017

rigorous synthesis of tobacco control research and a jurisdictional scan of tobacco control efforts in Ontario,[35] the report provides evidence on the effectiveness of 56 interventions related to the four pillars of tobacco control: industry, prevention, cessation and protection. The report includes a scientific consensus statement that categorizes each intervention's potential contribution for Ontario (high, innovative, moderate, uncertain at this time) and a succinct key message on the potential impact on reducing tobacco use and its associated burden in Ontario.

Executive Steering Committee: Overview of Priority Actions for Infrastructure

The *Smoke-Free Ontario Modernization*[1] report outlined a number of priority actions to create a strong enabling system to execute the SFO Strategy. Below is a summary of priority actions that support the SFO Strategy Infrastructure, including an assessment of how the current SFO initiatives address the priority actions (Table 3-1).

Table 3A-1: Executive Steering Committee Priority Actions that Support the Smoke-Free Ontario Strategy Infrastructure

Priority Actions	Current Status
5.1 Engage the public	
5.1.1 Create an intense, compelling, multi-faceted, multi-year mass media-based public education and social marketing campaign to build awareness about: • Harmful effects of tobacco • Tobacco Industry practices • Benefits of quitting • Cessation services and how to access them • Knowledge and skills that young people need to decide not to initiate smoking • Their rights as non-smokers and changes that can be made to protect vulnerable populations	Not implemented - The Ministry of Health ran two cessation-focused campaigns in early 2017 encouraging young adults and adults to not give up trying to quit smoking. Both campaigns were limited in their duration and intensity. Smaller public education campaigns have been conducted at the local and regional level on an ad hoc and intermittent basis.
5.2 Ensure the best evidence is used to guide the strategy	
5.2.1 Establish a comprehensive learning system • Track and report on progress of all activities • Continually use evidence from research, practice, surveillance, monitoring and evaluation to adjust initiatives to increase their impact	Not formally implemented – Current activities that could contribute to a comprehensive learning system include: • SFO partners, public health units and Tobacco Control Area Networks' year-end activity reports • OTRU's annual Strategy Monitoring Report, Knowledge and Evaluation Support, and Rapid Response service • Provincial Task Forces • PTCC's Communities of Practice and evidence summaries • Scientific Advisory Committee report

Priority Actions	Current Status
5.2.2 Ensure up-to-date research findings are readily available to inform policy and practice • Assess, appraise and synthesize research findings • Conduct relevant Ontario research on tobacco and other harmful inhaled substances • Document innovative practices • Respond to time-sensitive requests for rapid research reviews • Convene meetings to discuss the scientific evidence • Share new knowledge in timely and useful ways • Support research trainees and investigators	A number of organizations currently execute and disseminate up-to-date research findings, including the Ontario Tobacco Research Network, OTRU, PTCC, the Scientific Advisory Committee and SHAF.
5.2.3 Evaluate strategy initiatives, activities and enablers • Key activities and interventions should be evaluated to assess their individual and collective impact on Strategy goals. • The enabling system should also be evaluated to determine how effective its activities are in supporting the development and implementation of interventions.	OTRU continues to evaluate the Strategy through its evaluation projects and annual Strategy Monitoring Report.
5.2.4 Conduct ongoing surveillance • Ontario should conduct ongoing, flexible, frequent and comprehensive surveillance of: o Industry trends o Population trends o Health care system success in reaching and treating people who smoke o Progress towards the attainment of goals, objectives and targets	Through TIMS, OTRU continues to analyze population survey data to assess population trends and progress toward the attainment of SFO goals, objectives and targets. However, the recent 1- 2 year lag in the release of some population survey data limits the ability to assess current population trends. SHAF monitors the price and tobacco taxation, retailer licensing fees and smoke-free policy implementation as measurements towards the attainment of SFO goals, objectives and targets. There remains a lack of publically-available industry and health care system data to conduct ongoing surveillance.
5.3 Build capacity to implement the strategy	

Priority Actions	Current Status
5.3.1 Enhance the knowledge and skills of all involved in implementing the strategy • Pre-licensure and post-licensure cessation education for all health care providers • Ongoing opportunities for knowledge and skills development for others involved in implementing aspects of the strategy	Ongoing training for health care providers and public health personnel is provided by a number of organizations: Ottawa Model, OTRU, PTCC, RNAO, SHAF and TEACH. YATI also provides training for youth, young adults and adults who wish to engage in tobacco-related advocacy work.
5.3.2 Provide technical assistance, advice and guidance in planning, implementing and evaluating evidence-based interventions.	ATP, OTRU, PTCC and SHAF all engage in the ongoing provision of technical assistance, upon request.
5.3.3 Facilitate learning through Communities of Practice	PTCC leads two Communities of Practice that engage researchers, health care providers and public health personnel from across the Province.
5.4. Ensure strong leadership, coordination and accountability	
5.4.1 Identify the most effective mechanism(s) to provide leadership, assign responsibility, ensure coordination, and hold people and organizations accountable for executing the strategy.	Not implemented
5.5 Works with Indigenous Partners to Develop Strategies Specific to First Nations, Metis and Inuit Communities building on existing approaches	
5.5.1 Establish mechanisms to engage First Nations, Métis and Inuit communities to have further dialogue on the *Smoke-Free Ontario Modernization* report recommendations	Not implemented
5.5.2 Ensure that no part of this strategy impinges on the use of tobacco by Indigenous people and communities when used for traditional or ceremonial purposes.	In the implementation and enforcement of the *Smoke-Free Ontario Act,* the Ministry of Health continues to protect the use of tobacco by Indigenous people and communities when used for traditional or ceremonial purposes.
5.5.3 Support development, implementation and further expansion of Indigenous-specific approaches within an integrated health promotion/chronic disease risk factor approach, in a sustainable way.	ATP provides ongoing support for Indigenous-specific approaches.
Cross-Cutting Priority Actions	
Ensure providers have the core skills and	Smoking cessation training is offered through in-

Priority Actions	Current Status
competencies to provide high quality evidence-based cessation services. (Cessation recommendation) • Cessation services are most effective when the providers delivering them have the right knowledge, skills, attitudes (core competencies) and resources (tools) • Educational institutions should develop curricula for entry-to-practice preparation as well as continuing education for practicing clinicians that are based on the clinical standards and guidelines and take advantage of existing supports	person courses/workshop (TEACH, Ottawa Model and RNAO) and web-based training modules (Ottawa Model). It is unknown how many academic institutions include smoking cessation in the curriculum or continuing education course for health care professionals.

Chapter Summary

A strong comprehensive tobacco control strategy needs an infrastructure component to support the successful implementation of policies and interventions aimed at reducing the burden of tobacco use at the population-level. In 2016/17, the Smoke-Free Ontario Strategy funded 14 infrastructure initiatives that offered a wide variety of support – training, research, evaluation, surveillance, knowledge exchange and technical support. These infrastructure initiatives addressed nine out of the 12 enabling system priority actions identified by the Executive Steering Committee. Efforts should be made to continue and expand upon the current infrastructure activities. While increased attention should be given to addressing the three remaining priority actions not currently implemented – a comprehensive learning system; a mechanism to lead, assign responsibility, coordinate and hold organizations accountable for executing the strategy; and a mechanism to engage First Nations, Metis and Inuit communities to have further dialogue on the *Smoke-Free Ontario Modernization* report recommendations.

References

1 Ontario Ministry of Health and Long-Term Care. *Smoke-Free Ontario Modernization: Report of the Executive Steering Committee.* Toronto, ON: Queen's Printer for Ontario, 2017. Accessed November 30, 2017.

2 Ontario Tobacco Research Unit. *Tobacco Cessation Practices and Services in Central West Ontario: 2013, 2015 and 2017 Survey Results*. Special Report. Toronto, ON: Ontario Tobacco Research Unit; June 2017. Accessed December 5, 2017.

3 Ontario Tobacco Research Unit. *Environmental Scan of Workplace Tobacco Control Activities in Ontario Public Health Units*. Special Report. Toronto, ON: Ontario Tobacco Research Unit, March 2017. Accessed December 5, 2017.

4 Ontario Tobacco Research Unit. *OTRU Knowledge and Evaluation Support Update*. Knowledge and Evaluation Support Newsletter. Toronto, ON: Ontario Tobacco Research Unit, September 2017. Accessed December 5, 2017.

5 Ontario Tobacco Research Unit. *OTRU Knowledge and Evaluation Support Update*. Knowledge and Evaluation Support Newsletter. Toronto, ON: Ontario Tobacco Research Unit, September 2016. Accessed December 6, 2017.

6 Borland T, Dubray J, Chaiton M, Schwartz R. *Monitoring and Evaluating Ontario's New Tobacco Policy Measures: Flavoured Tobacco Prohibition*. Special Report. Toronto, ON: Ontario Tobacco Research Unit, September 2017. Accessed November 30, 2017.

7 Borland T, Dubray J, Chaiton M, Schwartz R. *Monitoring and Evaluating Ontario's New E-Cigarette Policy Measures: Sale and Supply to Youth*. Special Report. Toronto, ON: Ontario Tobacco Research Unit, August 2017. Accessed November 30, 2017.

8 Dubray J, Borland T, Chaiton M, Schwartz R. *Evaluation of the Smoke-Free Ontario Act Outdoor Smoking Regulations*. Special Report. Toronto, ON: Ontario Tobacco Research Unit, March 2017. Accessed November 30, 2017.

9 Chaiton M, Luk R, Yang W, Lamont R, Schwartz R. *Smoke-Free Ontario OTRU Scientific Advisory Group Evidence Update 2017.* Special Report. Toronto, ON: Ontario Tobacco Research Unit. November 2017. Accessed December 5, 2017.

10 Ontario Tobacco Research Unit. *Heat-Not-Burn Tobacco Products: Claims and Science*. OTRU Update. Toronto, ON: Ontario Tobacco Research Unit, November 2016. Accessed March 1, 2018.

11 Ontario Tobacco Research Unit. *Vaping in Ontario: Preliminary Findings from RECIG-WP*. OTRU Update. Toronto, ON: Ontario Tobacco Research Unit, January 2018. Accessed March 1, 2018.

12 Luk R and Schwartz R. *Youth Exposure to Tobacco in Movies in Ontario, Canada: 2004-2016*. OTRU Special Report. Toronto, ON: Ontario Tobacco Research Unit, July 201. Accessed March 1, 2018.

13 Ontario Tobacco Research Unit. *Research on Electronic Cigarettes and Waterpipe (RECIG-WP)*. OTRU Update. Toronto, ON: Ontario Tobacco Research Unit, June 2017. Accessed December 5, 2017.

[14] Ontario Tobacco Research Unit. *Research on Advancing Cessation Treatment (REACT)*. OTRU Update. Toronto, ON: Ontario Tobacco Research Unit, June 2017. Accessed December 5, 2017.

[15] Kernoghan A, Lambraki I, Honsberger N, Garcia J. *Documentation of Practice: Experiences in Developing Policy to Eliminate Tobacco Use on Post-Secondary Campuses*. Toronto, ON: Program Training and Consultation Centre and the Propel Centre for Population Health Impact, October 2016. Accessed November 24, 2017.

[16] Kernoghan A, Lambraki I, Saxena A, Garcia J. *Preventing relapse to smoking: A review of the evidence.* Toronto, ON: Program Training and Consultation Centre and the Propel Centre for Population Health Impact, 2017. Accessed November 24, 2017.

[17] Cehovin A, Lambraki I, Pieters K, Garcia J. *Expanding Brief Cessation Counselling to Professional Health Influencers*. Toronto, ON: Program Training and Consultation Centre and the Propel Centre for Population Health Impact, 2016. Accessed November 24, 2017.

[18] Smoke-Free Housing Ontario. *A Landlord & Property Manager's Guide to Smoke-Free Housing*. Toronto, ON: Smoking and Health Action Foundation, Winter 2017. Accessed December 7, 2017.

[19] Smoking and Health Action Foundation. *Smoking and Health Action Foundation (SHAF) Quarterly and Final Report: April 1, 2016 – March 31, 2017.* Toronto, ON: Smoking and Health Action Foundation, May 2017.

[20] Ontario Tobacco Research Unit. *OTRU Launches the Ontario Tobacco Research Network (OTRN)*. Project Newsletter. Toronto, ON: Ontario Tobacco Research Unit, March 2017. Accessed November 10, 2017.

[21] Registered Nurses' Association of Ontario (RNAO). *The Registered Nurses' Association of Ontario Tobacco Intervention Initiative: Evaluation Summary 2008-2017.* Toronto, ON: RNAO, October 2017.

[22] Babayan A, Srikandarajah A, Di Sante E, Schwartz R. *Evaluation of the 2009-2010 RNAO Nursing Best Practice Smoking Cessation Initiative.* Toronto, ON: Ontario Tobacco Research Unit, May 2010.

[23] Babayan A, Krynen-Hill M, Schwartz R. *Evaluation of the 2010-2011 RNAO Nursing Best Practice Smoking Cessation Initiative.* Toronto, ON: Ontario Tobacco Research Unit, November 2011.

[24] Babayan A, Malas M, Schwartz R. *Evaluation of the 2011-2012 Registered Nurses' Association of Ontario Nursing Best Practice Smoking Cessation Provincial Initiative.* Toronto, ON: Ontario Tobacco Research Unit, January 2013.

[25] Babayan A, Lillico H, Haji F, Schwartz R. *Evaluation of the 2013-2015 Registered Nurses' Association of Ontario Nursing Best practice Smoking Cessation Provincial Initiative: Progress Report (2013-2014).* Toronto, ON: Ontario Tobacco Research Unit, March 2014.

[26] Dubray J, Babayan A, Lillico H, Haji F, O'Connor S, Schwartz R. *Evaluation of the 2013-2015 Registered Nurses' Association of Ontario Nursing Best Practice Smoking Cessation Provincial Initiative*. Toronto, ON: Ontario Tobacco Research Unit, January 2016.

[27] Training Enhancement in Applied Cessation Counselling and Health (TEACH). *TEACH Project Year-End Evaluation Report, FY 2016-2017.* Toronto, ON: Centre for Addiction and Mental Health, May 2017.

[28] Youth Advocacy Training Institute/YATI. *Final Activity Report 2016/2017*. Toronto, ON: Lung Association, 2017.

[29] Kaufman P, Borland T, Zhang B, Schwartz R. *Evaluation of the Youth Advocacy Training Institute 2016-17*.Toronto, ON: Ontario Tobacco Research Unit, May 2017.

[30] Ontario Ministry of Health and Long-Term Care. *Ontario Public Health Standards 2008*. Toronto, ON: Queen's Printer for Ontario, 2008 [revised March 2017]. Accessed November 24, 2017.

[31] Ontario Ministry of Health Promotion. *Comprehensive Tobacco Control: Guidance Document.* Toronto, ON: Queen's Printer for Ontario, 2010. Accessed on December 6, 2017.

[32] Ontario Ministry of Health and Long-Term Care. *Health Bulletins: Executive Steering Committee Advises on Reducing Smoking Rates*. October 10, 2017. Accessed March 2, 2018.

[33] Executive Steering Committee. *Smoke-Free Ontario Modernization: Report of the Executive Steering Committee*. Webinar hosted by PTCC on November 14, 2017. Accessed March 2, 2018.

[34] Smoke-Free Ontario Scientific Advisory Committee, Ontario Agency for Health Protection and Promotion (Public Health Ontario). *Evidence to Guide Action: Comprehensive Tobacco Control in Ontario (2016)*. Toronto, ON: Queen's Printer for Ontario, April 2017. Accessed December 6, 2017.

[35] Ontario Agency for Health Protection and Promotion (Public Health Ontario), Saikaly R. *A Jurisdictional Scan: Documentation of Tobacco Control Efforts in Ontario between January 2010 and July 2015*. Toronto, ON: Queen's Printer for Ontario, 2017. Accessed December 7, 2017.

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

Generating knowledge for public health

Smoke-Free Ontario Strategy Monitoring Report:

Youth Prevention

Table of Contents

List of Tables

List of Figures

Prevention: Smoke-Free Ontario Strategy Components

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

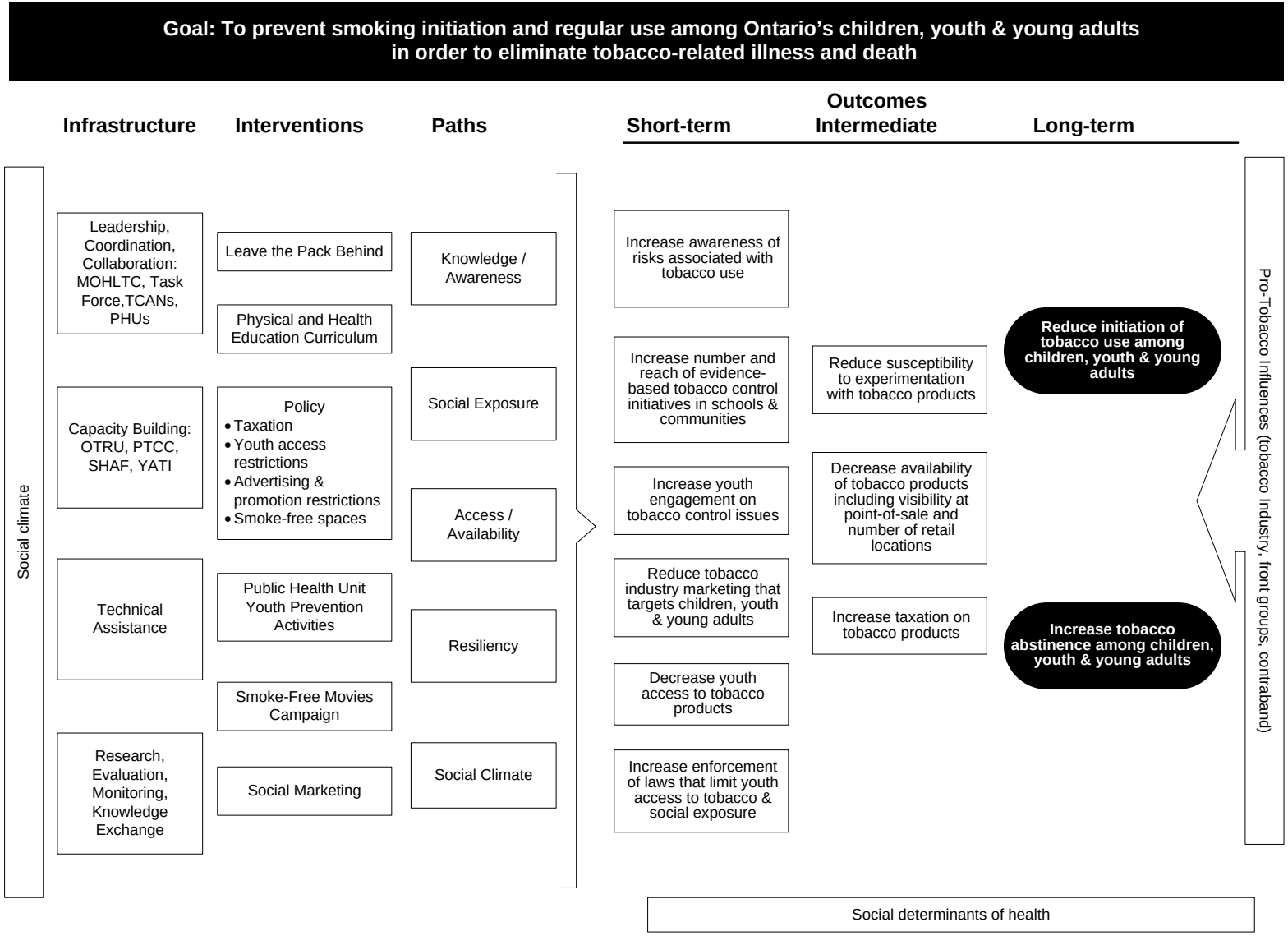
- Limiting social exposure to tobacco use among youth
- Decreasing access and availability of tobacco products
- Increasing knowledge of the harmful effects of tobacco use
- Increasing youth resiliency to make healthy choices and resist tobacco use initiation

In Ontario, the prevention component of the Smoke-Free Ontario (SFO) Strategy is the main avenue by which progress toward these pathways/desired goals is expected to be achieved (Figure 4-1).

In this chapter, we provide an overview of current 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.

New this year, we highlight throughout the chapter the prevention-related assessments from the Smoke-Free Ontario Scientific Advisory Committee report, *Evidence to Guide Action: Comprehensive Tobacco Control in Ontario (2016)*[2] and recommendations from the Executive Steering Committee report, *Smoke-Free Ontario Modernization*.[3] In addition, we have included summary tables at the end of the chapter that compare the current status of SFO-funded initiatives to the prevention-related assessments and recommendations from the Scientific Advisory Committee and Executive Steering Committee reports.

Figure 4-1: Prevention Path Logic Model



Prevention Infrastructure

Several prevention infrastructure components support the development and implementation of a variety of programs, services and policies. To ensure success, the prevention system has been designed to build capacity, provide technical assistance and offer research and evaluation support to key stakeholders, and to deliver evidence-based programs, services and policies to the public. Please refer to the summary presented in the Infrastructure chapter outlining the prevention infrastructure delivered by several key organizations including: the Ontario Tobacco Research Unit, the Program Training and Consultation Centre, Public Health Units, Tobacco Control Area Networks and the Youth Advocacy Training Institute.

Prevention Interventions

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

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

Province-Wide Interventions

Aboriginal Tobacco Program

As a part of the Aboriginal Cancer Control Unit at Cancer Care Ontario, the Aboriginal Tobacco Program (ATP) works with and for First Nation, Inuit, Métis (FNIM) and other Indigenous and non-Indigenous partners to enhance knowledge, build capacity and empower communities with the skills and tools needed to address commercial tobacco cessation, protection and prevention. The ATP encourages and partners with communities to become "Tobacco-Wise" and use tobacco in a traditional and sacred way while breaking free from commercial tobacco addiction. Below are some of the key activities that have taken place in the 2016/17 fiscal year.[i]

Sample of Contributions: The ATP provided support to the development and implementation of the first and second phases of the Research on Tobacco Reduction in Aboriginal Communities (RETRAC) project. The project aims to improve understanding of why and how interventions work with FNIM groups and build community capacity to understand and address commercial tobacco prevention/cessation at the community level. The program collaborated with the CAMH STOP program to provide free nicotine replacement therapy to community members (First Nations and Inuit clients). This program also partnered with *ReachUp Ultimate* to deliver youth workshops

[i] Richard Steiner, Group Manager, Aboriginal Cancer Control Unit/Aboriginal Tobacco Program. Personal communication, December 11, 2017

involving age-appropriate tobacco prevention messaging and learning to play Ultimate Frisbee. Fifteen Ultimate Frisbee / Smoking Cessation & Prevention events took place, reaching a total of 1,932 students. Over 1,200 sets of resources were distributed and the evaluation indicated knowledge related to both tobacco prevention and the harmful effects of commercial tobacco significantly increased.

To increase awareness of the ATP and reach to youth, the ATP Tobacco-Wise Leads attended 27 regional/community events dedicated to youth in order to provide information on commercial smoking cessation and prevention (including a youth Pow Wow and youth cultural events, a Youth Addiction Program and schools).

Freeze the Industry—Plain and Standardized Packaging

Freeze the Industry—Plain and Standardized Packaging (FTI-PSP) is a province-wide initiative, which mobilizes youth in tobacco industry denormalization efforts to educate the public and elected officials on the need for plain and standardized packaging legislation. This project has worked toward establishing training and capacity-building initiatives, as well as the development of communication and social media tools including public awareness campaigns.

Contribution: In 2017, there were over 100 FTI-PSP initiatives in Ontario including 42 FTI-PSP events (42% of initiatives) reaching over 11,000 people; 10 presentation or training activities (10% of initiatives) reaching over 4,200 people; 11 media or public relations activities (11%); 28 social media activities (28%); 8 leadership activities (8%) and 2 arts activities (2%). These initiatives took place across 22 public health units (PHU) and 5 Tobacco Control Area Networks (TCANs). The majority of the initiatives occurred in the Central West TCAN (40%) and South West TCAN (35%), with the remaining initiatives occurring in the Eastern (22%), North East (3%) and Central East (1%) TCANs.[ii] Multiple TCANs were involved in 4% of initiatives.

Interim social media metrics for 2017 include those from Facebook (reach: 15,731; post clicks: 1,257 and engagements: 340), Twitter (impressions: 10,214 and actions: 378), Instagram (engagements: 189 and impressions: 2004) and snapchat (swipes: 653 and views: 4,800).

[ii] The reported results have been compiled from a survey of 7 TCANs and 36 PHUs across Ontario. Not all parties may have completed the survey for each activity in which they were involved and thus the numbers may be under reported.

Leave The Pack Behind

The Scientific Advisory Committee assessed that campus-based tobacco policies would make a moderate potential contribution to reducing tobacco initiation if intensified.

The Executive Steering Committee identified the intensification of tobacco prevention policies and education in elementary, secondary and post-secondary schools—with particular emphasis on trade schools—as a priority action.

To address prevention goals, Leave The Pack Behind (LTPB) uses several tobacco control interventions including:

- Social marketing campaigns that use social media, mass media and interpersonal communication in print, electronic and face-to-face formats
- Peer-to-peer programs and services that actively discourage uptake/escalation of tobacco use, address social norms, support campus policies and provide general tobacco control education

Two campaigns in particular addressed prevention goals. First, LTPB's *Party Without The Smoke* prevention campaign encouraged young adults to refrain from using any form of tobacco/nicotine products while socializing, with particular attention to preventing initiation and preventing escalation. Second, LTPB's annual *wouldurather... contest* challenged post-secondary students and community-dwelling young adults to quit, reduce or stay smoke-free.
Contribution: *Party Without The Smoke.* During the 2016/17 fiscal, this campaign was implemented on 43 post-secondary institutions and communities serviced by three health units (Niagara, Thunder Bay, Northwestern), with results as follows.[4] At 36 of these institutions, student teams hosted 862 face-to-face outreach events (e.g., display tables, etc.). As a result of these events, 17,236 students (2% of the entire student population) had one-on-one interactions with student teams, 30,654 promotion and educational materials were disseminated by student-teams and health professionals, and 3,481 promotional and educational materials were displayed on campus. A further 1,306 *Party Without The Smoke* promotional materials were disseminated in community pilot sites and 207 posters were displayed in community pilot sites.

Based on data collected from separate year-end intercept interviews, 58% of 3,711 university and college students drawn from 47 campus institutions, and 42% of 430 community young adults, recognized the *Party Without The Smoke* campaign.[4] Among the latter group, exposure to the campaign led to greater knowledge that social smoking can lead to daily smoking, 100% of non-smokers saying they would avoid smoking and 53% of smokers saying they would reduce smoking.[4]

wouldyourather. In 2016/17, the prevention component of this contest attracted 4,055 non-smokers, who registered to stay smoke free. Of the 7,224 smokers registering, 3,169 did so to quit or reduce their smoking.[4]

Public Health Units and Tobacco Control Area Networks

Public health units are responsible for the following prevention-related outcomes of the Ontario Public Health Standards:[5]

- Priority populations adopt tobacco-free living
- Work with school boards and/or staff of elementary, secondary, and post-secondary educational settings to influence the development and implementation of a comprehensive tobacco control approach
- Tobacco vendors are in compliance with the *Smoke-Free Ontario Act*
- E-cigarette vendors are in compliance with the *Electronic Cigarettes Act*
- Youth have reduced access to tobacco products

The Ministry of Health and Long-Term Care (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.[6] Youth Engagement Coordinators focus their work on a number of activities including: training on the principles of youth engagement across PHU programs, funding of youth-led health promotional activities, ongoing engagement of youth

in tobacco control and creating opportunities for peer networking and learning.[6]

Specific PHU/TCAN level initiatives related to the enforcement of the *Smoke-Free Ontario Act* and *Electronic Cigarettes Act* are discussed later in this chapter, as are select regional interventions.

School Health and Physical Education Curriculum

The Scientific Advisory Committee assessed elementary and secondary school tobacco policies as having a moderate potential contribution to be intensified.

The Scientific Advisory Committee assessed elementary and secondary school prevention programs as having a moderate potential contribution to be continued.

The Executive Steering Committee identified the intensification of tobacco prevention policies and education in elementary and secondary and schools as a priority action.

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

Contribution: No evaluative information is available.

Smoke-Free Movies

The Scientific Advisory Committee assessed onscreen tobacco use and product placement, with particular emphases on the requirement to rate movies containing tobacco imagery as Adult or 18A (or Mature for video games) and the requirement for anti-tobacco advertisements to be shown in advance of movies (or video games) containing tobacco imagery.

The Executive Steering Committee identified reducing youth and young adult exposure to on-screen smoking as a priority action.

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

The Ontario Coalition for Smoke-Free Movies formed in May 2010 to take collective action to counter the harmful impact of smoking in youth-rated movies released in Ontario. The Coalition is an alliance of health organizations including the Canadian Cancer Society (Ontario Division), Heart and Stroke Foundation of Ontario, Non-Smokers' Rights Association/Smoking and Health Action Foundation, Ontario Lung Association, the Ontario Tobacco Research Unit, Physicians for a Smoke-Free Canada, PHUs, TCANs and Youth Advocacy Training Institute.

The depiction of tobacco use in movies increases the social exposure of tobacco products and tobacco use. Such depiction helps to normalize smoking behaviours, particularly when celebrities are seen using tobacco products. Viewing on-screen smoking is correlated with both youth smoking uptake and becoming an established smoker. Furthermore, a causal relationship has been established whereby exposure to on-screen smoking leads to subsequent smoking initiation among youth.

Contribution: In 2016, 38% of top-grossing movies (n=133) in Ontario had tobacco imagery including 11% of all movies rated G (General), 46% of all movies rated PG (Parental Guidance), and 48% of all movies rated 14A. This corresponded to 2742 tobacco incidents. By playing these Ontario Film Review Board rated G/PG/14A films across Ontario theatres, 340.3 million tobacco impressions on movie goers were delivered (impressions equal to tobacco incidents multiplied by paid admission equivalent), which is equivalent to 61.5% of all in-theatre tobacco impressions.[8] Based on the most recent data available (i.e., 2015), an estimated 185,000 children and teens aged under 17 living in Ontario would be recruited to cigarette smoking by their exposure to onscreen smoking.

Restricting movies with tobacco imagery to adults (by assigning an 18A rating) could influence Studio and Director choice to have smoking in movies. The Scientific Advisory Committee notes that this has the potential to substantially decrease smoking initiation in Ontario. Public health stakeholders and institutions recommend this policy measure provincially, nationally and internationally. Yet, Ontario has not taken steps to protect youth from exposure to smoking in movies.

Tobacco Price and Taxation

The Scientific Advisory Committee assessed increased tobacco price and taxation as having a 'high potential contribution' toward encouraging smoking cessation and reducing smoking prevalence, tobacco consumption and smoking initiation.

The Executive Steering Committee identified the following as priority actions to create environments that encourage and support and quitting:

- Raising tobacco taxes to at least the highest level of all other provinces and territories
- Regularly increasing taxes to at least double the price of tobacco products

There is strong evidence that an increase in cigarette taxes is an effective policy measure to drive down cigarette consumption, encourage current smokers to quit and prevent youth from becoming regular smokers.[9,10,11,12,13,14] On average, a 10% increase in price results in a 3 to 5%

reduction in demand in higher income countries.[15,16,17] Moreover, contrary to industry claims, research suggests that increased taxation does not noticeably lead to an increase in illicit tobacco,[18] a position supported by current tax rates across Canada. That is, high tax provinces appear to have lower levels of illicit tobacco than low tax provinces.

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

In 2018 and 2019, the Government of Ontario will increase tobacco taxes annually by an additional 2 cents per cigarette or gram of tobacco.[23] This approach replaces the inflation-based tax increases announced in the provincial Budget. Ontario tobacco tax rates, as set by the provincial government, were last changed on April 28, 2017 (see Table 7-1 in the Pro-Tobacco Influence chapter). The current rates are:[23]

- 16.475¢ per cigarette, which translates to $3.30 for a pack of 20 cigarettes, $4.12 for a pack of 25 cigarettes, and $32.95 for a carton of 200 cigarettes. In 2018, with an additional 2 cents per cigarette, this will translate to 18.475¢ per cigarette, $3.70 for a pack of 20, $4.62 for a pack of 25, and $36.95 for a carton. The latter is about a 4% increase in total price of a carton of 200 cigarettes over the 2017 price ($106.93 vs. $102.40)
- 16.475¢ per gram or part gram of cut tobacco
- Tax on cigars is 56.6% of the taxable price

The province of Ontario continues to have the second lowest total taxes (federal and provincial) on tobacco ($66.29) of any Canadian province or territory (see Table 7-2 in the Pro-Tobacco Influences chapter). Overall, total tobacco taxes account for 64.7% of the retail price of a carton of cigarettes. Recent tobacco tax increases in Ontario have not been sufficient to reach the WHO MPOWER minimum standard for taxation,[24] which is 75% of the retail price.

Tobacco Product Availability

The Scientific Advisory Committee assessed reducing the availability of tobacco products (including reducing the density of tobacco retail outlets and banning tobacco product sales near schools and campuses) as having an innovative potential contribution towards reducing smoking prevalence.

The Executive Steering Committee identified the use of provincial and municipal legislation, zoning restrictions and licensing fees to reduce the number and density of retail tobacco vendors as a priority action towards reducing the availability of tobacco in retail settings and ultimately reducing tobacco use.

Vendor Retail Licensing

Requiring retailers to obtain a tobacco license and pay an annual fee is a first step toward potentially reducing the retail availability of tobacco. The fee itself, if high enough, might dissuade some retailers from carrying tobacco.[25,26] Increasing the number of retail outlets with paid licenses to sell tobacco products has several other potential advantages. In Los Angeles, California, the tobacco retailer's permit fee is set at $300 USD annually to recover "the cost of both the administration and enforcement of the permit including the cost of issuing the permit, renewing the permit, administering the retailer permit program, retailer education, retailer inspection and compliance checks, documentation of violations, adjudications, and convictions, and prosecution of violators.[27] Most provinces in Canada have not established tobacco retailer license fees, but there are a few exceptions. For example, New Brunswick has a one-time fee of $100, with an annual renewal fee of $50.[28] Nova Scotia has a tobacco retailer licence fee of $124.60, renewable every three years.[29]

Contribution: In Ontario, effective July 1, 2018, all retail dealers who held a vendor permit under the *Retail Sales Tax Act* are required to hold a tobacco retail dealer's permit issued under the *Tobacco Tax Act.*[30] However, there is no fee for this permit. Several municipalities in Ontario do charge an annual tobacco retail license fee including those located within the East (Ottawa, Kingston, Cornwall), Central East (Vaughn, Richmond Hill, Markham, Brampton, Mississauga, Wasaga Beach), Toronto, Central West (Oakville, Hamilton, Burlington), South West (London,

Chatham-Kent, Windsor) and North East (Greater Sudbury, North Bay, Hearst) TCANs.[31] Annual fees range from a high of $877 in Ottawa to under $50 in several jurisdictions.[31]

Zoning Restrictions and Number of Venders

Tobacco retail availability refers to the accessibility of tobacco products at retail and the level of convenience associated with obtaining tobacco. Restricting the retail distribution and availability of tobacco products is considered an important mechanism to limit consumption, contribute to cessation and prevention, and to ultimately reduce subsequent negative health effects.[32,33,34] In a 2005 study prepared for Health Canada, young adult smokers report that they would smoke less if they had to travel farther to buy cigarettes.[35]

Contribution: In Ontario, legislation prohibits tobacco from being sold by vending machines, at pharmacies, on college and university campuses, hospitals and other healthcare and residential-care facilities.[36] Despite these advances, tobacco products continue to be available across the province through a large number of retail outlets (approximately 9,725 in June 2017), primarily convenience and grocery stores. This is down from 10,044 in 2015, 10,620 in 2014, and a further decrease from the approximate 14,000 tobacco vendors that were operating in 2006.[37] The reason for these decreases is unclear. It could be due to more accurate recording of vendors by the MOHLTC, fewer vendors selling tobacco, fewer vendors in general or a combination of all three. An analysis of the tobacco vendor distribution in Ontario found that tobacco vendors were more likely to be located in deprived neighbourhoods (e.g., high proportion of residents on government assistance, single parent families, less than high school education, and homes needing major repairs) and within 500 metres of a school in deprived neighbourhoods.[38]

As of June 30, 2017 there were 5,843 e-cigarette vendors in the province.[37]

Tobacco Product Restrictions

The Scientific Advisory Committee's Industry Working Group assessed banning flavours in tobacco products as having a high potential contribution towards reducing tobacco use, particularly among youth and young adults.

The addition of flavour to tobacco products has been shown to increase the palatability of tobacco products and encourage the progression from experimental to regular tobacco use among youth.[39] Evidence demonstrating the effectiveness of a flavoured tobacco ban is limited due to the relative infancy of this policy. However, one study has suggested a general decrease in smoking rates and cigarette consumption among youth following a flavoured cigarette ban (excluding menthol); yet an increase in post-ban menthol cigarette use was noted among smokers highlighting the importance of a complete ban on flavoured tobacco products.[40] Among adults, recent research suggests that menthol cigarette smokers are less likely to quit smoking than non-menthol cigarette smokers.[41,42,43]

On May 28, 2015, the *Making Healthier Choices Act* (Bill 45) received Royal Assent. This *Act* prohibited the sale of flavoured tobacco at retail stores in the Province, with exceptions. Specifically, regulations consolidated on November 13, 2015 (and in effect as of January 2016) mandated that the *Act* does not apply to flavouring agents in cigars that impart a flavour or aroma of wine, port, whiskey or rum (at the time, it did not apply to the flavour or aroma of menthol, but this regulation was revoked as of January 1, 2017 thus prohibiting menthol as a flavouring agent[44]). Likewise, an order amending the Schedule to the federal *Tobacco Act* came into force December 15, 2015 that prohibited the manufacture and sale of certain types of cigars that contain targeted additives (flavours). Cigarillos and cigars weighing 6 g or less were captured in the amended Schedule.

Contribution: OTRU is currently evaluating both the general flavour and menthol bans. Preliminary analyses found that 29% of menthol smokers in the study attempted to quit smoking in the first month of the menthol ban implementation.[45]

In 2016, Ontario wholesale sales of the total cigar category (little cigars/cigarillos and cigars) was 130,495,924 units.[iii] This represents a 6.8% relative fall from 2015 sales (140,090,699 units) and a 14.8% relative decline from 2012 sales (153,137,662 units) reported 5 years earlier. (Note: Annual sales data may be influenced by wholesale shipment dates).

In 2016, 51.4% of the Ontario cigar market was estimated to be flavoured, down from 82.6% in

[iii] Health Canada, Personal Communication, February 8, 2018.

2015, an apparent result of the partial flavour ban put in place on January 1, 2016 (menthol and alcohol flavoured cigars excepted). Menthol sales in 2016 comprised 8.1% of all cigar sales[iii] compared to the previous year's estimate of 4.15%, an increase that may have been a result of retailers purchasing product before the menthol ban come into force as of January 1, 2017.

Vendor Point-of-Sale Display Ban and Marketing Restrictions

The Scientific Advisory Committee assessed bans on point of sale displays as having a high potential contribution towards reducing smoking prevalence.

The Executive Steering Committee identified expanding the ban on the display of cigarettes to include all smoking, tobacco-related and vaping paraphernalia.

Restrictions on marketing and promotion of tobacco products is an essential policy tool aimed at reducing tobacco use.[46,47,48,49,50] 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.[51,52]

Contribution: In Ontario, a complete ban on the retail and wholesale display of tobacco products took effect on May 31, 2008, with exemptions for tobacconists, duty-free retailers and manufacturers.

Marketing, promotion and sponsorship of tobacco products is also regulated under the *Federal Tobacco Act*, which includes a total ban on tobacco advertising on television, radio and in newspapers and magazines. There remain only two exceptions to the federal advertising ban: tobacco advertising in a publication that is mailed directly to an adult who is identified by name, and signs in places where youth are not permitted to enter by law.

Youth Access Laws and Vendor Compliance

An overarching goal laid out in the Executive Steering Committee report is to regulate and reduce access to the supply of tobacco and other harmful inhaled products and substances.

PHUs are mandated to enforce the *Smoke-Free Ontario Act* in accordance with provincial protocols (e.g., the *Tobacco Compliance Protocol*, 2016).[53] Likewise, PHUs are mandated to enforce the *Electronic Cigarettes Act* in accordance with provincial protocols (e.g., the *Electronic Cigarettes Compliance Protocol*, 2016). With the passage of Bill 174, these protocols have been rolled up together and expect to be implemented within the coming year (Royal Assent was received December 12, 2017).[54]

Contribution: In Ontario, it is illegal to sell tobacco products to anybody under the age of 19. MOHLTC funds PHUs to conduct two youth access checks of each tobacco vendor in their jurisdiction. In 2016, there were 20,080 youth access checks (compliance or enforcement) conducted in Ontario, in which a test shopper entered a store and attempted to purchase tobacco products. The test shopper was sold a tobacco product 704 times.[37] Using the store as the unit of analysis, 97% of Ontario tobacco vendors were found to be in compliance with youth access legislation at the time of their last inspection (9,762 checks, with 287 sales).[40]

In Ontario, it is illegal to sell electronic cigarettes and its components (does not include e-juice) to anybody under the age of 19. MOHLTC funds PHUs to conduct one youth access check of each e-cigarette vendor in their jurisdiction. In 2016, there were 6,369 e-cigarette youth access checks (compliance or enforcement) conducted in Ontario, in which a test shopper entered a store and attempted to purchase an electronic cigarette. The test shopper was sold an electronic cigarette 504 times.[37] Using the store as the unit of analysis, 94% of Ontario e-cigarette vendors were found to be in compliance with youth access legislation at the time of their last inspection (6,141 checks, with 398 sales).[37]

Select Regional Interventions

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

Algoma Youth Action Alliance/Youth Engagement Groups

As of November 2017, 70 young people volunteered 620 hours developing and implementing 21 tobacco prevention activities and 3 trainings reaching 873 people including peers, adult allies and community leaders. The following collaborations/partnership were established: Girl Guides, Indigenous (partners), Substance Misuse through Injury Prevention Lens, Smoke-Free Movies, Freeze the Industry and hospital and community cigarette clean ups.

Contribution: In the NE TCAN Youth Engagement Evaluation Survey, all respondents (including Algoma Youth Action Alliance youth) reported that the program strengthened their knowledge about the harmfulness and addictiveness of smoking cigarettes, and influence of smoking imagery in movies. There was high agreement with tobacco industry denormalization questions (e.g., smoking is not cool, helps people fit in and have more friends). No evaluative information was available about the impact of these activities on tobacco use initiation.

Bad Ways to Be Nice

In a second phase of Bad Ways to Be Nice, the campaign centred on First Nation, Inuit, and Métis communities. The campaign objectives were to raise awareness about social supply of cigarettes in these communities; to raise awareness among young adults that supplying cigarettes to teens under 19 is not nice and to encourage them to think twice about it; to reduce social supply of cigarettes to teens; to educate the public that even with the best intentions, giving cigarettes to teens is a bad way to be nice; and to keep tobacco sacred.

Contribution: Bad Ways to Be Nice photo booth toolkits were created for all Indigenous

Friendship Centers in Ontario, with a third having been delivered. A webinar was created to teach communities about how to use the photo booth to raise awareness about social supply of tobacco. It is anticipated that further evaluative information will be available later in 2018.

Love My Life

An initiative of the East TCAN, Love My Life's goal is to meaningfully engage youth aged 10 to 24 around increasing tobacco-free environments, with the expectation that these will enhance supportive social and physical environments and influence policies that support healthy living. For instance, tobacco-free environments are expected to support the process of normalizing tobacco-free living by removing tobacco use role-modeling.[55]

Love My Life project-based activities take place within partner organizations and often include tobacco-free policy development and implementation (e.g., community arts project with a tobacco-free theme, tobacco-free school project).

One activity included orientation sessions, which were held with engaged youth and adult allies to build capacity in the promotion of tobacco-free spaces, and develop an action plan to enhance the tobacco control policies at the participating site. Orientation sessions trained the group in tobacco control, policy development and tobacco industry denormalization and prepared participants to develop an action plan. The action plan covered enhancements to the site's tobacco-free policy and how participants planned to achieve results at their site.

Contribution: An orientation survey was designed to measure participant attitude change, and the change in behavioural intentions. Thirty-nine percent of respondents reported that their views had changed at least somewhat on how rules around tobacco make people healthier. Forty-four percent of respondents reported that their views had changed at least somewhat on how tobacco-free environments impact our health and well-being.

Eighty percent of respondents agreed or strongly agreed that they intended to share their stories and views on tobacco. Similarly, among those who indicated that they participated in the orientation session because "I had to", 77% of respondents agreed or strongly agreed that they intended to share their stories and views on tobacco. Almost all (94%) of respondents agreed or strongly agreed that they want to make others care about the importance of tobacco-free

environments. Similarly, among those who indicated that they are participating in the orientation session because "I had to", 94% of respondents agreed or strongly agreed that they want to make others care about the importance of tobacco-free environments.

Smoke-Free Movies

Hey Parents Campaign

The Hey Parents Campaign is a public education initiative in support of smoke-free movies. The campaign objectives were to increase parental advocacy in support of an 18A rating and to obtain support for smoke-free movies. The specific communication objective of the campaign was to empower parents and caregivers to take action by signing an online petition at the SmokeFreeMovies.ca website and to share it online. The goal of the campaign is to have all newly released youth-rated movies in Ontario be smoke-free by December 31, 2019.

The most recent iteration of the campaign included participation from health units within the Central East TCAN as well as Thunder Bay District Health Unit. Phase 1 (July 27 to August 9, 2017) and phase 2 (September 13 to September 27, 2017) of this initiative utilized Facebook, Instagram, YouTube and Google Display Network to display campaign creative.

Contribution: Phase 2 of the Hey Parents Campaign generated over 2.2 million impressions. Total video views were 240,000 and over 9,200 clicks to SmokeFreeMovies.ca. Facebook engagements included 818 post reactions, 231 post comments, 48 post shares and 4 page likes. In phase 1, 12 online petition letters were sent to Members of Provincial Parliaments (MPP) during the campaign; 22 online letters were sent during phase 2.

Social Marketing Campaign

A Smoke-Free Movies social marketing campaign was run out of the Region of Peel Public Health. Its overall objective was to increase parental advocacy in support of an 18A rating and to obtain support for the issue. The campaign's communication objective was to empower parents and caregivers to take action by directing them to SmokeFreeMovies.ca to sign an online petition and share it online.

Contribution: The campaign had a reach of 45,036,437 impressions and 14,567 engagements. Compared to industry standards, the campaign had higher click through rates in blogs (0.52%

vs. 0.59%), newsletters (0.52% vs. 0.75%) and online ads 0.03-0.09% vs. 0.71%). The campaign was successful at creating action: 72 petitions were signed during the campaign including 22 during a campaign twitter discussion.

That's Risky

That's Risky is a social marketing campaign originating in Central East TCAN. The fall 2017 campaign's main objective was to increase awareness that smoking and exposure to secondhand smoke during breast development increases the risk of breast cancer at a younger age. Specifically, the campaign's focus was to:

- Increase the number of young adults who indicate that they would limit their exposure to secondhand smoke
- Stimulate young adults between the ages of 17 and 29 to seek out information about the relationship between smoking and breast cancer
- Increase the number of young adults between the ages of 17 and 29 that choose to abstain from tobacco use and increase the number of young adults between the ages of 17 and 29 that seek information about quitting

The Risky campaign ran in October 2017 using various channels including online/social media (e.g., google, Facebook, YouTube, Instagram), advertising (e.g., print, radio) and public relations (grass roots events). An earlier phase of the campaign consisting of online/social media activities ran for two weeks in August. The Middlesex London Health Unit participated in an online and grassroots launch in November 2017.

Contribution. The highest campaign engagement was with 18 to 24 year olds. The campaign had 84,291 full video views on YouTube; 166,387 3-second video views and 48,194 full video views on Facebook and Instagram, resulting in 2202 social interactions on these platforms. There were 5,334 visits to ThatsRisky.com.[iv]

In November 2017, 453 responses were collected from a mixed methods survey (street-intercept and online) in Central East TCAN region. Fifty-eight percent (58%) of respondents saw or heard of the campaign on Facebook, Twitter or Instagram; 34% saw it on YouTube; 30% saw it in online

[iv] Cindy Baker-Barill. Personal communication, 29 November, 2017.

ads; 25% saw it on the Web; 25% saw it on a poster; 12.5% saw it on TV and 12% heard of it on the radio. Other exposures included print media (9.5%), events/activities (8%), billboards (8%) and transit ads (5%).

Those who were exposed to the campaign compared to unexposed respondents were:[56]

- 2.9 times more likely to agree that if you regularly smoke around females, you increase their risk of developing breast cancer.
- 2.5 times more likely to agree that secondhand smoke is dangerous for females from the start of puberty until they have a baby.

UPRISE: Youth Social Identities and Tobacco Use Prevention Project

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

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

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

Contribution: UPRISE's social media metrics for the period 2015 (July-December) through to 2017 (January-December) are highlighted in Table 4-1. Over time, there has been increased

engagement, as measured by social media.

Additionally, an internet-based survey of 973 youth aged 13 to 18 conducted in Central West and South West TCANS during the summer of 2017 found that:

- 40% of the targeting Alternative peer crowd were aware of UPRISE compared to 21% of non-targeted "Other" peer crowds
- 74% of the Alternative peer crowd supported the main message of UPRISE, not significantly different from that of the "Other" peer crowds (71%)
- Among the Alternative peer crowd, those who were aware of UPRISE were significantly more likely to want to be involved in efforts to get rid of tobacco products compared to those not aware (71% vs. 52%)
- Among all respondents, those who were aware of UPRISE (compared to those who were not) were more likely to agree that tobacco companies lie (78% vs. 68%) and that taking a stand against tobacco companies is important (78% vs. 65%)

Table 4-1: UPRISE's Social Media Metrics, 2015 to 2017

Social Media Channel	2015 (July-December)	2016	2017
Facebook			
Reach[a]	Not available	1,057,156	1,410,587
Impressions[b]	961,980	5,521,055	5,316,166
Video Views	55,146	169,476	949,757
Engagements[c]	10,261	41,737	268,774
Page Likes[d]	824	1,297	881
Instagram			
Reach	Not available	185,442 (Q3/Q4 only)	1,445,257
Impressions	Not available	Not available	3,503,921
Video Views	Not available	Not available	461,225
Engagements	426	6,625	44,993
Page Likes	138	231	190
YouTube			
Video Views	17,290	62,915	N/A

[a]Reach: Number of times people are exposed to our content.
[b]Impressions: Number of times a post from our page is displayed/seen.
[c]Engagements: Any action that is performed on a piece of social content (e.g., comments, likes, shares, photo views).
[d]Page Likes: Number of fans/followers that have liked our page.

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 4-1). In working toward these desired outcomes, the more immediate objectives of the Strategy are to increase awareness and adoption of school and community tobacco prevention initiatives.

Next, we present results about youth tobacco use and other prevention indicators from a variety of sources (e.g., 2017 Ontario Student Drug Use and Health Survey, 2016 Centre for Addiction and Mental Health Monitor and the 2015 Canadian Community Health Survey). At the time of writing, data from the Canadian Community Health Survey were only available for 2015 even though Statistics Canada has released select 2016 results.

Long-Term Outcomes: Cigarettes

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

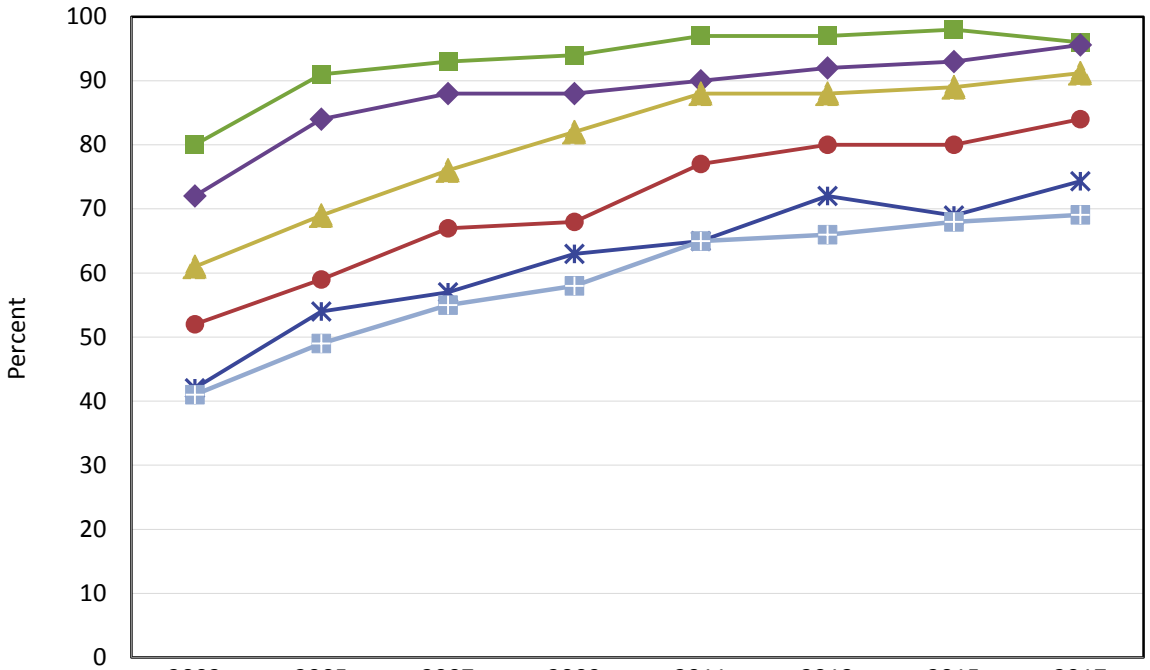
Tobacco Use

- In 2015, among youth aged 12 to 18 years, 8.3% used some form of tobacco in the past month including cigarette, cigar, smokeless tobacco, pipe, and tobacco waterpipe (CCHS 2015, data not shown)
- When vaping products are added into this mix, 9.6% of youth used some form of tobacco or vapour product. This included 4.2% for vaping, 4.1% for cigarettes and 2.3% for cigars (Marginal estimates, interpret with caution; data for smokeless, pipe and waterpipe were suppressed but were used in the overall calculation of tobacco use)

Lifetime Abstinence: Students in Grades 7 to 12

- Among students, lifetime abstinence from cigarettes ranged from 96% of students in grade 7 and 8 to 69% of students in grade 12 (OSDUHS 2017 data; Figure 4-2), with overall lifetime abstinence among all grades combined at 84%
- From the 2005 pre-SFO baseline year, there was a significant increase in lifetime abstinence among all grades (Figure 4-2). There were no statistically significant changes by grade reported from 2015 to 2017

Figure 4-2: Lifetime Abstinence, by Grades 7 to 12, Ontario, 2003 to 2017



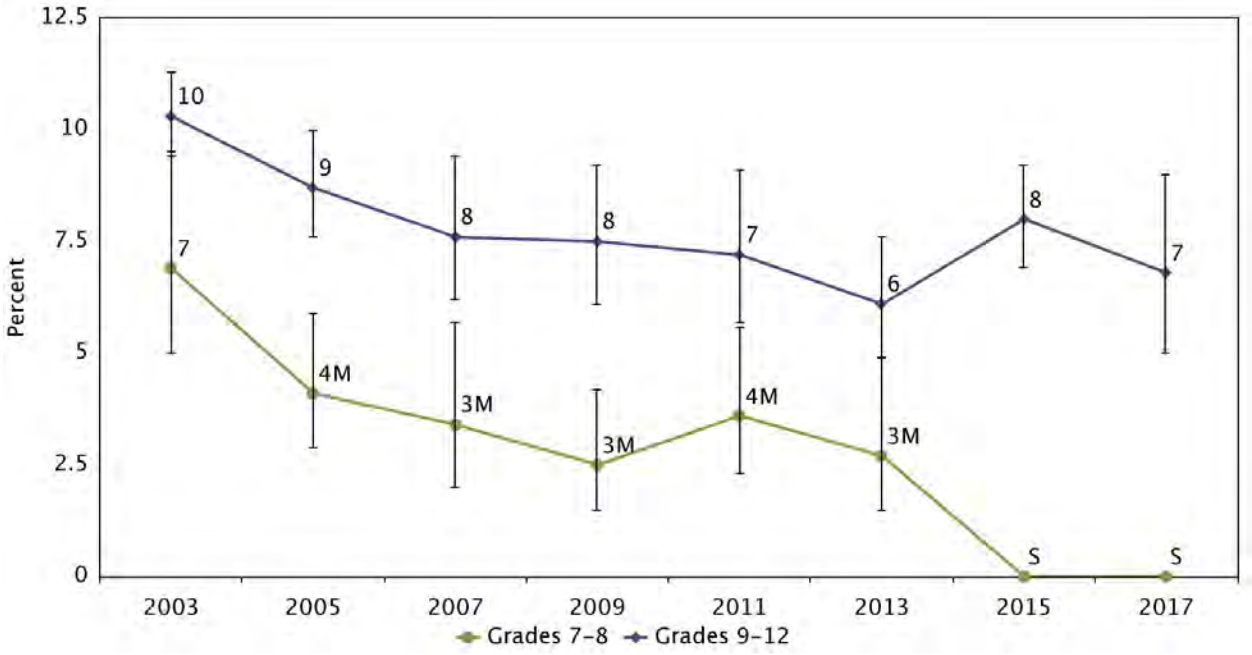
	2003	2005	2007	2009	2011	2013	2015	2017
Grade 7	80	91	93	94	97	97	98	96
Grade 8	72	84	88	88	90	92	93	96
Grade 9	61	69	76	82	88	88	89	91
Grade 10	52	59	67	68	77	80	80	84
Grade 11	42	54	57	63	65	72	69	74
Grade 12	41	49	55	58	65	66	68	69

Note: Full data table for this graph provided in the Appendix (Table 4A-1).
Source: Ontario Student Drug Use and Health Survey 2003–2017 (Biennial).

Past-Year Initiation: Students in Grades 7 to 12

- In 2017, 7% of students in grade 9 to 12 used a cigarette for the very first time in the past 12 months (OSDUHS 2017, Figure 4-3). Grade 7/8 student data have been suppressed in recent years due to small sample size
- There were no significant changes in 2017 from our pre-SFO baseline year of 2005

Figure 4-3: Use of Cigarettes for the First Time in the Past Year, by Grade, Ontario, 2003 to 2017



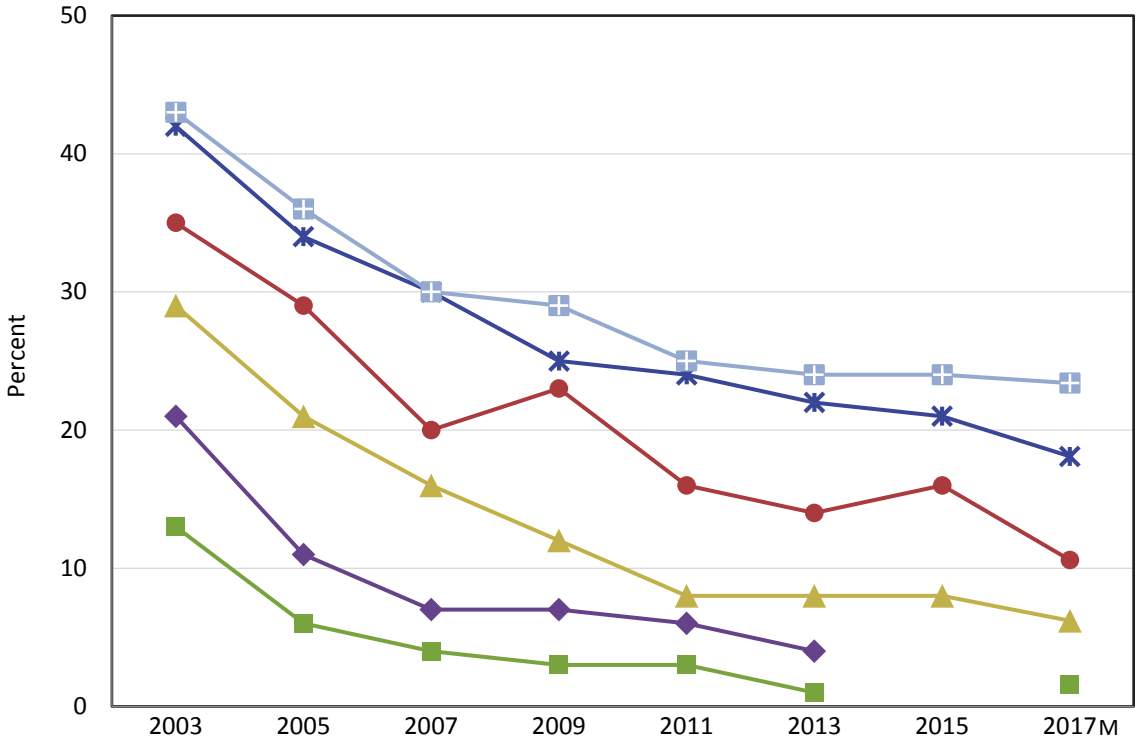
Note: M=Marginal. Interpret with caution: subject to moderate sampling variability. S=data suppressed due to small sample sizes. Full data table for this graph provided in the Appendix (Table 4A-2).
Source: Ontario Student Drug Use and Health Survey 2003–2017 (Biennial).

Past-Year Smoking: Students in Grades 7 to 12

- Among students in grades 7 to 12, the 2017 overall prevalence of smoking in the past year, even a few puffs, was 11.6% (representing 106,000 students; OSDUHS 2017, data not shown) (Note: respondents in any given grade reported about their smoking behaviour over the previous year)
- In 2017, past-year smoking significantly declined among all students in grades 7 to 12 (combined) compared to the pre-SFO baseline year of 2005 (14% vs. 23%; OSDUHS 2017, data not shown)

- Over the period 2005 to 2017, there were significant declines in past-year smoking among students in grades 7, 9, 10, 11 and 12 (OSDHUS 2017, Figure 4-4); over the period 2005 to 2013, there were significant declines in past-year smoking among students in grade 8 (Figure 4-4)
- The differences between 2017 and the 2013 5-year benchmark year were not significant
- In 2017, the prevalence of past-year smoking was 6% in grade 9, significantly lower than all higher grades (Figure 4-4). Grade 10 past-year smoking was significantly lower than grade 11 and grade12 past-year smoking

Figure 4-4: Past-Year Smoking, by Grades 7 to 12, Ontario, 2003 to 2017



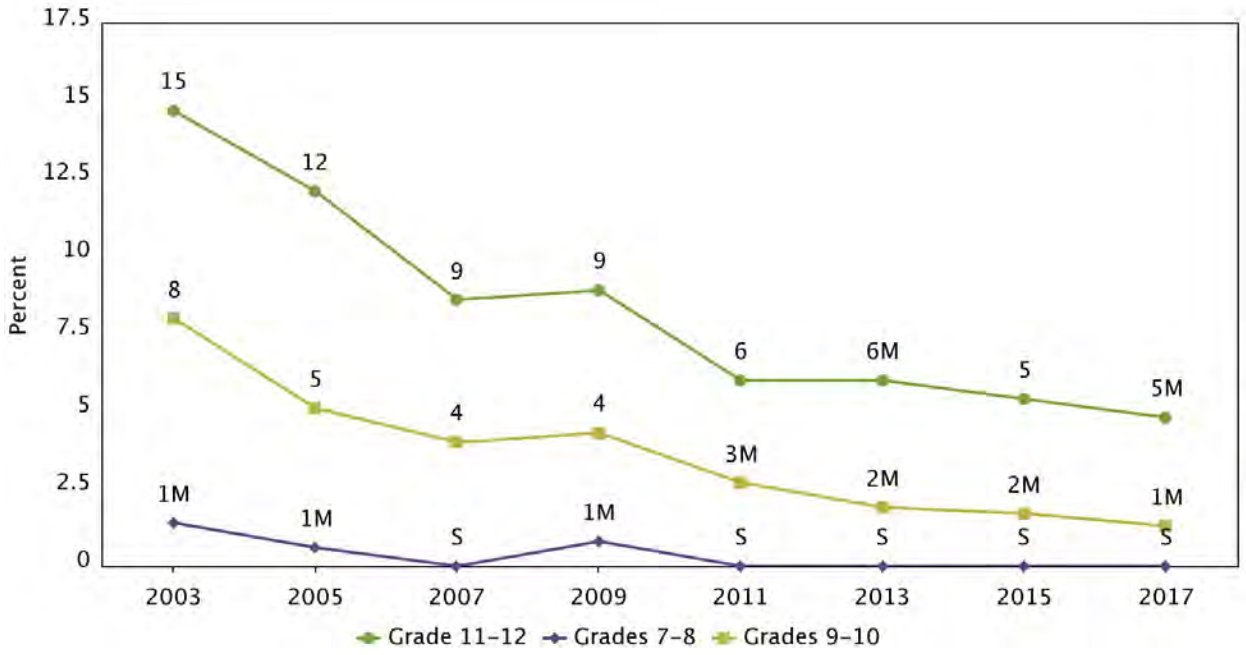
	2003	2005	2007	2009	2011	2013	2015	2017M
Grade 7	13	6	4	3	3	1	S	1.6
Grade 8	21	11	7	7	6	4	S	S
Grade 9	29	21	16	12	8	8	8	6
Grade 10	35	29	20	23	16	14	16	11
Grade 11	42	34	30	25	24	22	21	18
Grade 12	43	36	30	29	25	24	24	23

Note: S=data suppressed due to small sample sizes. M=Marginal. Interpret with caution: subject to moderate sampling variability. Full data table for this graph provided in the Appendix (Table 4A-3).
Source: Ontario Student Drug Use and Health Survey 2003–2017 (Biennial).

Current Smoking (Past 30-Days): Students in Grades 7 to 12

- In 2017, past 30-day current smoking was significantly higher among students in grades 11 to 12 (combined) compared to students in grades 9 to 10 (5% vs. 1%; OSDUHS 2017, Figure 4-5). Data were suppressed for grades 7 to 8 due to small sample
- From 2013 (our 5-year benchmark) to 2017, there has not been significant change in the prevalence of current smoking among students in grades 9 to 10 and grades 11 to 12 (Marginal estimates: Interpret with caution)

Figure 4-5: Current Smoking (Past 30-Days), by Grade, Ontario, 2003 to 2017



M=Marginal. Interpret with caution: subject to moderate sampling variability. S=data suppressed due to small sample sizes.
Note: Full data table for this graph provided in the Appendix (Table 4A-4).
Source: Ontario Student Drug Use and Health Survey 2003–2017 (Biennial).

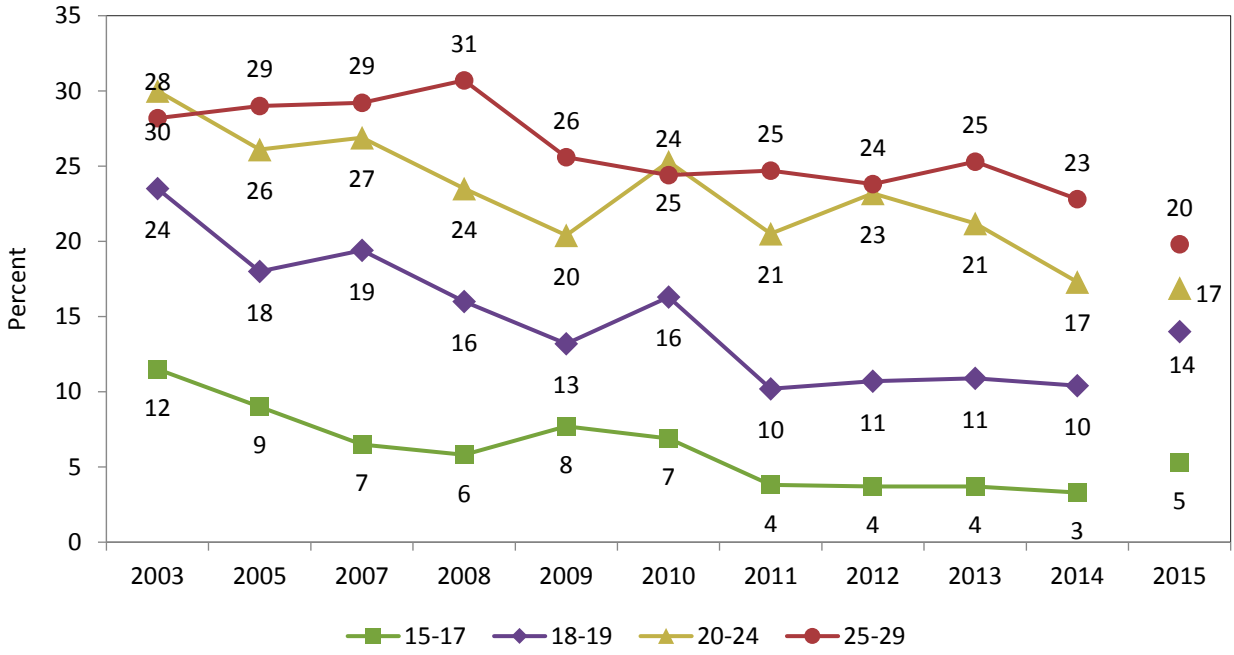
Current Smoking (Past 30-Days): Youth and Young Adults Aged 15 to 29

- In 2015, 20% of young adults aged 25-29 were current smokers; there has not been a significant change in this rate over the five-year benchmark year of 2011 (CCHS 2015, Figure 4-6)
- In 2015, 17% of young adults aged 20 to 24 were current smokers, which was likewise

unchanged over the five-year benchmark year of 2011 (Figure 4-6)

- According to the Canadian Community Health Survey (CCHS),[v] from the pre-SFO baseline year of 2005, there has been a significant decline in past 30-day current smoking among all age groups, with the exception of 15 to 17 year olds (Figure 4-6)
- Youth aged 15 to 17 have a significantly lower rate of current smoking than young adults, with their level stable in recent years, ranging from 3 to 5% (Figure 4-6)
- Among 18 to 19 year olds, the rate of current smoking was 14% in 2015, significantly lower than that of young adults aged 25 to 29 years (Figure 4-6)
- In 2015, males aged 25 to 29 had a significantly higher rate of smoking in the past 30-days compared to females (CCHS 2015, Figure 4-7). (Data for males 15 to 17 was suppressed due to small sample sizes)

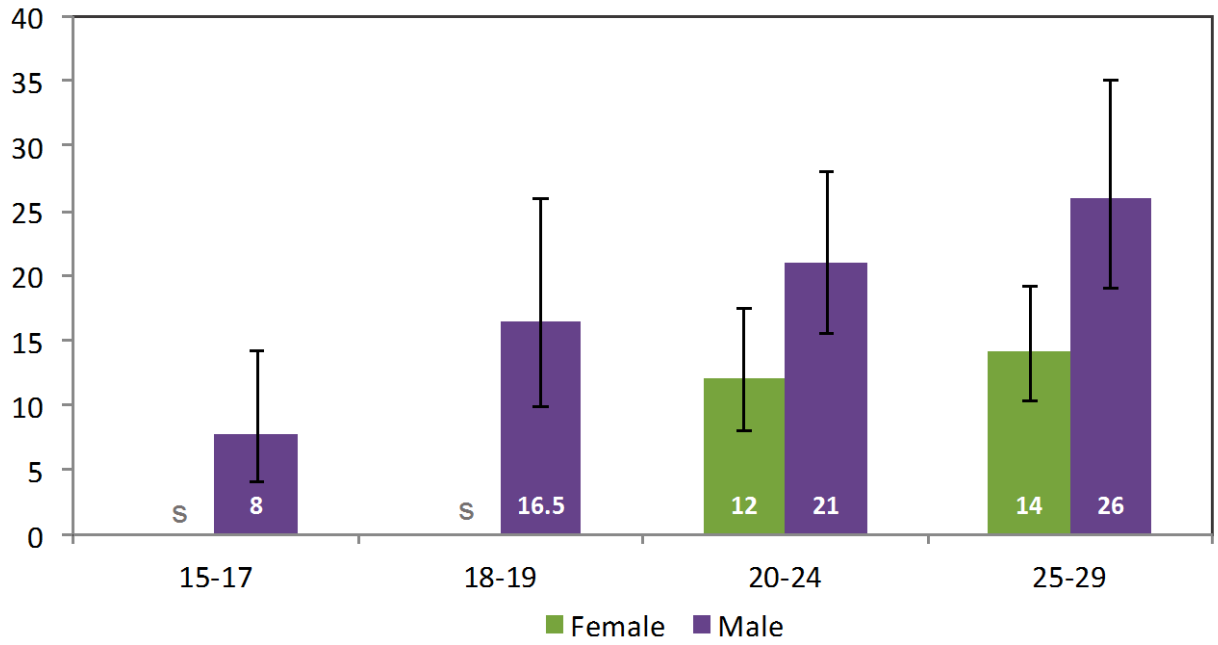
Figure 4-6: Current Smokers (Past 30-Days), Youth and Young Adults, Ontario, 2003 to 2015



Note: The Canadian Community Health Survey was redesigned in 2015—interpret trend with caution. Data from the 2016 CCHS was not available at time of writing. From 2011 to 2015, values for 15-17 and 18-19 are *marginal estimates* and subject to moderate sampling variability. X-axis scale from 2003 to 2007 not uniform—interpret with caution. Full data table for this graph provided in the Appendix (Table 4A-5).
Source: Canadian Community Health Survey 2003, 2005, 2007-2015.

[v] Note: The Canadian Community Health Survey, on which this section is based, considers both in-school and out-of-school respondents.

Figure 4-7: Current Smokers (Past 30-Days), Youth and Young Adults, by Sex, Ontario, 2015



Note: All estimates are marginal and subject to moderate sampling variability—interpret with caution. S=data suppressed due to small sample sizes. Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 4A-6).
Source: Canadian Community Health Survey 2015.

Long-Term Outcomes: Use of Alternative Products

Cigars

- According to the 2015 CCHS, past-month use of cigars (either cigarillo or larger cigars) was 2.3% among 12 to 18 year olds, representing 24,800 youth (Marginal estimate: Interpret with caution, data not shown)
- Among 19 to 29 year olds, the rate of cigar use was 4.8% in 2015, representing 95,000 Ontarians (CCHS 2015, data not shown)

Smokeless Tobacco Products

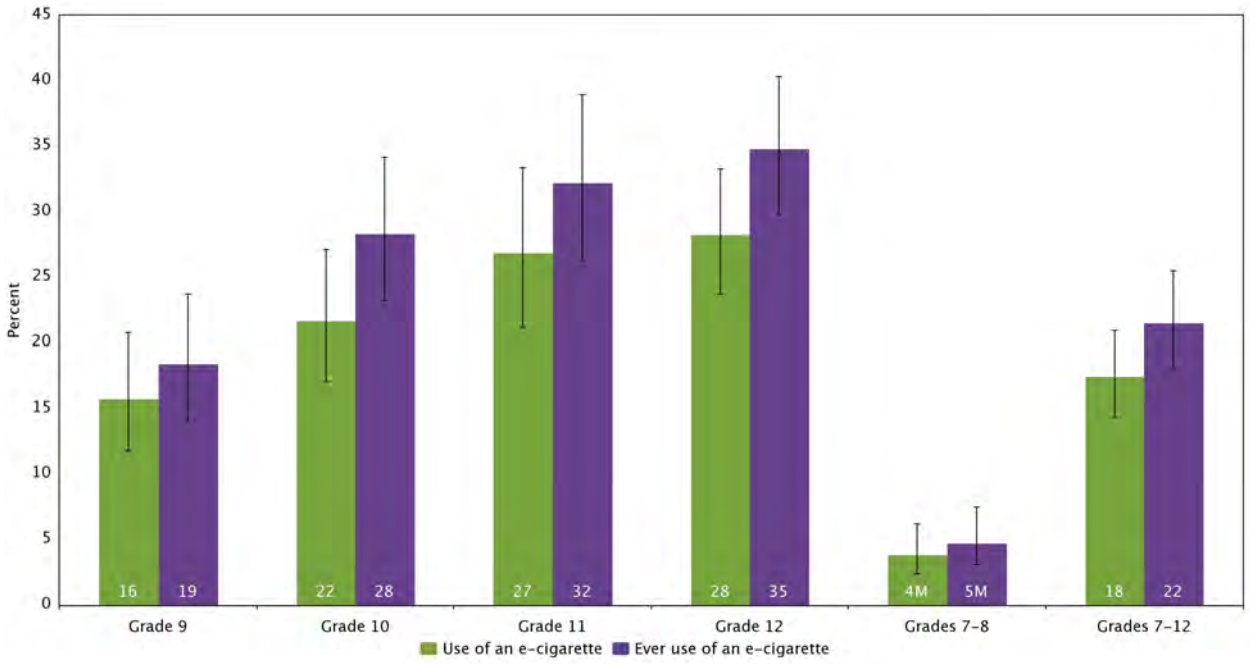
- In 2017, among Ontario students in grades 7 to 12, 5.4% used smokeless tobacco products (chewing tobacco or snuff) in the past year, significantly unchanged since the 5-year benchmark year of 2013 (5.7%). Among past-year users, 69% tried these products only once or just a “few times” (OSDUHS 2017, data not shown)

- Use significantly differed by sex, with 8.1% of males using but only 2.6% of females using in the past year (both estimates are marginal: interpret with caution; OSDUHS 2017, data not shown)
- Lifetime use was 6.3% among all students in grades 7 to 12 (OSDUHS 2017, data not shown)

Electronic Cigarettes

- Among all students in grades 7 to 12, 1.6% had used e-cigarettes every day over the past year (OSDUHS, 2017, data not shown; Interpret with caution: subject to moderate sampling variability)
- Among all students, 4.7% had used e-cigarettes at least once every month over the past year (data not shown) (Note: this is not a measure of past month use)
- Among all students, 17.5% (132,400 students) had used an e-cigarette in the past year (including only a few puffs; OSDUHS 2017, Figure 4-8). The rate in grades 7 and 8 combined (4%) was significantly lower than that reported in all other grades; the rate for grade 9 students was significantly lower than that reported for grade 11 and 12 (Figure 4-8)
- In 2017, among students in grades 7 to 12, 22% (163,300) had ever used an e-cigarette. Prevalence of ever use varied by grade (OSDUHS 2017, Figure 4-8), with the rate reported in grades 7 and 8 combined (5%) significantly lower than all other grades, and the rate reported in grade 9 significantly lower than grades 11 and 12
- A quarter (25%) of all male students had ever used an e-cigarette, whereas only 18% of females were ever users (not statistically different; OSDUHS 2017). The rate of past-year use of an e-cigarette by males was 20.5% compared to 14% for females (not statistically different; data not shown)
- In Canada, e-cigarettes are not permitted to contain nicotine, yet available evidence suggests that a number of users obtain nicotine juice for their vaping. Of students in grades 7 to 12 using an e-cigarette in the past year, 23% reported using nicotine-based e-cigarettes, 45.5% reported using non-nicotine e-cigarettes, 14% used both kinds (marginal estimate—interpret with caution) and 17% indicated they were not sure which type they used (OSDUHS 2017, data not shown)
- Among grade 9 to 12 students, 6.9% used cannabis in a vaping device in the past year (OSDUHS 2017, data not shown)

Figure 4-8: E-Cigarette Use, Past Year and Ever Use, by Grade, Ontario, 2017

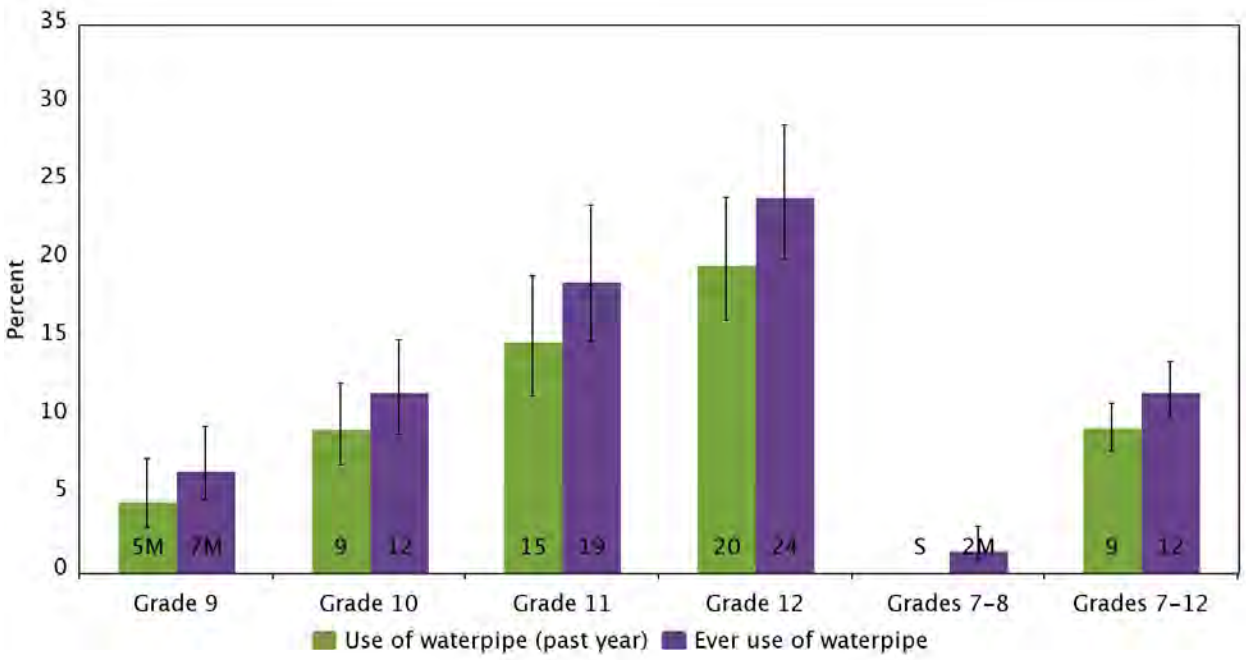


Note: M=Marginal. Interpret with caution: subject to moderate sampling variability. Full data table for this graph provided in the Appendix (Table 4A-7).
Source: Ontario Student Drug Use and Health Survey 2017.

Waterpipes

- Among students in grades 7 to 12 in 2017, 12% (88,200 students) had ever used a waterpipe. Prevalence of ever use varied by grade, with rates in grades 7 and 8 combined (marginal estimate) significantly lower than all other grades, rates in grade 9 significantly lower than grades 11 and 12, and rates in grade 10 significantly lower than grade 12 (OSDUHS 2017, Figure 4-9)
- In 2017, among students in grades 7 to 12, 9% (70,200 students) had used a waterpipe in the past year (including only a few puffs; Figure 4-9), with rates in grade 9 significantly lower than that reported in grades 11 and 12 (data for grades 7-8 combined was suppressed due to small sample size); the rate in grade 10 was lower than that reported for grade 12 (OSDUHS 2017, Figure 4-9)
- Past-year use of waterpipe among students did not differ between 2015 and 2017 (12% vs. 9%) but warrants monitoring for a possible downward trend

Figure 4-9: Waterpipe Use, Past Year and Ever Use, by Grade, Ontario, 2017



Note: M=Marginal. Interpret with caution: subject to moderate sampling variability. S=data suppressed due to small sample sizes. Full data table for this graph provided in the Appendix (Table 4A-8).
Source: Ontario Student Drug Use and Health Survey 2017.

Cannabis Use

The use of cannabis—which is also known as marijuana, weed, pot, grass, hashish, hash and hash oil—has led to widespread interest in recent years amongst health practitioners, in part, due to the expected legalization of this substance by the federal government, as of mid-2018.

- Among students in grades 7 to 12, 12% used cannabis during the past month (among grades 9 to 12, 16% used cannabis). Specifically, past month use of cannabis was 6% in grade 9, 12% in grade 10, 20% in grade 11 and 24% in grade 12 (OSDUHS 2017, data not shown), unchanged from 2015
- Among students in grades 7 to 12, 19% used cannabis in the past year (among students in grades 9 to 12, it was 25.5%; OSDUHS 2017, data not shown). Reportable levels by grade include: 9% in grade 9, 20% in grade 10, 30% in grade 11 and 37% in grade 12
- Among students in grades 7 to 12, lifetime abstinence from cannabis was 78% in 2017 (among students in grades 9 to 12, it was 71%). Abstinence differed by grade: 97% in

grade 7, 97% in grade 8, 89% in grade 9, 78% in grade 10, 65% in grade 11 and 58% in grade 12 (OSDUHS 2017, data not shown). Only 16% of past year cigarette smokers had lifetime abstinence from cannabis compared to 86.5% of non-cigarette smokers

Short and Intermediate-Term Outcomes

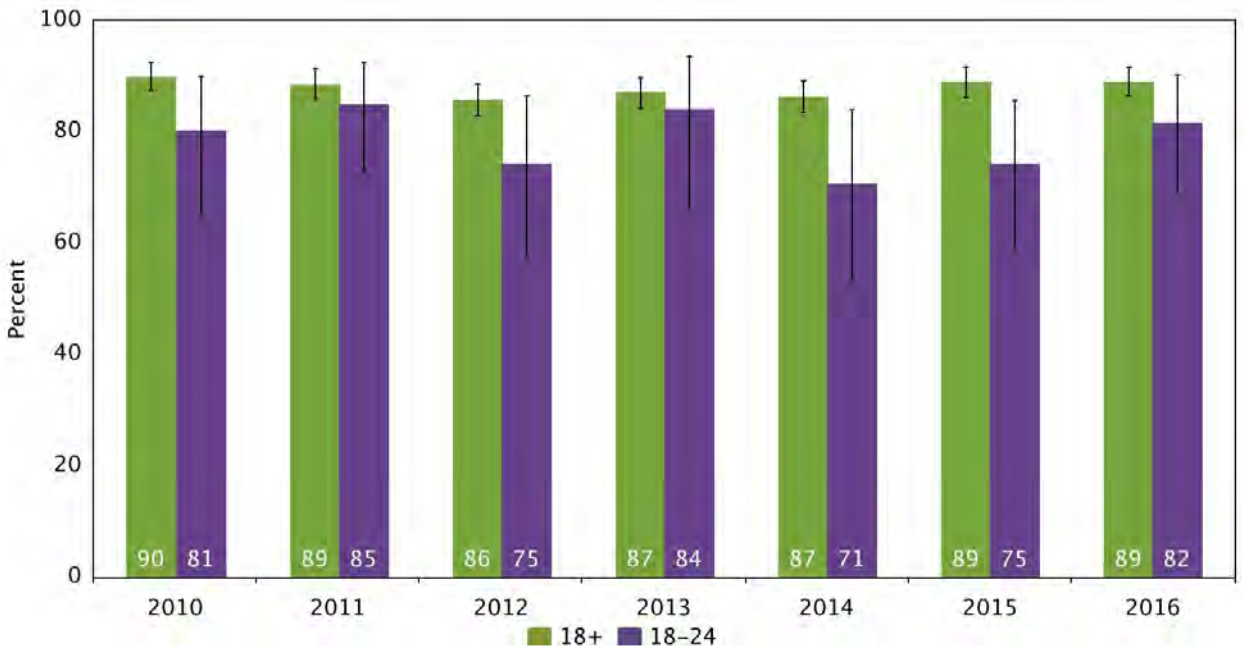
Social Climate

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

Social Acceptability

- In 2016, all adults (both young and old) viewed smoking by teenagers as highly unacceptable (CAMH Monitor 2016, Figure 4-10)

Figure 4-10: Adult Views on the Social Unacceptability of Teenagers Smoking Cigarettes, by Age, Ontario, 2010 to 2016



Note: Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 4A-9).
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2010-2016.

- In 2016, young adults aged 18 to 24 did not have significantly different views on the unacceptability of smoking by teenagers compared to adults aged 18 and over (82% vs 89%; in 2015, this difference was significant, with young adults less likely to view smoking by teenagers as unacceptable (75% vs. 89%; CAMH Monitor 2016, Figure 4-10)
- Never smokers and former smokers reported a significantly higher level of disapproval of smoking by teenagers than did current smokers (92% and 91% vs. 72%; CAMH Monitor 2016, data not shown).

Smoking in Movies

- In 2017, three in 10 students who were nonsmokers (27%) were in agreement that movies showing characters smoking should be rated 18A compared to 13% of students who were past-year smokers (OSDUHS 2017, data not shown; 13% is a marginal estimate. Interpret with caution)
- Over half of all adults (58%) agreed that movies showing characters smoking should be rated 18A, including 52% of all current smokers (CAMH Monitor 2016, data not shown)

Ease of Obtaining Cigarettes

- In 2017, 50% of students in grades 7 to 12 under the age of 19 believed it was fairly easy or very easy to obtain cigarettes, not significantly different from the 53% reported in 2015 (OSDUHS 2017, data not shown)
- In 2017, students in grades 9 to 12 were much more likely to report it was fairly easy or very easy to obtain cigarettes compared to students in grades 7 to 8 (62% vs. 23.5%, OSDUH 2017)

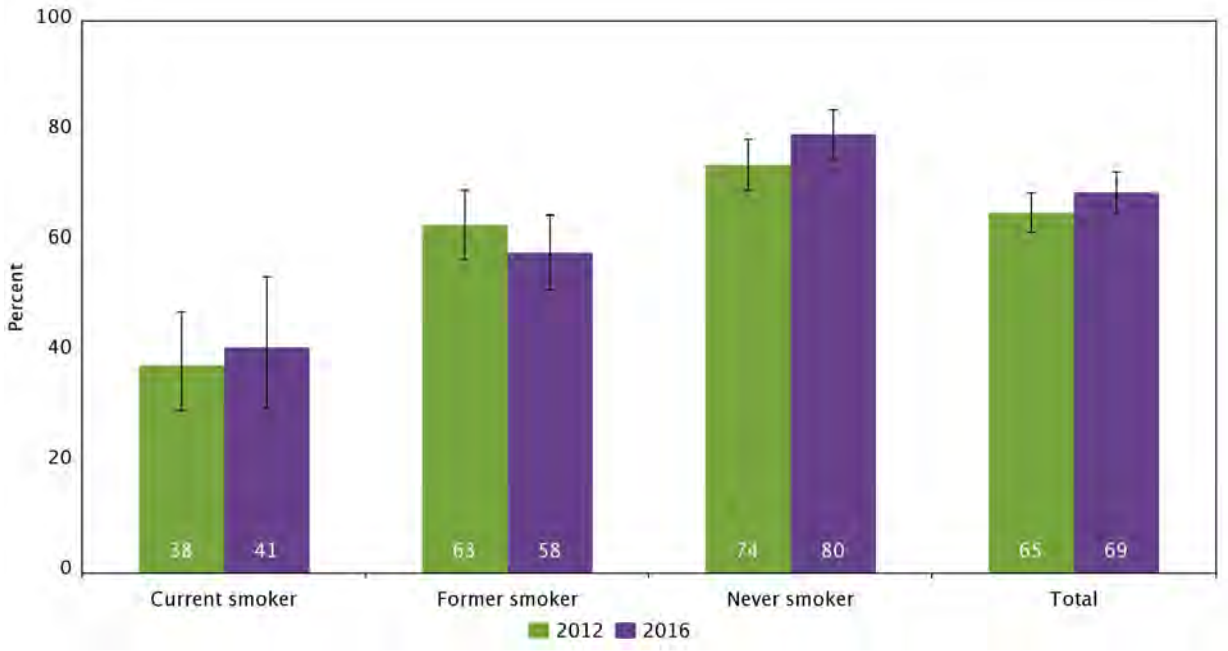
Support for Measures Related to Product Availability

Retail Sales

- In 2017, 62% of Ontario students in grades 7 to 12 under 19 years of age indicated their support for further restrictions on tobacco sales. That is, 35% agreed that tobacco products should not be sold at all and 27% responded that tobacco products should be sold in government-owned stores, similar to the way alcohol is sold in liquor stores. Only 16% responded that tobacco products should be sold in a number of places as they are now (OSDUHS 2017, data not shown)

- Opinion about how tobacco products should be sold differed by grade (for youth under 19 years of age), with 53% of grade 7 and 8 students indicating that tobacco products should not be sold at all compared to only 27% of students in grades 9 to 12 sharing this view (OSDUHS 2017, data not shown)

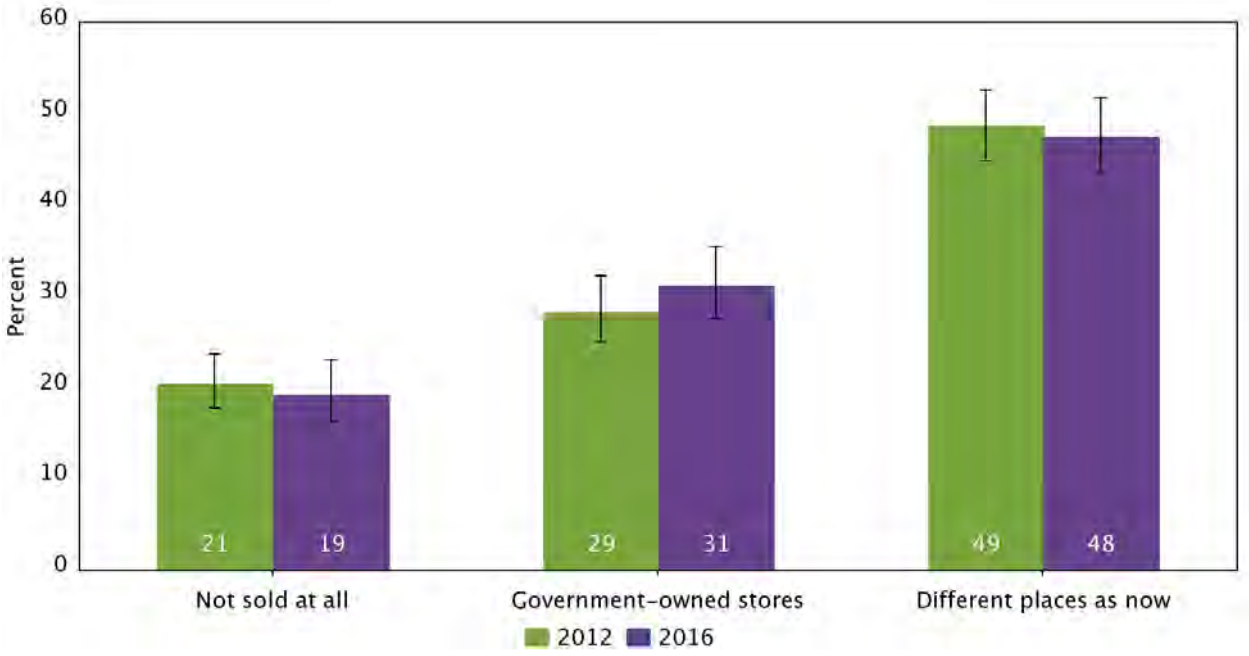
Figure 4-11: Agreement that the Number of Retail Outlets Selling Cigarettes Should Be Reduced, by Smoking Status, Ages 18+, Ontario, 2012 and 2016



Note: Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 4A-10).
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2012 and 2016.

- In 2016, 69% of all Ontario adults agreed that the number of retail outlets that sell cigarettes should be greatly reduced, a rate unchanged in recent years (Figure 4-11, CAMH Monitor 2016). Significantly more never smokers agreed with this policy option (80%) compared to former smokers (58%) and current smokers (41%; Figure 4-11)
- In 2016, 51% of adults in Ontario indicated their support for further restrictions on tobacco retail location, unchanged from 2015. Specifically, 19% responded that tobacco products should not be sold at all, 31% responded tobacco should be sold in government-owned stores similar to the way alcohol is sold in Liquor Control Board of Ontario stores, and 48% agreed that tobacco should be sold in a number of different places as they are now (CAMH Monitor 2016, Figure 4-12; no change over the 5-year benchmark year of 2012)

Figure 4-12: Views on How Tobacco Should Be Sold, Ages 18+, Ontario, 2012 and 2016



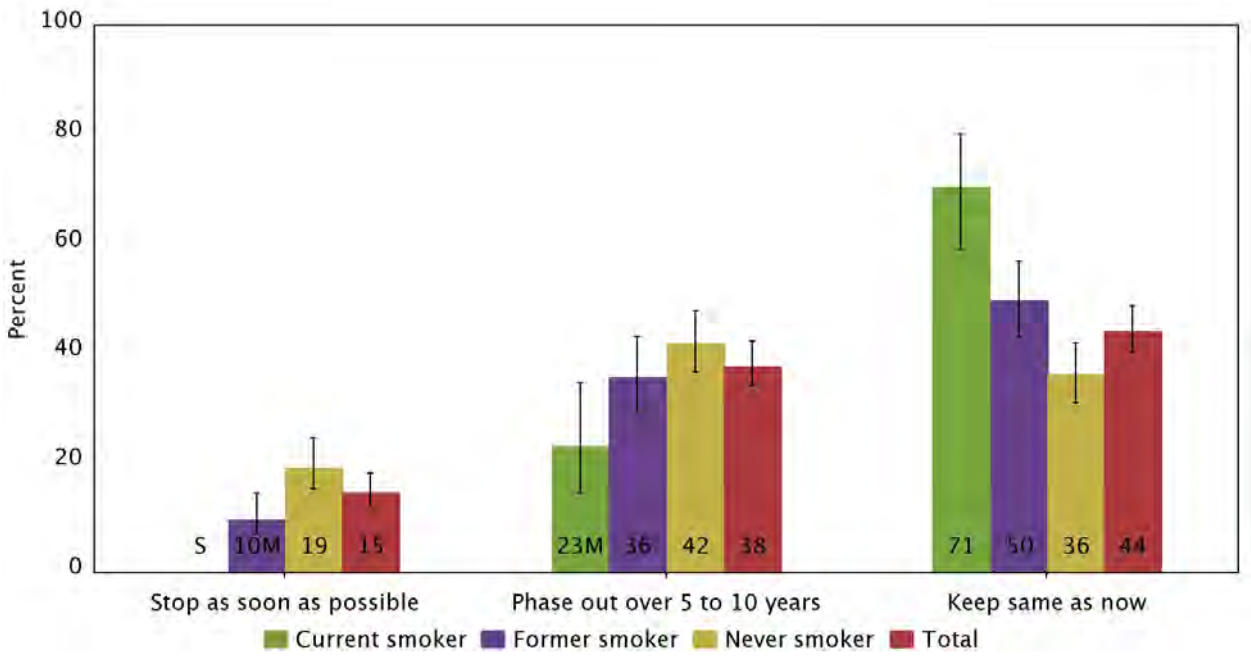
Note: Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 4A-11).
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2012 and 2016.

Support for the Prohibition of Tobacco Products

- In 2016, 15% of Ontario adults responded that the sale of cigarettes should be stopped as soon as possible, 38% felt cigarettes should be phased out over the next five to 10 years and 44% felt that the sale of cigarettes should be kept as it is now (CAMH Monitor 2016, Figure 4-13), unchanged from the benchmark year of 2012 (data not shown)
- Twenty-three percent of smokers were of the opinion that cigarettes should be phased out in five to 10 years (Marginal estimate: Interpret with caution), whereas 71% of smokers responded that the sale of cigarettes should be kept the same as now (CAMH Monitor 2016, Figure 4-13)
- Half of all Ontario adults (49%) are in agreement that tobacco products should forever not be sold to youth who are now teenagers even when they reach adulthood (CAMH Monitor 2016, Figure 4-14); 26% of current smokers are likewise in agreement (Note: marginal estimate, interpret with caution), unchanged from 2015
- Adults in Ontario had varied beliefs about where e-cigarettes should be sold including

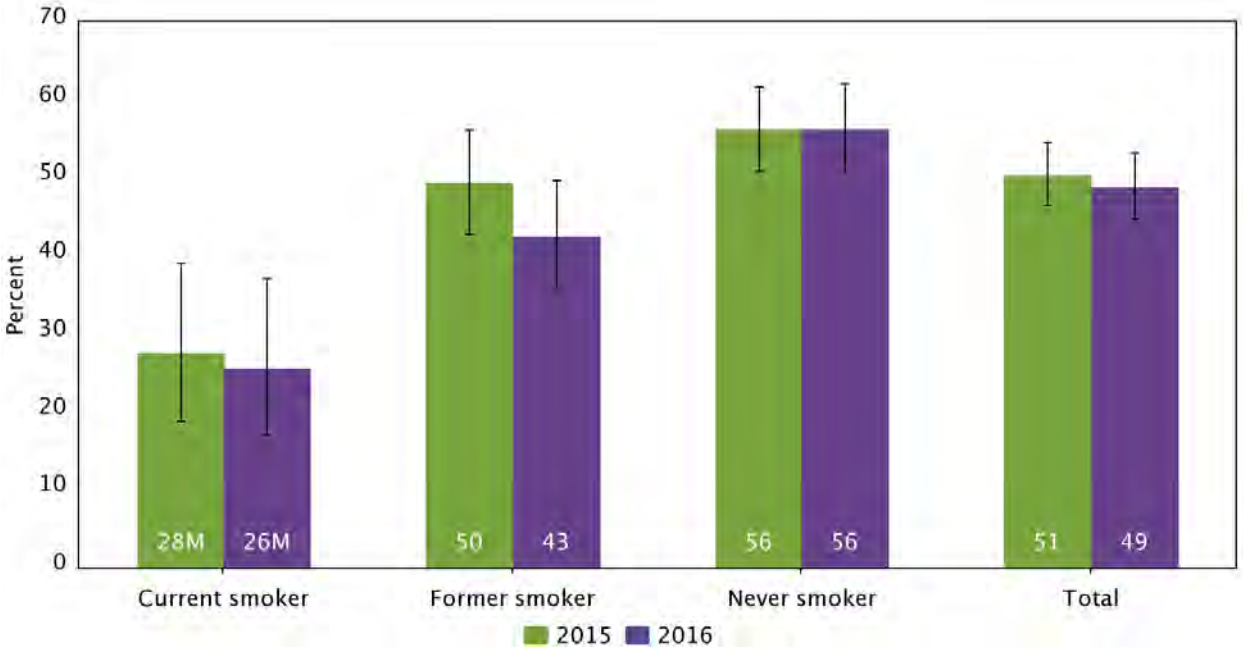
not at all (18%), different place as is the case now (28%), vape shop only (20%), government-owned stores (14%), pharmacies (11%), with 9% responding that they did not know where it should be sold (CAMH Monitor 2016; Figure 4-15). The view that e-cigarettes should be sold in vape shops only significantly increased from 2015 to 2016 (11.5% to 20%; Figure 4-15)

Figure 4-13: Views on the Sale of Cigarettes, by Smoking Status, Ages 18+, Ontario, 2016



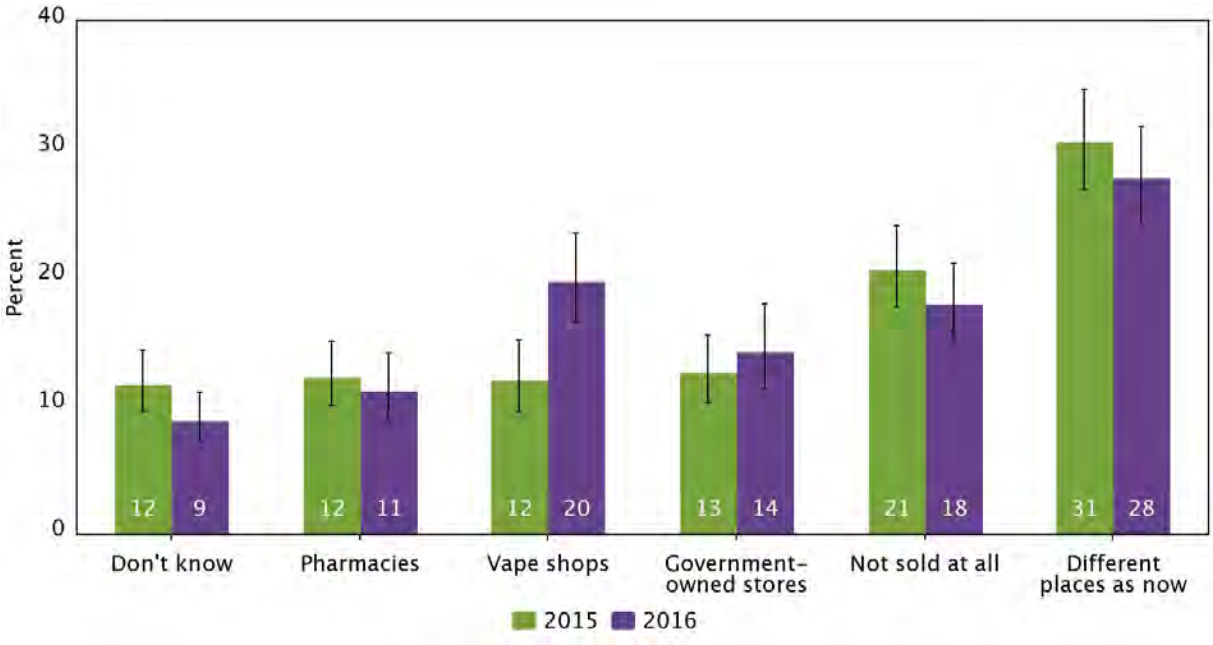
Note: S=data suppressed due to small sample sizes. M=Marginal. Interpret with caution: subject to moderate sampling variability Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 4A-12).
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2016.

Figure 4-14: Agreement that Tobacco Products Should Forever Not Be Sold to Youth Who Are Now Teenagers Even When They Reach Adulthood, Ontario, 2015 and 2016



Note: Vertical lines represent 95% confidence intervals. M=Marginal. Interpret with caution: subject to moderate sampling variability. Full data table for this graph provided in the Appendix (Table 4A-13).
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2015 and 2016.

Figure 4-15: Views on Where E-Cigarettes Should Be Sold, Ontario, 2015 and 2016



Note: Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 4A-14).
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2015 and 2016.

Scientific Advisory Committee: Overview of Potential Contribution of Prevention Interventions

The updated Smoke-Free Ontario Scientific Advisory Committee report, *Evidence to Guide Action: Comprehensive Tobacco Control in Ontario (2016)*,[46] outlined the potential contributions of 13 prevention-related interventions. Below is a summary of the 12 high, innovative and moderate potential contributions related to prevention outcomes including an assessment of the current status of SFO prevention initiatives related to each potential contribution (Table 4-2).

Table 4-2: Scientific Advisory Committee Potential Contributions Related to Prevention Outcomes

Intervention	Current Status
High Potential Contribution – Intensify	
Price and Taxation	Despite an increase in 2017, Ontario continues to have the second lowest retail price ($102.40) and total tobacco tax ($66.29) for tobacco products compared to other Canadian provinces and territories.
Mass Media – Prevention	Not implemented at the provincial level
Banning Flavours in Tobacco Products (Tobacco industry assessment)	All flavours have been prohibited in Ontario since January 1, 2017, with the exception of some cigars weighing more than 1.4 grams but less than 6 grams (a flavour or aroma of wine, port, whiskey or rum is permitted), cigars weighing 6 or more grams, and pipe tobacco.
High Potential Contribution – Continue	
Bans on Point of Sale Displays	The *Smoke-Free Ontario Act* has banned the display of tobacco products at the retail and wholesale levels since May 1, 2008. Three price signs are permitted under specific controls (size and font).
Innovative	
Reducing the Availability of Tobacco Products	Tobacco continues to be sold seven days a week, 24 hours a day in some 10,000 outlets with almost no zoning restrictions.
Raising the Minimum Purchase Age	Not implemented
Social Marketing	There is currently a mix of regional and province-wide social marketing campaigns in Ontario (e.g., FTI-PSP, Party Without the Smoke).

Intervention	Current Status
Onscreen Tobacco Use and Product Placement	There is no requirement to rate movies containing tobacco imagery as Adult or 18A (or Mature for video games). There is no requirement for anti-tobacco advertisements to be shown in advance of movies (or video games) containing tobacco imagery.
Tobacco-Free Generation	Not implemented
Moderate Potential Contribution – Intensify	
Elementary and Secondary School Tobacco Policies	Currently, regulations prohibit smoking (holding a lighted cigarette) on elementary and secondary school property. The Smoke-Free Ontario Act 2017 has received Royal Assent. When it comes into force, it will extend coverage to vaping products.
Campus-Based Tobacco Policies	Not implemented at provincial level
Moderate Potential Contribution – Continue	
Elementary and Secondary School Prevention Programs	Little is known about the reach and effects of the current curricular program in Ontario schools

Executive Steering Committee: Overview of Priority Actions for Prevention

The *Smoke-Free Ontario Modernization* report[57] outlined a number of priority actions to keep youth and young adults from starting to smoke. Below is a summary of priority actions related to prevention outcomes including an assessment of how the current SFO initiatives address the priority actions (Table 4-3).

Table 4-3: Executive Steering Committee Priority Actions Related to Prevention Outcomes

Priority Actions	Current Status
3.1 Implement Comprehensive Policies And Programs To Keep Youth And Young Adults From Starting To Smoke	
3.1.1 Raise the minimum age to buy tobacco products to 21.	Not implemented
3.1.2 Intensify tobacco prevention policies and education in elementary, secondary and post-secondary schools, with particular emphasis on trade schools.	While not provincial in scope, Leave The Pack Behind has successfully run smoking prevention and de-escalation initiatives on several post-secondary campuses and in the community.
3.1.3 Implement prevention interventions (policies and programs) in a variety of youth-centred settings.	There is a mix of provincial and regional interventions being run by various PHUs and TCANs. Currently, regulations prohibit smoking (holding a lighted cigarette) on elementary and secondary school property. The *Smoke-Free Ontario Act 2017* has received Royal Assent. When it comes into force, it will extend coverage to vaping products.
3.2 Reduce Youth And Young Adult Social Exposure To Tobacco Use	
3.2.1 Reduce youth and young adults exposure to on-screen smoking by: • Requiring any movie that contains tobacco imagery to be assigned an adult rating (18A); • Requiring movie theatres to show strong anti-tobacco ads (PSAs) before movies that contain smoking or tobacco use and	Not implemented

Priority Actions	Current Status
trailers that discount any credibility of association with tobacco; and • Making media productions that include smoking ineligible for public subsidies.	
3.2.2 Make Ontario post-secondary campuses smoke-free, tobacco-free and free from tobacco industry influence.	Not implemented
Cross-Cutting Priority Actions	
Raise tobacco taxes to at least the highest level of all other provinces and territories, and regularly increase taxes to at least double the price of tobacco products. (Tobacco industry recommendation)	Ontario continues to have the second lowest retail price ($102.40) and total tobacco tax ($66.29) for tobacco products compared to other Canadian provinces and territories.
Utilization of provincial and municipal legislation, zoning restrictions and licensing fees to reduce the number and density of retail tobacco vendors. (Tobacco industry recommendation)	Tobacco continues to be sold seven days a week, 24 hours a day in some 10,000 outlets with almost no zoning restrictions.
Expand the ban on the display of cigarettes to include all smoking, tobacco-related and vaping paraphernalia. (Tobacco industry recommendation)	Not implemented

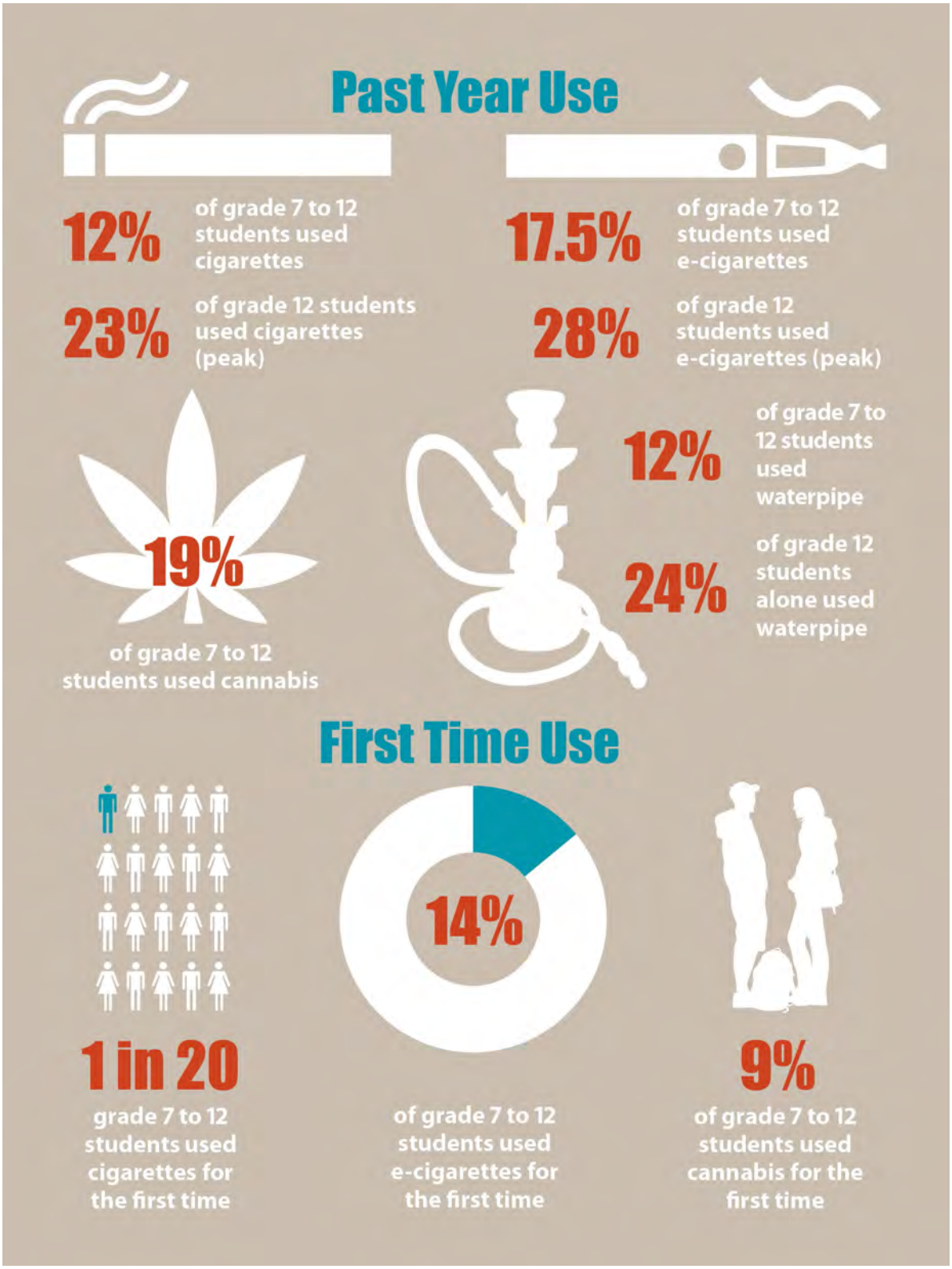
Chapter Summary

While considerable progress has been made in decreasing tobacco use initiation in Ontario, one in every ten youth (aged 12-18) still used tobacco in the past 30 days, one in four grade 12 students has smoked in the past year, and 17% of young adults (aged 20 to 24) and 20% of young adults (aged 25 to 29) are current cigarette smokers. There have been no significant changes in these indicators in recent years.

Ontario continues to fall short on several of the Executive Steering Committee Report recommendations for preventing tobacco use. Substantial progress requires population-level policy measures to increase cost and to decrease availability and access (see Pro-Tobacco Influences chapter). Specific to prevention is the recommendation to raise the legal age to purchase tobacco products to 21—an intervention that the 2016 Scientific Advisory Committee report assessed as innovative and a promising direction if implemented in Ontario. In addition, 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 changed in recent years. Moreover, it is unclear whether sufficient effort is being directed to targeting youth and young adults who are most at risk of becoming established tobacco users.

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

Visual Summary of Key Prevention Indicators



Appendix: Data Tables

Table 4A-1: Lifetime Abstinence, by Grades 7 to 12, Ontario, 2003 to 2017

Grade	2003	2005	2007	2009	2011	2013	2015	2017
Grade 7	80	91	93	94	97	97	98	96
Grade 8	72	84	88	88	90	92	93	96
Grade 9	61	69	76	82	88	88	89	91
Grade 10	52	59	67	68	77	80	80	84
Grade 11	42	54	57	63	65	72	69	74
Grade 12	41	49	55	58	65	66	68	69

Note: Data table is for Figure 4-2.
Source: Ontario Student Drug Use and Health Survey 2003–2017 (Biennial).

Table 4A-2: Use of Cigarettes for the First Time in the Past Year, by Grade, Ontario, 2003 to 2017

Grade	Year	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Grades 7-8	2003	19,300	6.9	5	9.5
	2005	11,600	4.1 [M]	2.9	5.9
	2007	9,500	3.4 [M]	2	5.7
	2009	6,700	2.5 [M]	1.5	4.2
	2011	9,600	3.6 [M]	2.3	5.6
	2013	6,300	2.7 [M]	1.5	4.9
	2015	S	S	S	S
	2017	S	S	S	S
Grades 9-12	2003	70,300	10.3	9.4	11.3
	2005	54,400	8.7	7.6	10
	2007	49,700	7.6	6.2	9.4
	2009	52,800	7.5	6.1	9.2
	2011	51,700	7.2	5.7	9.1
	2013	41,700	6.1	4.9	7.6
	2015	54,800	8	6.9	9.2
	2017	35,100	6.8	5	9

Note: M=Marginal. Interpret with caution: subject to moderate sampling variability. S=data suppressed due to small sample sizes. Data table is for Figure 4-3.
Source: Ontario Student Drug Use and Health Survey 2003–2017 (Biennial).

Table 4A-3: Past-Year Smoking, by Grades 7 to 12, Ontario, 2003 to 2017

Grade	2003	2005	2007	2009	2011	2013	2015	2017
Grade 7	13	6	4	3	3	1	S	1.6[M]
Grade 8	21	11	7	7	6	4	S	S
Grade 9	29	21	16	12	8	8	8	6
Grade 10	35	29	20	23	16	14	16	11
Grade 11	42	34	30	25	24	22	21	18
Grade 12	43	36	30	29	25	24	24	23

Note: S=data suppressed due to small sample sizes. M=Marginal. Interpret with caution: subject to moderate sampling variability. Data table is for Figure 4-4.
Source: Ontario Student Drug Use and Health Survey 2003–2017 (Biennial).

Table 4A-4: Current Smoking (Past 30-Days), by Grade, Ontario, 2003 to 2017

Year	Grades 7 to 8	Grades 9 to 10	Grades 11 to 12
2003	1[M]	8	15
2005	1[M]	5	12
2007	S	4	8
2009	1[M]	4	9
2011	S	3[M]	6
2013	S	2[M]	6[M]
2015	S	2[M]	5
2017	S	1[M]	5[M]

Note: M=Marginal. Interpret with caution: subject to moderate sampling variability. S=data suppressed due to small sample sizes. Data table is for Figure 4-5.
Source: Ontario Student Drug Use and Health Survey 2003–2017 (Biennial).

Table 4A-5: Current Smokers (Past 30-Days), Youth and Young Adults, Ontario, 2003 to 2015

Year	Age	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2003	15-17	54,700	11.5	9.7	13.2
	18-19	75,600	23.5	20.4	26.6
	20-24	256,400	30	27.2	32.7
	25-29	214,900	28.2	25.7	30.8
2005	15-17	47,600	9	7.3	10.8
	18-19	58,800	18	15.4	20.5
	20-24	231,900	26.1	23.8	28.3
	25-29	228,800	29	26.8	31.3
2007	15-17	35,500	6.5	4.8	8.2
	18-19	63,100	19.4	13.7	25
	20-24	226,400	26.9	23.3	30.4
	25-29	255,300	29.2	25.9	32.6
2008	15-17	28,900	5.8	4.2	7.5
	18-19	54,600	16	12.1	19.8
	20-24	208,700	23.5	19.6	27.5
	25-29	260,700	30.7	27.2	34.2
2009	15-17	40,100	7.7	5.4	9.9
	18-19	44,500	13.2	9.6	16.8
	20-24	179,600	20.4	17	23.8
	25-29	224,900	25.6	21.9	29.2
2010	15-17	37,000	6.9	5	8.9
	18-19	55,300	16.3	12.1	20.5
	20-24	238,500	25.3	21.2	29.3
	25-29	212,100	24.4	21.3	27.6
2011	15-17	19,600	3.8 [M]	2.3	5.2
	18-19	35,000	10.2 [M]	6.9	13.5
	20-24	199,800	20.5	17.1	24
	25-29	214,500	24.7	21.1	28.4
2012	15-17	20,400	3.7 [M]	1.9	5.5
	18-19	31,000	10.7 [M]	7	14.5
	20-24	228,900	23.2	19.2	27.2
	25-29	211,200	23.8	19.9	27.7
2013	15-17	18,700	3.7 [M]	2.2	5.1
	18-19	37,800	10.9 [M]	7.2	14.6
	20-24	197,700	21.2	17.8	24.6
	25-29	242,700	25.3	21.6	29
2014	15-17	17,800	3.3 [M]	1.7	4.9
	18-19	33,700	10.4 [M]	5.8	15
	20-24	171,000	17.3	14.3	20.4
	25-29	202,900	22.8	18.8	26.7
2015	15-17	25400	5.3[M]	3.2	8.8
	18-19	52200	14[M]	9.3	20
	20-24	152800	16.9	13.3	21
	25-29	171800	19.8	15.7	25

Note: M=Marginal. Interpret with caution: subject to moderate sampling variability. Data table is for Figure 4-6.
Source: Canadian Community Health Survey 2003-2015.

Table 4A-6: Current Smokers (Past 30-Days), Youth and Young Adults, by Sex, Ontario, 2015

Age	Sex	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
15-17	Females		S		
	Males	20,000	8[M]	4.1	14.2
18-19	Females		S		
	Males	33,800	16.5[M]	9.9	26.0
20-24	Females	50,600	12[M]	8.0	17.5
	Males	102,200	21[M]	15.5	28.0
25-29	Females	64,600	14[M]	10.3	19.2
	Males	107,200	26[M]	19.0	35.0

Note: M=Marginal. Interpret with caution: subject to moderate sampling variability. S = data suppressed due to small sample sizes. Data table is for Figure 4-7.
Source: Canadian Community Health Survey 2015.

Table 4A-7: E-Cigarette Use, Past Year and Ever Use, by Grade, Ontario, 2017

Use of an E-Cigarette	Group	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Past Year	Grade 7-8	9,200	3.9 [M]	2.4	6.2
	Grade 9	17,800	15.8	11.8	20.8
	Grade 10	24,900	21.7	17.1	27.1
	Grade 11	33,100	26.9	21.2	33.4
	Grade 12	47,500	28.3	23.7	33.3
	Grades 7-12	132,400	17.5	14.4	21
Ever Use	Grade 7-8	11,500	4.8 [M]	3.1	7.5
	Grade 9	20,900	18.5	14.1	23.7
	Grade 10	32,600	28.4	23.2	34.2
	Grade 11	39,700	32.3	26.3	39
	Grade 12	58,500	34.9	29.8	40.3
	Grades 7-12	163,300	21.6	18.1	25.5

Note: M=Marginal. Interpret with caution: subject to moderate sampling variability. Data table is for Figure 4-8.
Source: Ontario Student Drug Use and Health Survey 2017.

Table 4A-8: Waterpipe Use, Past Year and Ever Use, by Grade, Ontario, 2017

Any Use of a Waterpipe	Group	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Past Year	Grade 7-8		S		
	Grade 9	5,200	4.6 M	2.9	7.3
	Grade 10	10,600	9.2	6.9	12.1
	Grade 11	18,300	14.8	11.4	19
	Grade 12	33,400	19.8	16.2	24
	Grades 7-12	70,200	9.3	7.8	10.9
Ever use of waterpipe	Grade 7-8	3,700	1.5 M	0.8	3
	Grade 9	7,500	6.6 M	4.7	9.4
	Grade 10	13,300	11.6	8.9	14.9
	Grade 11	23,100	18.7	14.8	23.5
	Grade 12	40,600	24.1	20.1	28.7
	Grades 7-12	88,200	11.6	10	13.5

Note: M=Marginal. Interpret with caution: subject to moderate sampling variability. S=data suppressed due to small sample sizes. Data table is for Figure 4-9.
Source: Ontario Student Drug Use and Health Survey 2017.

Table 4A-9: Adult Views on the Social Unacceptability of Teenagers Smoking Cigarettes, by Age, Ontario, 2010 and 2016

Year	Age	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2010	18-24		80.5	65.1	90.1
	18+		90.3	87.7	92.4
2011	18-24		85.3	73	92.6
	18+		88.9	85.9	91.3
2012	18-24	782,400	74.7	57.8	86.5
	18+	8,732,700	86.1	83	88.7
2013	18-24	868,000	84.4	66.2	93.7
	18+	8,169,400	87.3	84.2	89.8
2014	18-24	761,600	71.1	53.8	83.9
	18+	8,893,500	86.7	83.6	89.2
2015	18-24	873,600	74.7	59.2	85.7
	18+	9,150,000	89.3	86.3	91.7
2016	18-24	1,309,400	82	68.9	90.4
	18+	9,336,700	89.4	86.5	91.8

Note: Data table is for Figure 4-10.
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2010 and 2016.

Table 4A-10: Agreement that the Number of Retail Outlets Selling Cigarettes Should Be Reduced, by Smoking Status, Ages 18+, Ontario, 2012 and 2016

Year	Group	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2012	Current smoker	618,900	37.9	29.3	47.2
	Former smoker	1,813,700	63.3	56.9	69.3
	Never smoker	4,180,400	74.4	69.4	78.8
	Total	6,628,400	65.4	61.7	68.9
2016	Current smoker	522,500	41.3	29.9	53.8
	Former smoker	1,567,200	58.3	51.3	65
	Never smoker	5,110,700	79.8	75	83.9
	Total	7,235,300	69.2	65.3	72.8

Note: Data table is for Figure 4-11.
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2012 and 2016.

Table 4A-11: Views on How Tobacco Should Be Sold, Ages 18+, Ontario, 2012 and 2016

Year	Policy Option	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2012	Not sold at all	2,078,000	20.5	17.7	23.6
	Government-owned stores	2,883,100	28.5	25	32.2
	Different places as now	4,940,700	48.8	45	52.6
2016	Not sold at all	2,026,900	19.4	16.2	23
	Government-owned stores	3,286,900	31.4	27.6	35.5
	Different places as now	4,992,700	47.7	43.5	51.9

Note: Data table is for Figure 4-12.
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2012 and 2016.

Table 4A-12: Views on the Sale of Cigarettes, by Smoking Status, Ages 18+, Ontario, 2016

Policy Option	Smoking Status	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Stop as soon as possible	Current smoker		S		
Phase out over 5 to 10 years	Current smoker	292,700	23.2 M	14.5	34.8
Keep same as now	Current smoker	893,300	70.7	59.1	80.1
Stop as soon as possible	Former smoker	263,500	9.9 M	6.8	14.4
Phase out over 5 to 10 years	Former smoker	955,800	36	29.4	43.2
Keep same as now	Former smoker	1,330,200	50.1	43.2	57
Stop as soon as possible	Never smoker	1,242,300	19.4	15.2	24.5
Phase out over 5 to 10 years	Never smoker	2,697,000	42.2	36.7	47.9
Keep same as now	Never smoker	2,325,100	36.4	31	42.1
Stop as soon as possible	Total	1,545,500	14.8	12	18.2
Phase out over 5 to 10 years	Total	3,960,700	38	34	42.2
Keep same as now	Total	4,624,100	44.4	40.3	48.6

Note: S=data suppressed due to small sample sizes. M=Marginal. Interpret with caution: subject to moderate sampling variability. Data table is for Figure 4-13.
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2016.

Table 4A-13: Agreement that Tobacco Products Should Forever Not Be Sold to Youth Who Are Now Teenagers Even When They Reach Adulthood, Ontario, 2015 and 2016

Year	Smoking Status	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2015	Current smoker	384,500	27.7 M	18.7	39.1
	Former smoker	1,388,500	49.5	42.8	56.1
	Never smoker	3,416,700	56.4	50.9	61.7
	Total	5,189,700	50.6	46.6	54.6
2016	Current smoker	320,500	25.8 M	17	37.1
	Former smoker	1,139,000	42.7	35.9	49.7
	Never smoker	3,610,200	56.4	50.7	62
	Total	5,096,800	48.9	44.7	53.2

Note: M=Marginal. Interpret with caution: subject to moderate sampling variability. Data table is for Figure 4-14.
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2015 and 2016.

Table 4A-14: Opinion About Where E-Cigarettes Should Be Sold, Ontario, 2015 and 2016

Year	Location	Population Estimate	Value (%)	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2015	Don't know	1,197,400	11.7	9.5	14.3
	Only vape shops	1,230,200	12	9.5	15.1
	Only pharmacies	1,257,900	12.3	10	15
	Government-owned stores	1,291,300	12.6	10.2	15.5
	Not sold at all	2,115,200	20.7	17.7	24
	Different places as now	3,137,100	30.7	26.9	34.7
2016	Don't know	934,100	8.9	7.2	11
	Only pharmacies	1,169,600	11.2	8.8	14.1
	Government-owned stores	1,494,100	14.3	11.3	17.9
	Not sold at all	1,884,700	18	15.3	21.1
	Only vape shops	2,076,600	19.8	16.6	23.5
	Different places as now	2,908,100	27.8	24.1	31.8

Note: Data table is for Figure 4-15.
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2015 and 2016.

References

[1] Centers for Disease Control and Prevention. *Best Practices for Comprehensive Tobacco Control Programs—2007*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, October 2007.

[2] Smoke-Free Ontario. Scientific Advisory Committee, Ontario Agency for Health Protection and Promotion (Public Health Ontario). *Evidence to Guide Action: Comprehensive Tobacco Control in Ontario (2016).* Toronto, ON: Queen's Printer for Ontario, 2017. Accessed on December 18, 2017.

[3] Ontario Ministry of Health and Long-Term Care. *Smoke-Free Ontario Modernization: Report of the Executive Steering Committee.* Toronto, ON: Queen's Printer for Ontario, 2017. Accessed on November 30, 2017.

[4] Leave The Pack Behind. *Ministry of Health and Long-Term Care – 2016-17 Final Report – Leave The Pack Behind*. 2017, June.

[5] Ontario Ministry of Health and Long-Term Care. *Ontario Public Health Standards 2008*. Toronto, ON: Queen's Printer for Ontario, 2008 [revised March 2017]. Accessed November 24, 2017.

[6] Ministry of Health Promotion and Sport. *Youth Engagement Principles*. Toronto, ON: Ontario Ministry of Health Promotion and Sport, December 2010.

[7] Ontario Ministry of Education. *Foundations for a Healthy School: Promoting Well-Being is Part of Ontario's Achieving Excellence Vision*. Queen's Printer for Ontario, 2014. Accessed on February 17, 2018.

[8] Luk R, Schwartz R. *Youth Exposure to Tobacco in Movies in Ontario, Canada: 2004-2016*. OTRU Special Report. Toronto, ON: Ontario Tobacco Research Unit, July 2017.

[9] Bader P, Boisclair D, Ferrence R. Effects of tobacco taxation and pricing on smoking behavior in high risk populations: A knowledge synthesis. *International Journal of Environmental Research and Public Health* 2011 Nov;8(11);4118-4139.

[10] Chaloupka FJ, Cummings KM, Morley CP, Horan JK. Tax, price and cigarette smoking: Evidence from the tobacco documents and implications for tobacco company strategies. *Tobacco Control* 2002 Mar;11 (Suppl 1):i62-i72.

[11] Chaloupka FJ, Grossman M. Price, tobacco control policies and smoking among young adults. *Journal of Health Economics* 1997 Jun;16(3):359-373.

[12] Gruber J, Sen A, Stabile M. Estimating price elasticities when there is smuggling: The sensitivity of smoking to price in Canada. *Journal of Health Economics* 2003 Sep;22(5):821-842.

[13] International Agency for Research on Cancer. *Effectiveness of Tax and Price Policies for Tobacco Control*. IARC Handbooks of Cancer Prevention, Volume 14. Lyon, FR: IARC, 2011.

[14] Cavazos-Rehg PA, Krauss MJ, Spitznagel EL, Chaloupka FJ, Luke DA, Waterman B., et al. Differential effects of cigarette price changes on adult smoking behaviours. *Tobacco Control* 2014 Mar;23(2):113-118.

[15] Chaloupka FJ, Pacula RL. The impact of price on youth tobacco use. In: National Cancer Institute. *Changing Adolescent Smoking Prevalence. Smoking and Tobacco Control Monograph No. 14*. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute, 2001:pp.193-199.

[16] Tauras JA. Public policy and smoking cessation among young adults in the United States. *Health Policy* 2004;68(3):321-332.

[17] United States. Dept. of Health and Human Services. *Reducing Tobacco Use: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2000.

[18] Schwartz R, Zhang B. Debunking the taxation–contraband tobacco myth. *Canadian Medical Association Journal* 2016 April; 188(6):401-402.

[19] Carpenter C, Cook PJ. Cigarette taxes and youth smoking: New evidence from national, state and local Youth Risk Behaviour Surveys. *Journal of Health Economics* 2008 Mar;27(2):287-299.

[20] Gruber J. *Youth Smoking in the U.S.: Prices and Policies*. NBER Working Paper No. 7506. Cambridge, MA: National Bureau of Economic Research, January 2000. Accessed on February 27, 2018.

[21] Chaloupka FJ, Wechsler H. Price, tobacco control policies and smoking among young adults. *Journal of Health Economics* 1997 Jun;16(3):359-373.

[22] Ross H, Chaloupka FJ, Wakefield MA. Youth smoking uptake progress: Price and public policy effects. *Eastern Economic Journal* 2006 Spring;32(2):355-367.

[23] Ontario Ministry of Finance. Tobacco Tax. Accessed on January 20, 2018.

[24] World Health Organization. WHO Report on the Global Tobacco Epidemic, 2008: The MPOWER Package. Geneva, SZ: WHO, 2008. Accessed February 15, 2018.

[25] Satterland TD, Treiber J, Haun S, Cassady D. Evaluating local policy adoption campaigns in California: Tobacco retail license (TRL) adoption. *Journal of Community Health* 2014 Jun;39(3):584-591.

[26] Tilson M. *Reducing the Availability of Tobacco Products at Retail: Policy Analysis*. Toronto, ON: Non-Smokers' Rights Association, April 2011. Assessed February 27, 2018.

[27] Los Angeles. Tobacco Retailer's Permit. Accessed on February 8, 2018.

[28] New Brunswick. Department of Finance. Tobacco Retailer's Guide. Revised: February, 2016. Accessed on February 28, 2018.

[29] Service Nova Scotia - Provincial Tax Commission. Retail Vendor's Permit (Designated Tobacco Retailer). Accessed on February 28, 2018.

[30] Ontario Ministry of Finance. Basic Rules for Tobacco Retail Dealers. Accessed February 16, 2018.

[31] Non-Smokers Rights Association/Smoking & Health Action Foundation. Ontario Municipalities with Tobacco Retailer Licence Fees. March 2017. Accessed on January 7, 2018.

[32] Chuang YC, Cubbin C, Ahn D, Winkleby MA. Effects of neighbourhood socioeconomic status and convenience store concentration on individual level smoking. *Journal of Epidemiology and Community Health* 2005 Jul;59(7):568–573.

[33] Reitzel LR, Cromley EK, Li Y, Cao Y, Dela Mater R, Mazas CA, et al. The effect of tobacco outlet density and proximity on smoking cessation. *American Journal of Public Health* 2011 Feb;101(2):315-320.

[34] Cohen JE, Anglin L. Outlet density: A new frontier for tobacco control. *Addiction* 2009 Jan;104(1):2-3.

[35] Health Canada. *2005 National Baseline Survey on the Tobacco Retail Environment. Final Report POR-04-48*. Prepared for Health Canada by Corporate Research Associates Inc., March 2005. Accessed on February 27, 2018.

[36] Ontario Government (Service Ontario e-Laws). *Smoke-Free Ontario Act* (December 12, 2017). Accessed February 27, 2018.

[37] Ontario Ministry of Health and Long Term Care. Tobacco Inspection System [Unpublished data], February 6, 2017.

[38] Chaiton MO, Mecredy GC, Cohen JE, Tilson ML. Tobacco retail outlets and vulnerable populations in Ontario, Canada. *International Journal of Environmental Research and Public Health* 2013 Dec 17;10(12):7299-309.

[39] Anderson SJ. Menthol cigarettes and smoking cessation behaviour: a review of tobacco industry documents. *Tobacco Control* 2011;20:ii49-ii56.

[40] Courtemanche CJ, Palmer MK, Pesko MF. Influence of the flavored cigarette ban on adolescent tobacco use. *American Journal of Preventive Medicine* 2017 May;52(5):e139-e146.

[41] Delnevo CD, Gundersen DA, Hrywna M, Echeverria SE, Steinberg MB. Smoking-cessation prevalence among U.S. smokers of menthol versus non-menthol cigarettes. *American Journal of Preventive Medicine* 2011 Oct;41(4):357-365.

[42] Trinidad DR, Pérez-Stable EJ, Messer K, White MM, Pierce JP. Menthol cigarettes and smoking cessation among racial/ethnic groups in the United States. *Addiction* 2010 Dec;105 Suppl1:84-94.

[43] Smith SS, Fiore MC, Baker TB. Smoking cessation in smokers who smoke menthol and non-menthol cigarettes. *Addiction* 2014 Dec;109(12):2107-2117.

[44] The Ontario Gazette. Ontario Regulation 336/15 made under the *Smoke-Free Ontario Act*. Printed in The Ontario Gazette: November 28, 2015. Accessed on February 27, 2018.

[45] Chaiton M, Schwartz R, Cohen J, Soule E, Eissenberg T. Association of Ontario's ban on menthol cigarettes with smoking behavior 1 month after implementation. *JAMA Internal Medicine* 2018 March 5 [epub ahead of print].

[46] Smoke-Free Ontario. Scientific Advisory Committee, Ontario Agency for Health Protection and Promotion (Public Health Ontario). *Evidence to Guide Action: Comprehensive Tobacco Control in Ontario (2016).* Toronto, ON: Queen's Printer for Ontario, 2017. Accessed on December 18, 2017.

[47] Ontario Tobacco Research Unit. *The Tobacco Control Environment: Ontario and Beyond. Monitoring and Evaluation Series (Vol. 16). Retail Display of Tobacco Products: Monitoring Update*. Toronto, Canada: OTRU, April 27, 2010. Accessed February 27, 2018.

[48] Hoek J, Gifford H, Pirikahu G, Thomson G, Edwards R. How do tobacco retail displays affect cessation attempts? Findings from a qualitative study. *Tobacco Control* 2010 Aug;19(4):334-337.

[49] Institute of Medicine. *Ending the Tobacco Problem: A Blueprint for the Nation*. Washington: National Academies Press, 2007.

[50] Li L, Borland R, Yong H, Hitchman SC, Wakefield MA, Kasza KA, et al. The association between exposure to the point-of-sale anti-smoking warnings and smokers' interest in quitting and quit attempts: Findings from the International Tobacco Control Four Country Survey. *Addiction* 2012 Feb;107(2):425-433.

[51] O'Loughlin J, Karp I, Koulis T, Paradis G, DiFranza JR. Determinants of first puff and daily cigarette smoking in adolescents. *American Journal of Epidemiology* 2009 Sep 1;170(5):585-597.

[52] Alesci N, Forster J, Blaine T. Smoking visibility, perceived acceptability, and frequency in various locations among youth and adults. *Preventive Medicine* 2003 Mar;36(3):272-281.

[53] Ontario Ministry of Health and Long-Term Care. *Tobacco Compliance Protocol, 2016*. Publication No. 020632. Queen's Printer of Ontario. May 2016.

[54] Legislative Assembly of Ontario. *Bill 174, Cannabis, Smoke-Free Ontario and Road Safety Statue Law Amendment Act, 2017*. (Royal Assent December 12, 2017). Legislative Assembly of Ontario.

[55] Chisholm J. *Evaluation of East TCAN Regional Project: Love My Life…Tobacco Free! (2016-2018)* [Draft LML Evaluation Framework]. Eastern Ontario Health Unit, 2015.

[56] O'Connor S. *Risky Campaign Evaluation*. Toronto, ON, February 2018.

[57] Ontario Ministry of Health and Long-Term Care. *Smoke-Free Ontario Modernization: Report of the Executive Steering Committee.* Toronto, ON: Queen's Printer for Ontario, 2017. Accessed on November 30, 2017.

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

Generating knowledge for public health

Smoke-Free Ontario Strategy Monitoring Report:

Smoking Cessation

Table of Contents

List of Tables

List of Figures

Cessation: Smoke-Free Ontario Strategy Components

A main objective of tobacco control is to increase the proportion of smokers who have successfully quit smoking. Desired outcomes include increasing the proportion of smokers intending to quit, decreasing cigarette consumption as a step towards quitting smoking 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[i] products[1,2]
- Increasing knowledge of tobacco harm and awareness of available cessation supports
- Promoting and supporting quit attempts
- Limiting physical and social exposure to tobacco products[3,4]

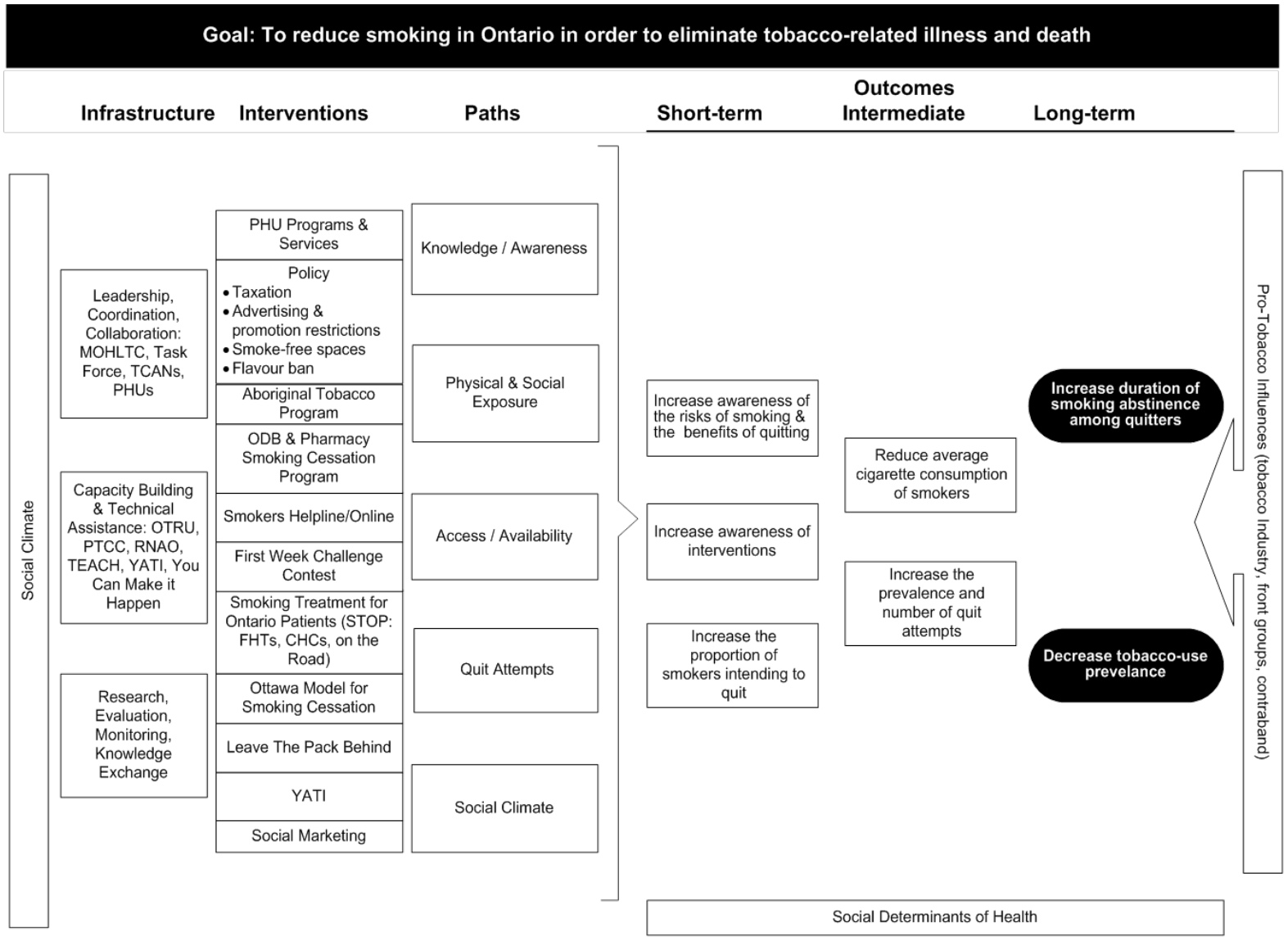
These pathways are expected to influence the social climate (or social norms) surrounding tobacco-use behaviour by reducing its social acceptability; this in itself is considered key to achieving and sustaining the desired cessation outcomes.[5,6] The cessation component of the Smoke-Free Ontario (SFO)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

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

New this year, we highlight throughout the chapter the cessation-related assessments from the Smoke-Free Ontario Scientific Advisory Committee report, *Evidence to Guide Action: Comprehensive Tobacco Control in Ontario (2016)*[7] and recommendations from the Executive Steering Committee report, *Smoke-Free Ontario Modernization*.[8] In addition, we have included summary tables at the end of the chapter that compare the current status of SFO-funded initiatives to the cessation-related assessments and recommendations from Scientific Advisory Committee and Executive Steering Committee reports.

[i] Cessation efforts have traditionally focused on cigarettes. However, it is important that users stop all forms of tobacco use.

Figure 5-1: Cessation Path Logic Model



Cessation Infrastructure

Several cessation infrastructure components support the development and implementation of a variety of programs, services and policies. To ensure success, the cessation system has been designed to build capacity, provide technical assistance and offer research and evaluation support to key stakeholders, and to deliver evidence-based programs, services and policies to the public. Please refer to the summary presented in the Infrastructure chapter outlining the cessation infrastructure delivered by several key organizations, including: the Ontario Tobacco Research Unit, Ottawa Model for Smoking Cessation, the Program Training and Consultation Centre, Public Health Units, the Registered Nurses' Association of Ontario, Tobacco Control Area Networks, the Training Enhancement in Applied Cessation Counselling and Health Project, You Can Make it Happen and the Youth Advocacy Training Institute.

Cessation Interventions

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

Interventions to Limit Physical and Social Exposure

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

Point-of-Sale Display Ban and Marketing Restrictions

The Scientific Advisory Committee assessed bans on point of sale displays as having a high potential contribution towards reducing smoking prevalence.

The Executive Steering Committee identified bans on the display of all smoking products in the effort to reduce the social cues to smoke as a priority action to create environments that encourage and support quitting.

Restrictions on marketing and promotion of tobacco products is an essential policy tool aimed at reducing tobacco use.[7,9,10,11] In Ontario, a complete ban on the retail and wholesale display of tobacco products took effect on May 31, 2008. Marketing, promotion and sponsorship of tobacco products is also regulated under the Federal *Tobacco Act*, which includes a total ban on tobacco advertising on television, radio and in newspapers and magazines. Only two exceptions remain to the federal advertising ban: tobacco advertising in a publication that is mailed directly to an adult who is identified by name, and signs in places where youth are not permitted to enter by law.

Protection from Secondhand Smoke

The Scientific Advisory Committee assessed smoke-free policies in various settings (workplace, public places, health care facilities, private homes and communities) as having a high potential contribution towards smoking cessation.

The Executive Steering Committee identified expanding smoke-free policies as a priority action to create environments that encourage and support quitting.

Since 2006, a number of policies to protect against secondhand smoke have been introduced in Ontario, including bans on smoking in public places, workplaces, cars transporting children under the age of 16 and outdoor spaces (e.g., playgrounds, sports and recreational fields, restaurant and bar patios, and outdoor hospital grounds; please refer to the Protection chapter for more detail). While these policy measures are not implemented for the purpose of increasing cessation, studies have shown that smoke-free policies reduce consumption and support recent quitters by reducing cues for smoking and increasing their likelihood of quitting permanently.[7,12,13,14,15,16]

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 severe restrictions on the sale of flavoured tobacco products (since January 1, 2016) including a menthol ban (since January 1, 2017),[ii] restrictions on the location where tobacco products may be sold and tobacco tax increases.

[ii] Exemptions in the *Smoke-Free Ontario Act* still allow the sale of any flavoured cigar weighing over 6 grams; wine, port, whiskey or rum flavoured cigars weighing 1.4 grams - 5.9 grams; and flavoured pipe tobacco.

Flavoured Tobacco Ban

The Scientific Advisory Committee assessed banning flavours in tobacco products as having a high potential contribution towards reducing tobacco use.

The addition of flavour to tobacco products has been shown to increase the palatability of tobacco products leading to a decrease in the motivation to quit smoking and the misperception that flavoured cigarettes are less harmful than non-flavoured cigarettes.[17,18] Evidence demonstrating the effectiveness of a flavoured tobacco ban on cessation outcomes is limited due to the relative infancy of this policy. The Ontario Tobacco Research Unit is currently evaluating both the general flavour and menthol bans. Preliminary analyses found that 29% of menthol smokers in the study attempted to quit smoking in the first month of the menthol ban implementation.[19]

Tobacco Product Availability

The Scientific Advisory Committee assessed reducing the availability of tobacco products (including reducing the density of tobacco retail outlets and banning tobacco product sales near schools and campuses) as having an innovative potential contribution towards reducing smoking prevalence.

The Executive Steering Committee identified the use of provincial and municipal legislation, zoning restrictions and licensing fees to reduce the number and density of retail tobacco vendors as a priority action towards reducing the availability of tobacco in retail settings and ultimately reducing tobacco use.

Restricting the retail distribution and availability of tobacco products is considered an important mechanism to limit consumption, contribute to cessation and prevention, and to ultimately reduce subsequent negative health effects.[1,2,20] In Ontario, legislation prohibits tobacco from being sold from vending machines, at pharmacies, on college and university campuses, at

hospitals and other health care and residential care facilities. Despite these advances, tobacco products continue to be available across the Province through a large number of retail outlets (approximately 9,725 in 2017)–primarily convenience and grocery stores. This is down from 10,044 in 2015, 10,620 in 2014, and a further decrease from the approximate 14,000 retail outlets that were operating in 2006.[21] The reason for these decreases is unclear. It could be due to more accurate recording of tobacco vendors by the Ministry of Health and Long-Term Care, fewer vendors selling tobacco, fewer vendors in general or a combination of all three. An analysis of the tobacco vendor distribution in Ontario found that tobacco vendors were more likely to be located in deprived neighbourhoods (e.g., high proportion of residents on government assistance, single parent families, less than high school education, and homes needing major repairs) and within 500m of a school in deprived neighbourhoods.[22]

A recent study examining the impact of tobacco retail availability on cessation outcomes among Ontario smokers found that the presence of at least one tobacco vendor within 500m from home was associated with an increased risk of relapse. In addition, the increased density of tobacco vendors was associated with decreased quit attempts in higher income neighbourhoods.[23]

Tobacco Taxation

The Scientific Advisory Committee assessed increased tobacco price and taxation as having a high potential contribution towards smoking cessation.

The Executive Steering Committee identified raising tobacco taxes to at least the highest level of all other provinces and territories and to regularly increase taxes to at least double the price of tobacco products as a priority action to create environments that encourage and support quitting.

There is strong evidence that increasing cigarette taxes is an effective policy measure to drive down cigarette consumption, encourage current smokers to quit and prevent youth from becoming regular smokers.[24,25,26,27,28,29] On average, a 10% increase in price results in a 3 to 5% reduction in demand in higher income countries.[30,31,32] Moreover, contrary to industry claims,

research suggests that increased taxation does not noticeably lead to an increase in illicit tobacco,[33] a position supported by current tax rates across Canada. That is, high tax provinces appear to have lower levels of illicit tobacco than low tax provinces.

In 2018 and 2019, the Government of Ontario will increase tobacco taxes annually by an additional 2 cents per cigarette or gram of tobacco.[34] This approach replaces the inflation-based tax increases announced in the provincial Budget. Ontario tobacco tax rates, as set by the provincial government, were last changed on April 28, 2017 (Table 7-1 in Pro-Tobacco Influences chapter). The current rates are:

- 16.475¢ per cigarette, which translates to $3.30 for a pack of 20 cigarettes, $4.12 for a pack of 25 cigarettes, and $32.95 for a carton of 200 cigarettes. In 2018, with an additional 2 cents per cigarette, this will translate to 18.475¢ per cigarette, $3.70 for a pack of 20, $4.62 for a pack of 25, and $36.95 for a carton. The latter is about a 4% increase in total price of a carton of 200 cigarettes over the 2017 price ($106.93 vs. $102.40)
- 16.475¢ per gram or part gram of cut tobacco
- Tax on cigars is 56.6% of the taxable price

The province of Ontario continues to have the second lowest total taxes (federal and provincial) on tobacco ($66.29) of any Canadian province or territory (Table 7-2 in Pro-Tobacco Influences chapter). Overall, total tobacco taxes account for 64.7% of the retail price of a carton of cigarettes. Recent tobacco tax increases in Ontario have not been sufficient to reach the WHO MPOWER minimum standard for taxation,[35] which is 75% of the retail price.

Interventions to Build Knowledge and Awareness

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

The Scientific Advisory Committee assessed mass media as having a high potential contribution towards smoking cessation.

The Executive Steering Committee identified ongoing multi-year mass media and social marketing campaigns that motivate people to quit and guide them to services that are easy-to-access as priority actions to create environments that encourage and support quitting.

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 ran two social marketing campaigns in 2017. The first campaign ran from January to March, targeting regular smokers aged 35-44 years. The goal of the campaign was to encourage regular smokers to keep trying to quit smoking if their first attempts to quit were not successful. Digital and social media ads contained similar messaging. This campaign was a repeat of the campaign launched in January 2016.

In April and May, a second campaign targeting a younger set of regular smokers (aged 18-34 years) was launched. The goal of the second campaign was to reassure the younger regular smokers that failure is a part of the quitting journey and not to give up trying. An ad for the campaign featured a young woman who repeatedly tried to quit smoking and under various circumstances kept relapsing. The campaign also used digital, social media, restaurant and bar posters to promote the message.[iii] No evaluation data on either campaign are publically available.

Leave The Pack Behind

Across 44 colleges and universities, Leave The Pack Behind (LTPB) delivers three coordinated social and digital marketing campaigns through multiple communication channels (e.g., peer-to-

[iii] Richard Mutton, Senior Communications Advisor, Ontario Ministry of Health and Long-Term Care, Personal Communication, November 28, 2017.

peer programming, traditional promotional channels, social media platforms, and linkages with other on-campus partners). Leave The Pack Behind collaborates with a wide range of partners, including all 36 public health units, Cancer Care Ontario's Tobacco Wise program, Ontario Federation of Indigenous Friendship Centres, and Smokers' Helpline, to ensure selected campaigns and interventions are available to all young adults aged 18 to 29 in Ontario.

In 2016/17, LTPB ran three coordinated age-tailored social and digital marketing campaigns:

- Party Without the Smoke (fall) was a prevention campaign aimed at discouraging the use of any conventional or alternative tobacco/nicotine product while socializing. In particular, the campaign aims to prevent initiation of any type of tobacco or nicotine product among young adults who do not smoke and prevent the escalation of multi-product tobacco/nicotine use among young adults who already use one substance
- wouldurather… contest (fall/winter) was a six week quit smoking contest designed for all young adults aged 18 to 29. The cessation part of the contest aimed to have smokers pledge to quit smoking, to reduce smoking by 50%, or to refrain from smoking when drinking alcohol. Tailored promotional materials were developed to reach special population groups (e.g., LGBTQ, Indigenous, Canadian Armed Forces, parents, young adult workers/trainees in skilled trades and sales and services).
- Make Quit Memorable campaign (spring/summer/fall) was developed to encourage young adult smokers to use memorable days – statutory and cultural holidays, birthdays, etc. – as triggers to quit (or quit again). The campaign promotes the availability of free nicotine replacement therapy (NRT), self-help smoking cessation booklets, online programs, mobile apps and health professional counselling to assist with quit attempts. Tailored social and digital promotional ads were developed to reach special population groups (e.g., LGBTQ, Indigenous).

Reach: LTPB student teams hosted a total of 3,197 face-to-face outreach events (e.g., display tables, presentations, smoking area "walkabouts", etc.) to promote each of the campaigns at 36 of 44 post-secondary institutions in 2016/17. In total, 60,266 post-secondary students (or 8% of the entire student population) had one-on-one interactions with student teams. In addition, 121,332 promotional and educational materials related to the campaigns were disseminated by student-teams and health professionals on campus.

During the wouldurather…. contest campaign, there were 46,096 visits to the wouldurather.ca website. The Party Without the Smoke campaign led to 11,162 visits to LTPB website during the campaign period. No information was available about the number of website visits that occurred during the Make Quit Memorable campaign.

Effects: Year-end intercept interviews with a sample of college and university students (n=4,239) revealed a modest level of awareness for each campaign. Awareness was highest for the wouldurather… contest campaign (60%), followed by the Party Without The Smoke campaign (58%) and the Make Quit Memorable campaign (47%). A quarter of survey respondents (25%) identified all three social marketing campaigns.[36] Recall of tobacco-related mass media campaigns is associated with increased number of quit attempts and increased chances of being smoke-free for more than one month.[37]

Two of the campaigns had a positive impact on NRT orders through the LTPB website and wouldurather…. contest registration. Online promotions during the Make Quit Memorable campaign resulted in an 82% increase in NRT orders through LTPB's website when ads were placed (e.g., 30 vs. 55 per week). A total of 3,169 smokers registered to quit or cut back during the wouldurather… contest as a result of the wouldurather… contest campaign.[36]

Clinical Cessation Interventions to Increase Quit Attempts

The Strategy funds several clinical smoking cessation programs and services dedicated to encouraging people to quit smoking and help them in their quit attempts. In this section we report responder quit rates[iv] where available, as a measure of each intervention's effects. New methodological thinking suggests that the previously reported intention-to-treat quit rates may be inappropriate for service delivery programs (this rate has been used in randomized control trials).[38,39] 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.

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

The Scientific Advisory Committee assessed hospital-based cessation interventions, other health care setting cessation interventions, pharmacotherapy and behavioural interventions as each having a high potential contribution towards smoking cessation.

The Scientific Advisory Committee assessed cessation maintenance (or relapse prevention) as having an innovative potential contribution towards smoking cessation.

The Scientific Advisory Committee assessed the following interventions as having a moderate potential contribution towards smoking cessation:

- Workplace-based interventions
- Campus-based interventions
- Quitlines with cessation telephone support
- Self-help materials

The Executive Steering Committee identified telephone quitlines and ongoing multi-year mass media and social marketing campaigns that motivate people to quit and guide them to services that are easy-to-access as priority actions to create environments that encourage and support quitting.

The Executive Steering Committee identified the following interventions as priority actions to implement a visible network of high quality, person-centred cessation services:

- Establishment of a coordinated cessation system
- Mandatory smoking cessation best practices implementation in all health care settings
- Shift to opt-out approach to smoking cessation in health care settings
- Maintenance and enhancement of robust clinical standards for smoking cessation

The Executive Steering Committee identified cost-free pharmacotherapy and targeted population-based cessation services as priority actions to ensure equity and improve the patient experience.

The Aboriginal Tobacco Program

The Aboriginal Tobacco Program collaborated with the Smoking Treatment for Ontario Patients (STOP) Program and public health units to provide free nicotine replacement therapy (NRT) to community members (First Nations and Inuit clients) who have set quit dates, and with whom community health staff will be providing continued support.[v]

Reach: The number of community members who received NRT through this specific initiative was not available.

Effects: No evaluation data on this specific distribution of NRT through STOP is available.

Leave The Pack Behind

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

Reach: In 2016/17, 4,503 smokers (1,196 students and 3,307 community young adults) ordered an 8-week course of treatment of nicotine patches or gum through LTPB's online platform representing 1.2% of the 376,800 young adult smokers in Ontario (Table 5-1). This represents an increase in reach compared to the 1,701 courses of treatment distributed in 2015/16. About 1,300 students accessed on-campus health professional cessation counselling, representing a decrease from the 2,053 students who accessed counselling in 2015/16.[36] For additional information on other LTPB programs, go to the Interventions to Build Knowledge and Awareness

[v] Richard Steiner, Group Manager, Aboriginal Cancer Control Unit/Aboriginal Tobacco Program. Personal communication, December 11, 2017

and Other Cessation Interventions to Increase Quit Attempts sections in this chapter and the LTPB section in the Prevention chapter.

Effects: In 2016/17, it is estimated that of the 724 smokers who received the *Smoke/Quit* booklets and advice from a health professional, 83 (or 11.4%) were expected to quit smoking. (These outcomes are based on empirically derived 7-day point prevalence intention-to-treat quit rates for *Smoke/Quit* booklets/health professional counselling calculated from a randomized control trial. No responder quit rates were reported).

It is estimated that 315 of the 4,503 (or 7%) smokers who received free NRT through LTPB's online platform and 34 of the 485 (or 7%) smokers who received health professional counselling and free NRT were expected to quit smoking. (These outcomes are based on LTPB's rigorous evaluation using an intention-to treat sample. No responder quit rates were reported).

Table 5-1: Number of Smokers Reached through Leave The Pack Behind's Clinical Programs and Services, 2016/17

Program or Service	Number of Participants/Recipients
Online NRT distribution to all Ontario young in the community and on-campus	4,503
Health professional cessation counselling plus nicotine patch/gum	485
Health professional cessation counselling plus *SMOKE/QUIT* booklets	724
Health professional cessation counselling plus referral to Smokers' Helpline proactive counselling services	75
TOTAL	5,787

Ontario Drug Benefit and Pharmacy Smoking Cessation Programs

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

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

Reach: In 2016/17, a total of 23,550 ODB clients received cessation medication, such as Zyban™ and Champix,™ or counselling. Evidence has shown that a combination of cessation medication and behavioural counselling is more effective in increasing smoking cessation than either cessation method on its own.[7] Yet, the majority of ODB clients received smoking cessation medication (22,840), while 2,569 received counselling (individual drug and counselling numbers do not equal the overall total of ODB clients enrolled in the drug or counselling programs since clients receiving both programs are counted only once in the overall total).

The number of ODB clients reached in 2016/17 decreased from the previous year and is now lower than the first year the program was offered (Table 5-2). As of March 2017, 84% of the 2,569 clients enrolled in the counselling program had participated in the first consultation meeting, half (52%) had attended the primary follow-up counselling sessions (visits 1-3) within 3 weeks of enrollment, and 33% had attended the secondary follow-up sessions (visits 4-7) within 30 to 365 days of enrollment.

Table 5-2: Number of Smokers Reached by the Ontario Drug Benefit and Pharmacy Smoking Cessation Programs, 2011/12 to 2016/17

	Program		
Fiscal Year	**Drugs**	**Counselling**	**Drugs or Counselling[a]**
2011/12	23,503	2,510	24,053
2012/13	30,991	4,226	31,906
2013/14	27,358	4,074	28,309
2014/15	24,852	3,073	25,660
2015/16	24,010	2,678	24,682
2016/17	22,840	2,569	23,550

[a] Individual drug and counselling numbers do not equal the overall total of ODB clients enrolled in the drug or counselling programs since clients receiving both programs are counted only once in the overall total.
Source: Ontario Ministry of Health and Long-Term Care.

Overall, approximately 58% of clients were from Ministry of Community and Social Services programs (Ontario Disability Support Program or Ontario Works) and 35% were seniors.

Ontarians from across the Province enrolled in ODB drug or counselling programs, with the Hamilton Niagara Haldimand Brant Local Health Integration Network (LHIN) garnering the most clients (3,515; Table 5-3).[40]

Effects: Quit rates from clients enrolled in the ODB cessation program in 2016/17 are currently not available. A recent study examined administrative data to assess reported quit rates among ODB clients enrolled in the counselling program between September 2011 and September 2013.[41] However very few of the clients had a recorded quit status during the 6-month and 12-month follow-up periods (7% and 12%, respectively), levels that are too low to provide reasonable estimates.

Table 5-3: Unique Ontario Public Drug Program Clients, by Local Health Integration Network, 2016/17

	Program		
Local Health Integrated Network	**Drugs**	**Counselling**	**Drugs or Counselling[a]**
Erie St. Clair	1,802	327	1,842
South West	2,043	282	2,174
Waterloo Wellington	1,191	133	1,223
Hamilton Niagara Haldimand Brant	3,391	372	3,515
Central West	702	58	713
Mississauga Halton	850	78	873
Toronto Central	1,747	198	1,815
Central	1,364	142	1,398
Central East	2,429	239	2,499
South East	1,455	78	1,480
Champlain	2,536	168	2,577
North Simcoe Muskoka	1,022	121	1,043
North East	1,800	278	1,866
North West	521	78	538
Total	22,672	2,552	23,373

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

Ottawa Model for Smoking Cessation

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

Hospital and Specialty Care Sites

Reach: As of March 2017, 87 Ontario hospital inpatient settings (e.g., acute care hospitals) and outpatient specialty care settings (e.g., addiction treatment centres, diabetes clinics) had implemented the Ottawa Model, 10 were working on implementation and three had temporarily delayed implementation. In 2016/17, Ottawa Model hospital and specialty care settings partners provided smoking cessation support to 17,036 smokers (Table 5-4). This represents a 21% increase in reach over 2015/16. In February and March 2017, 90 Ottawa Model hospital and specialty clinic partners distributed Quit Cards ("gift cards" worth $450, redeemable for NRT products at any Ontario pharmacy) to patients. In total 5,722 smokers received Quit Cards and 4,013 (70%) were redeemed for NRT.

According to data from a large subsample of inpatients from the Champlain LHIN Network who participated in the Ottawa Model program (n=8,412), smokers were on average 54.9 (± 16.9) years of age, more likely to be male (51.9%), had long smoking histories (34.4 ±16.7 years) and smoked, on average, 17.4 (±12.3) cigarettes per day.[vi]

[vi] Kerri-Anne Mullen, Program Manager, Ottawa Model for Smoking Cessation Network, Personal communication, January 24, 2018.

Table 5-4: Number of Smokers Reached by the Ottawa Model for Smoking Cessation (Hospitals and Specialty Care), 2006/07 to 2016/17

Fiscal Year	Number of Smokers Reached
2006/07	2,733
2007/08	5,514
2008/09	6,410
2009/10	7,086
2010/11	8,609
2011/12	9,721
2012/13	11,940
2013/14	13,815
2014/15	15,726
2015/16	14,114
2016/17	17,036

Source: The Ottawa Model for Smoking Cessation

Effects: For Ottawa Model hospital and specialty care patients receiving smoking cessation follow-up support in 2016/17, the one-month responder-quit rate[vii] was 42% (7-day point prevalence for abstinence; 68% response rate for follow-up) and the six-month responder-quit rate was 48% (7-day point prevalence for abstinence; 51% response rate for follow-up).

Preliminary evaluation results from the distribution of Quit Cards suggest that Ottawa Model and Quit Card participants reported a significantly higher responder-quit rate at one-month follow-up compared to Ottawa Model only participants (56.6% vs. 28.1%, $p<0.001$; 7-day point prevalence for abstinence; based on a small subsample of 143 Quit Card participants and 128 controls). [viii]

Primary Care Organizations

Reach: In 2016/17, the Ottawa Model partnered with seven new primary care organizations, bringing their total partnerships to 104 primary care organizations representing a total of more than 212 primary-care sites since 2010 (e.g., Family Health Teams, Community Health Centres, Nurse Practitioner-Led Clinics and Aboriginal Health Access Centres). During 2016/17, a total of 6,445 patients expressing an interest in quitting smoking were referred to one-on-one smoking

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

[viii] Kerri-Anne Mullen, Program Manager, Ottawa Model for Smoking Cessation Network, Personal communication, January 24, 2018.

cessation counselling appointments (Quit Plan Visits) with trained cessation counsellors (Table 5-5). This represents a considerable decrease from the 7,501 patients who were referred to Quit Plan Visits in 2015/16.

Of the patients who participated in Quit Plan visits in 2016/17, 921 agreed to be referred to an automated telephone/email follow-up program delivered by Smokers' Helpline in which the patient receives five contact cycles over a 2 month period around the patient's chosen quit date.

Effects: In 2016/17, half of Ottawa Model primary care patients who received automated telephone/email follow-up support remained smoke-free 30 days following their quit date (55%; responder quit rate; 47% response rate for follow-up) and 60 days following their quit date (52%; responder quit rate; 38% response rate for follow-up). [42]

Table 5-5: Number of Smokers Reached by the Ottawa Model for Smoking Cessation (Primary Care), 2010/11 to 2016/17

Fiscal Year	Number of Smokers Referred to Quit Plan Visits
2010/11	538
2011/12	2,155
2012/13	3,418
2013/14	5,115
2014/15	6,168
2015/16	7,501
2016/17	6,445

Source: Ottawa Model for Smoking Cessation

Public Health Units

Local Boards of Health are mandated under the Ontario Public Health Standards to ensure the provision of tobacco use cessation programs and services for priority populations.[43] In approaching this requirement, the majority of public health units (PHU) reported that they directly provide tobacco use cessation programs and services (30/36 PHUs) and NRT distribution (33/36 PHUs).

Reach: Between July 2016 and June 2017, PHUs across the Province provided tobacco use cessation counselling programs and services to 8,543 smokers and free NRT (excluding STOP

on the Road programming) to 4,434 smokers.[ix] A broad range of populations were targeted by PHUs for tobacco use cessation programs and services including the general adult population, low socio-economic status populations, young adults, and pregnant and post-partum women (Table 5-6).

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

Table 5-6: Populations Targeted by Public Health Unit Tobacco Use Cessation Programs and Services, 2016/17

	Number of PHUs that targeted population	Proportion of PHUs that targeted population, %
General adult population	25	69
Low socio-economic status	20	56
Young adults (19 to 29 years)	18	50
Pregnant and post-partum women	16	44
Mental health and addictions	16	44
Youth (under the age of 19 years)	14	39
Blue collar workers	10	28
Hospital patients	9	25
Aboriginal	7	19
Dental patients	6	17
LGBTQ communities	5	14

Source: Online survey of PHUs conducted by OTRU November 15, 2017-January 15, 2018.

Smokers' Helpline (Phone Support)

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

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

[ix] Data collected through an online survey of PHUs conducted by OTRU November 15, 2017-January 15, 2018.

Reach: In the 2016/17 fiscal year, the SHL phone support reached 7,079 smokers (equivalent to 0.37% of adult smokers aged 18 years and older in Ontario),[x] which is similar to the 7,161 reached in 2015/16 (Table 5-7). Overall, the number of reactive callers[xi] was down compared to 2015/16 (6,377 vs. 6,801), while the number of referral contacts increased compared to 2015/16 (3,744 vs. 3,575).[44,xii]

Table 5-7: Number of Smokers Reached by Smokers' Helpline, 2005/06 to 2016/17

Fiscal Year	Number of New Clients[a]	Proportion of Ontario Smokers Reached, %[b]
2005/06	6,127	0.30
2006/07	6,983	0.35
2007/08	7,290	0.35
2008/09	6,464	0.32
2009/10	5,820	0.30
2010/11	6,844	0.34
2011/12	7,964	0.39
2012/13	10,217	0.51
2013/14	7,934	0.41
2014/15	7,467	0.40
2015/16	7,161	0.38
2016/17	7,079	0.37

[a] New clients calling for themselves regardless of smoking status and completed referrals. Administrative data provided by SHL.
[b] Estimates of the total population of smokers aged 18+ from 2005/06 to 2016/17 were calculated based on CCHS 2005 to 2015 (TIMS data).

The current reach in 2016/17 is lower than the median reach of quitlines in Canada in 2012 (0.48%; most recent data available) and is considerably lower than the median reach of quitlines in the US as reported by North American Quitline Consortium at 0.93% in 2015 (most recent data available).[xiii] This rate also falls far short of the reach of leading quitlines in individual US jurisdictions, such as Idaho (6.03%), Oklahoma (4.82%) and South Dakota (3.57%)[45] that have

[x] 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.
[xi] Reactive callers represent new clients calling for themselves.
[xii] The number of reactive callers and referral contacts includes repeat contacts therefore the two numbers combined do not equal the total number of new callers.
[xiii] Maria Rudie, Research Manager, North American Quitline Consortium. Personal communication, January 17, 2018.

been successful in achieving higher smoker penetration as a result of increased paid media and/or distribution of free cessation medication.

The majority of SHL callers in 2016/17 were female (54%), between the ages of 45 and 64 years (47%) and had a high school education (36%).[44]

Effects: No evaluative data are available about the effects of the SHL phone support on smokers' quitting behaviour in 2016/17. The most recent evaluation of the Ontario SHL phone support was conducted as part of the evaluation of the Pan-Canadian toll-free quitline initiative. In that evaluation, 7-month follow-up surveys were conducted with Ontario smokers between January 1, 2013 and April 30, 2014. Responder quit rates[xiv] at the 7-month follow-up were as follows: 31% (7-day point prevalence absence) and 28% (30-day point prevalence; Table 5-8).

Among respondents who were still smoking at the time of the follow-up survey during this period, 92% had taken at least one action toward quitting after their first contact with the SHL (response rate for follow-up not reported). This proportion was higher than what was reported in 2011/12 (89.0%). The most frequently reported actions included reducing cigarette consumption (72%), quitting for 24 hours (63%) and setting a quit date (55%).[46]

Table 5-8: Smokers' Helpline 7-Month Follow-up Responder Quit Rates, 2006/07 to 2013/14

Fiscal Year	7-day PPA %	30-day PPA %	6-month prolonged abstinence %
2006/07	15.9	13.2	7.0
2007/08	15.0	13.0	5.4
2008/09	17.0	14.6	7.6
2009/10	20.2	16.8	6.9
2010/11	22.7	18.8	11.4
2011/12[a]	25.1	23.0	14.4
2013 – 2014	31.0	28.0	-
Mean US Quitline Quit Rates (2016)[47]	--	30.2	-

PPA = Point prevalence abstinence

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

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

From 2006 to 2014, the SHL saw a 15 percentage-point increase in the proportion of users reporting 7-day and 30-day point prevalence abstinence (Table 5-8). The proportion of 6-month abstainers doubled between 2006 and 2012 (6-month abstainer rate not reported in 2013-2014). Furthermore, the 30-day quit rates achieved in 2013-2014 compares favourably with the same cessation indicators reported in studies of US quitlines that did not provide cessation medication (e.g., NRT) as part of their quitline counselling services.

Smoking Cessation by Family Physicians

In 2006, the MOHLTC introduced a set of billing codes to promote smoking cessation intervention by family physicians. These codes were assigned for cessation counselling services, including initial and follow-up counselling. Physicians are encouraged to use the 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 health care, 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 2016/17, a total of 192,211 patients in Ontario received initial cessation counselling from a physician. This is down from the 195,344 patients reached in 2015/16 (Table 5-9). Since 2006, the largest number of patients served was in 2008/09 (214,461) which may be attributable to the expansion of the eligibility criteria for billing to all primary care physicians in that year. In comparison with population-level estimates, the number of patients who received initial cessation counselling in 2016/17 represented 16% of smokers who reported visiting a physician.

Table 5-9: Reach of Initial Cessation Counselling Compared to Number of Patients Who Visited a Physician, 2006/07 to 2016/17

Fiscal Year	Number of Recipients of Initial Cessation Counselling[a]	Recipients of Initial Counselling, as a Proportion of Ontario Smokers Who Visited a Physician, %[b]
2006/07	124,814	8
2007/08	140,746	9
2008/09	214,461	14
2009/10	201,121	14
2010/11	201,522	14
2011/12	203,063	14
2012/13	192,536	13
2013/14	188,838	13
2014/15	190,136	14
2015/16	195,344	16
2016/17	192,211	16

[a] Source: Ontario Health Insurance Plan
[b] Estimates based on number of smokers (at present time) aged 15+ who visited a physician, using CCHS 2005 to 2015 data.

A total of 37,300 patients received one or more follow-up counselling sessions in 2016/17, representing 19% of recipients of initial counselling (Table 5-10). This is a slight increase to the proportion of initial counselling recipients who received follow-up counselling in previous years.[48]

Table 5-10: Reach of Follow-up Cessation Counselling Compared to Initial Counselling Estimates, 2007/08 to 2016/17

Fiscal Year	Number of Recipients of Follow-up Counselling[a]	Recipients of Initial Counselling Who Received Follow-Up Counselling, %
2007/08	4,144	3
2008/09	29,686	14
2009/10	31,526	16
2010/11	34,142	17
2011/12	36,233	18
2012/13	35,382	18
2013/14	33,604	18
2014/15	35,003	18
2015/16	36,018	18
2016/17	37,300	19

[a] Source: Ontario Health Insurance Plan

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

The Smoking Treatment for Ontario Patients Program

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

In 2016/17, the STOP Program continued to implement the following program models:

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

Reach: A total of 27,656 smokers were reached by various STOP models in 2016/17. This is the highest number of smokers reached by the STOP Program since it began in 2006/07. (Table 5-11).

Table 5- 11 Number of Smokers Reached by STOP Program Models, 2006/07 to 2016/17

Year	Number of Smokers Reached
2006/07	8,682
2007/08	20,410
2008/09	16,527
2009/10	607
2010/11	3,635
2011/12	11,469
2012/13	15,978
2013/14	17,933
2014/15	21,296
2015/16	25,542
2016/17	27,656

Source: STOP Program

A majority of participants in 2016/17 were enrolled through the STOP with FHTs (n=15,009; Table 5-12). Demographic and smoking characteristics of the STOP Program participants are summarized in Table 5-12.

Table 5-12: STOP Program Participants, by Select Characteristics, 2016/17

Program Model	Number of Participants	Male[a] %	Female[a] %	Age Mean	20+ Cigarettes per day, %
STOP with FHTs	15,009	47	53	52.1	37.1
STOP with Addictions Agencies	4,572	60	40	44.1	41.1
STOP with CHCs	3,797	50	50	50.7	42.3
STOP on The Road VII	3,546	44	56	51.4	43.4
STOP with NPLCs	567	46	54	47.9	38.6
STOP with AHACs	165	N/A	N/A	N/A	N/A

[a] Proportion excludes participants who selected 'Other' as their gender.
Note: Demographic and smoking characteristics were not available for participants in the STOP with AHACs program.
Source: STOP Program

Effects: In 2016/17, at six months post-treatment, the self-reported 7-day point prevalence responder quit rates[xv] ranged from 27% for STOP with CHCs to 34% for STOP with FHTs (Table 5-13; follow-up response rates ranged from 17% to 64% across the STOP Program models).

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

Table 5-13: STOP Program 7-Day Point Prevalence Responder Quit Rates, 2016/17

Program Model	Responder Quit Rate %
STOP with FHTs	33.9
STOP on The Road VII	31.4
STOP with NPLCs	30.4
STOP with Addictions Agencies	27.4
STOP with CHCs	26.9
STOP with AHACs	N/A

Note: Quit rates were not calculated for the STOP with AHACs due to the lack of follow-up survey. Follow-up survey response rates for the remaining STOP Programs were as follows: STOP on the Road VII (16.8%), STOP with Addiction Agencies (48.3%), STOP with CHCs (55.9%), STOP with NPLCs (61.0%) and STOP with FHTs (64.1%).
Source: STOP Program

Other Cessation Interventions to Increase Quit Attempts

The Strategy also funds several non-clinical smoking cessation programs and services in the effort to help smokers quit smoking.

The Scientific Advisory Committee assessed technology-based interventions (e.g., internet/computer and text messaging) as having a high potential contribution towards smoking cessation.

The Scientific Advisory Committee assessed cessation maintenance (or relapse prevention) as having an innovative potential contribution towards smoking cessation.

The Scientific Advisory Committee assessed the following interventions as having a moderate potential contribution towards smoking cessation:

- Financial incentives
- Self-help materials

The Executive Steering Committee identified targeted population-based cessation services and population-based behavioural technologies as priority actions to ensure equity and improve the patient experience.

The Aboriginal Tobacco Program

The Aboriginal Tobacco Program offers smoking cessation workshops in First Nation, Inuit and Métis communities across Ontario, which are tailored to meet the unique needs of each community.

Reach: 68 cessation workshops were held involving 1,294 participants throughout the course of 2016/17. Of these 68 cessation workshops, 22 were delivered to healthcare providers and 46 were delivered to community members. Over 530 resources were distributed (i.e., information on nicotine replacement therapy, Aboriginal Tobacco Program Toolkits and partner resources such as those created by the Centre for Addiction and Mental Health and Smokers' Helpline).

Effects: After completing the cessation workshops, 92% of participants understood the harms of secondhand smoke, 76% understood the benefit of quitting smoking within various timeframes, and 83% understood the number and impact of chemicals in commercial tobacco.[xvi]

First Week Challenge Contest

In January 2016, the Canadian Cancer Society launched the First Week Challenge Contest (FWCC) to replace the Driven to Quit Contest. The main objectives of the contest are to encourage quit attempts, increase tobacco users' awareness of cessation resources and encourage tobacco users to seek help through Smokers' Helpline. The contest is open to all Ontario residents over the age of 19 who currently use tobacco products or quit within three months of the contest period, and have used tobacco 100 times in their lifetime. In January 2017, the contest was expanded to Yukon, Saskatchewan, Manitoba, New Brunswick and Prince Edward Island. Participants register online or by telephone by the last day of the month and must refrain from

[xvi] Richard Steiner, Group Manager, Aboriginal Cancer Control Unit/Aboriginal Tobacco Program. Personal communication, December 11, 2017

using tobacco products for the first week of the following month to be eligible for the monthly $500 prize draw.

Reach: In 2017, a total of 6,233 Ontario smokers registered to participate in the monthly contests. This is a decrease from the 7,262 smokers who registered to participate in 2016.[xvii]

Effects: Preliminary findings from the FWCC follow-up survey suggest a 42% 30-day point prevalence quit rate for participants when surveyed at 6 months from their FWCC quit week (responder quit rate; response rate for 6 month follow-up not reported).[44]

Leave The Pack Behind

LTPB has adopted a comprehensive approach and uses evidence-based, age-tailored tobacco control strategies to reduce tobacco use among young adults across Ontario. In 2016/17, LTPB's key strategies to achieve this goal included:

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

Reach: In 2016/17, LTPB programs and services were available on-campus in all 44 public colleges and universities in Ontario and in the community through 36 PHUs.[36Error! Bookmark not defined.] In 2016/17, at least 25,525 smokers (7% of all 376,800 young adult smokers in Ontario) accessed any of LTPB non-clinical programs or services (Table 5-14). For additional information on other programs, go to the Interventions to Build Knowledge and Awareness and Clinical Cessation Interventions to Increase Quit Attempts sections above and the LTPB section in the Prevention chapter).

[xvii] Mathew LaRose, Data Management Coordinator, Canadian Cancer Society – Ontario Division, Personal communication, February 27, 2018.

Table 5-14: Leave The Pack Behind Participants by Non-Clinical Program or Service, 2016/17

Program or Service	Number of Participants/Recipients
SMOKE|QUIT self-help booklets distributed by student teams	14,332
Public Health distribution of self-help books (e.g., Hey, Something's Different)	7,824
Registration to quit or cut back in the *wouldurather…* contest	3,169
Registration for online personalized health program Quit*Run*Chill	47
Crush the Crave smart phone app	153
TOTAL	25,525

Effects: In 2016/17, it is estimated that of the 14,332 smokers who received the *Smoke/Quit* booklets, 1,634 (or 11.4%) were expected to quit smoking at 3-month follow-up. (These outcomes are based on empirically derived 7-day point prevalence intention-to-treat quit rates for *Smoke/Quit* booklets/health professional counselling. No responder rates were reported.) [49]

It is also estimated that of the 3,169 smokers who registered to quit or cut back in the wouldurather… contest, 533 were expected to quit smoking. (This outcome is based on empirically derived 7-day point prevalence intention-to-treat quit rates of 8.9% to 19.8%—depending on contest category—at 3-month follow-up. No responder rates were reported.)[50,51] Due to the multi-faceted nature of LTPB interventions and the challenges presented by collecting data from a highly transient target population, overall data on participants' demographic and smoking characteristics are not presented.

Public Health Units

In addition to providing counselling and nicotine replacement therapy, PHUs across the Province offer other forms of smoking cessation services. Between July 2016 and June 2017, the majority of PHUs offered self-help resources (97%) followed by the SHL fax referral program (78%), information sessions, workshops and seminars (75%) and telephone hotline (50%; Table 5-15). Less than half of PHUs offered youth cessation programming (47%), online or web-based support (39%) and PHU-specific quit smoking challenges (6%).

The Ontario Public Health Standards also state that local boards of health are required to link members of the population with community resources for tobacco use cessation.[43] Between July

2016 and June 2017, nearly all PHUs were referring clients to SHL (92%). Other referral organizations included local Family Health Teams, Community Health Centres, Nurse Practitioner-Led Clinics (89%), Leave the Pack Behind (86%), STOP (81%), and Aboriginal Health Access Centres (25%).

Table 5-15: Non-Clinical Tobacco Use Cessation Services Offered by Public Health Unit, 2016/17.

	Number of PHUs that Offered Service	Proportion of PHUs that Offered Service, %
Self-help resource material	35	97
Smokers' Helpline fax referral program	28	78
Information sessions, workshops and seminars	27	75
Telephone/Hotline	18	50
Youth Cessation Programming	17	47
Online or web-based support	14	39
PHU specific quit smoking challenges	2	6

Source: Online survey of PHUs conducted by OTRU November 15, 2017 - January 15, 2018.

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

Smokers' Helpline Online

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

Reach: In 2016/17, more than 5,100 smokers registered for SHO. This is an increase from the number of registrants in 2015/16 (Table 5-16). The SHO reached an estimated 0.27% of the smoking population in 2016/17.[44]

There is no information about the demographic characteristics of tobacco users who accessed the SHO in 2016/17. Nor is there evaluative information on the effects of the SHO on participants' quitting behaviour over this period.

Table 5-16: Smokers' Helpline Online Registration, 2005/06 to 2016/17

Fiscal Year	Number of Registrants	Proportion of Ontario Smokers Reached, %[a]
2005/06	3,365	0.17
2006/07	7,084	0.35
2007/08	7,692	0.37
2008/09	5,724	0.29
2009/10	9,539	0.50
2010/11	6,909	0.34
2011/12	8,640	0.43
2012/13	7,257	0.36
2013/14	4,593	0.24
2014/15	6,400	0.34
2015/16	3,117	0.17
2016/17	5,120	0.27

[a] Estimates of the total population of smokers aged 18+ from 2005/06 to 2016/17 were calculated based on CCHS 2005 to 2015 (TIMS data).

Smokers' Helpline Text Messaging

The Canadian Cancer Society's province-wide Smokers' Helpline Text Messaging (SHL TXT) offers registrants support, advice and information through text messages on their mobile device. Automated messages are sent to the registrants for up to 13 weeks based on their quit date and preferences. Registrants can also text key words to SHL to receive additional support on an as-needed basis. In 2016/17, a new stream was added to SHL TXT for smokers who were in the contemplation stage who had not yet set a quit date.

Reach: In 2016/17, 786 smokers registered to receive text messages. This represents a decrease from the 1,111 registrants in 2015/16 and an overall 53% decrease from the high number of registrants reported in 2012/13 (Table 5-17). In October 2016, a new vendor was secured for the SHL TXT initiative and registration by short-code was introduced (e.g., text 'iQuit' to "123456"). It is anticipated that the variability in engagement in SHL TXT will stabilize, if not increase in the near future.[44]

Table 5-17: Smokers' Helpline Text Service Registration, 2009/10 to 2016/17

Fiscal Year	Number of New Registrants
2009/10	218
2010/11	583
2011/12	839
2012/13	1,666
2013/14	1,645
2014/15[a]	400
2015/16	1,111
2016/17	786

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

There is no information about the demographic characteristics of tobacco users who accessed the SHL TXT in 2016/17. Nor is there evaluative information on the effects of the SHL TXT on participants' quitting behaviour over this period.

Youth Advocacy Training Institute N-O-T on Tobacco

In 2016/17, the Youth Advocacy Training Institute (YATI) continued to pilot the youth smoking cessation program, N-O-T on Tobacco (NOT) Ontario, a voluntary school-based program for teens who want to quit smoking. The NOT program occurs over 10 sessions and aims to assist youth in understanding why they smoke and assist them in developing the skills, confidence, and support needed to quit. NOT also addresses such topics as: how to control your weight after quitting, stress management, and how to communicate effectively. The program is designed specifically for youth. The NOT program employs several different strategies to assist youth: small group discussion, writing in journals and hands on activities.

Reach: In 2016/17, YATI completed one offering of the NOT program for a total of 10 sessions. Approximately 5 youth completed the program.[52]

Effects: Among youth who participated in the NOT program between 2014 and 2017, 19% reported that they were not using tobacco or smoking any cigarettes per day at the 6-month follow-up (responder quit rate; 28% response rate).[53]

Overall Reach of Ontario's Cessation Programs

In the 2016/17 fiscal year, Strategy smoking cessation interventions in Ontario directly engaged 334,423 smokers, or about 18% of Ontario smokers[xviii] (Table 5-18)(Note: this number is a maximum assuming that all clients are smokers and that they use only one of the services). Of these smokers, 15.6% engaged in some sort of clinical intervention, whereas 2% engaged in a non-clinical intervention such as a contest.

Table 5-18: Smokers Enrolled in Ontario Smoking Cessation Interventions[a] in 2016/17

Program	Clinical Reach	Intervention Reach
Smoking Cessation by Family Physicians	192,211	
The STOP Program	27,656	
Ontario Drug Benefit and Pharmacy Smoking Cessation Program	23,550	
Ottawa Model for Smoking Cessation (hospital sites)	17,036	
Public Health Unit cessation counselling and NRT distribution	12,977	
Smokers' Helpline Phone Support	7,079	
Ottawa Model for Smoking Cessation (primary care sites' quit plan visits)	6,445	
Leave The Pack Behind (Health professional cessation counselling and NRT distribution)	5,787	
Quit Cards (distributed by Ottawa Model for Smoking Cessation)	4,013	
Leave The Pack Behind Programs (excluding counselling and NRT distribution)		25,525
First Week Challenge Contest		6,233
Smokers' Helpline Online		5,120
Smokers' Helpline Text Messaging		786
Not-On-Tobacco Smoking Cessation		5
Sub-Total	296,754	37,669
Total (Clinical and Intervention Reach)	334,423	

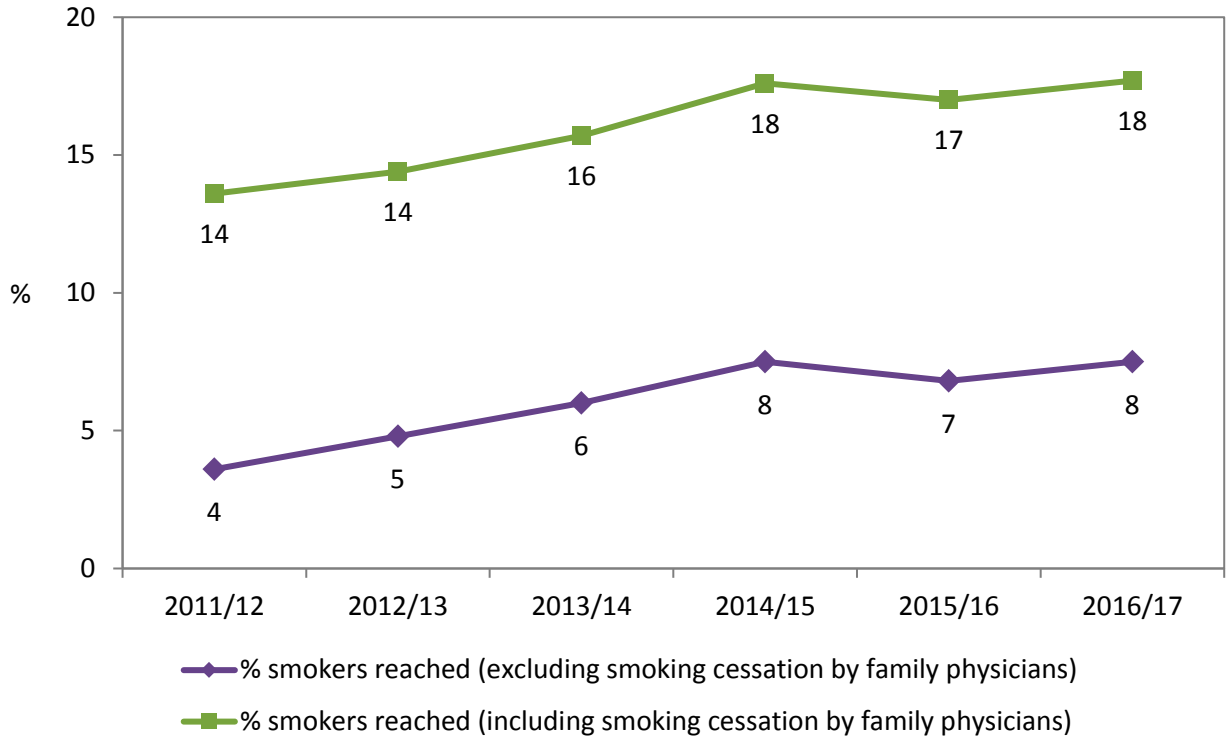
Note: Reach is calculated as total number of people in program. Only Smokers' Helpline is available to all Ontario smokers, with the other programs serving sub-populations. Comparisons among programs should not be made, as they provide varying services to different populations of smokers.

The overall reach of the Ontario smoking cessation interventions has not increased since 2014/15. Figure 5-2 presents the proportion of Ontario smokers reached by the cessation interventions over time with and without the Smoking Cessation by Family Physicians clinical reach included in the calculation. This presentation format is to facilitate interpretation of the overall cessation program reach since the Smoking Cessation by Family Physician program

[xviii] The population of current smokers in Ontario in 2015, aged 18 years and older is 1,905,400 (based on CCHS data).

accounts for approximately 57% of the smokers reached by Ontario cessation interventions, of which only 90% of these smokers received only one initial consultation with their physician.

Figure 5-2: Proportion of Smokers Reached by Ontario Smoking Cessation Interventions, 2011/12 to 2016/17



Note: Full data table for this graph provided in the Appendix (Table 5A-1).

Cessation Outcomes: Population-Level

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

Strategy programs offering cessation assistance have reached approximately 18% of all smokers in the Province. Although responder quit rates for some SFO clinical interventions are quite high (in the range of 30% and more), relapse rates are high with long-term quit rates reported to range from 6% to 12% for those undergoing cessation treatment,[54] it may be that only 20,100 to 40,100 of these smokers wishing to quit go on to have a long-term successful smoking abstinence. Furthermore, clinical programs tend to reach more addicted smokers than more population based programs, which makes it hard to have a large impact on smoking prevalence rates in the Province through cessation assistance alone. Population-level data show considerable more progress than this. The difference between program participant and the general population numbers is explained in part by the relative number of smokers who go on to quit smoking using no formal mechanism, interventions taking place outside formal Strategy channels and indirect interventions including tobacco tax and smoke-free spaces.

In this next section, we present data on a variety of cessation indicators – including quit rates, quit intentions and quit attempts – from a population-level perspective. The sources of the population-level data are the 2016 Centre for Addiction and Mental Health Monitor and the 2015 Canadian Community Health Survey. At the time of writing, data from the Canadian Community Health Survey were only available for 2015 even though Statistics Canada has released select 2016 results.

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 2015 CCHS,[xix] 6.8% 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 1.4% of previous-year smokers remained smoke-free for the subsequent 12 months (Table 5-19). During the period 2007-2015, there have been only slight changes and no substantial increase in the recent quit rate among Ontarians aged 12 years and older.

Table 5-19: Annualized (Recent) Quit Rate among Past-Year Smokers, by Duration of Quit, Ontario, 2007 to 2015

Year	Recent Quit Rate (95% CI)	Adjusted Quit Rate
2007	8.6 (7.4, 9.8)	1.8
2008	10.3 (8.5, 12)	2.2
2009	7.2 (6.0, 8.4)	1.5
2010	6.4 (5.4, 7.4)	1.3
2011	7.4 (6.1, 8.7)	1.6
2012	7.6 (6.1, 9.2)	1.6
2013	7.9 (6.0, 9.2)	1.7
2014	7.9 (6.3, 9.5)	1.7
2015	6.8 (5.5, 8.5)	1.4

Source: Canadian Community Health Survey 2007- 2015.

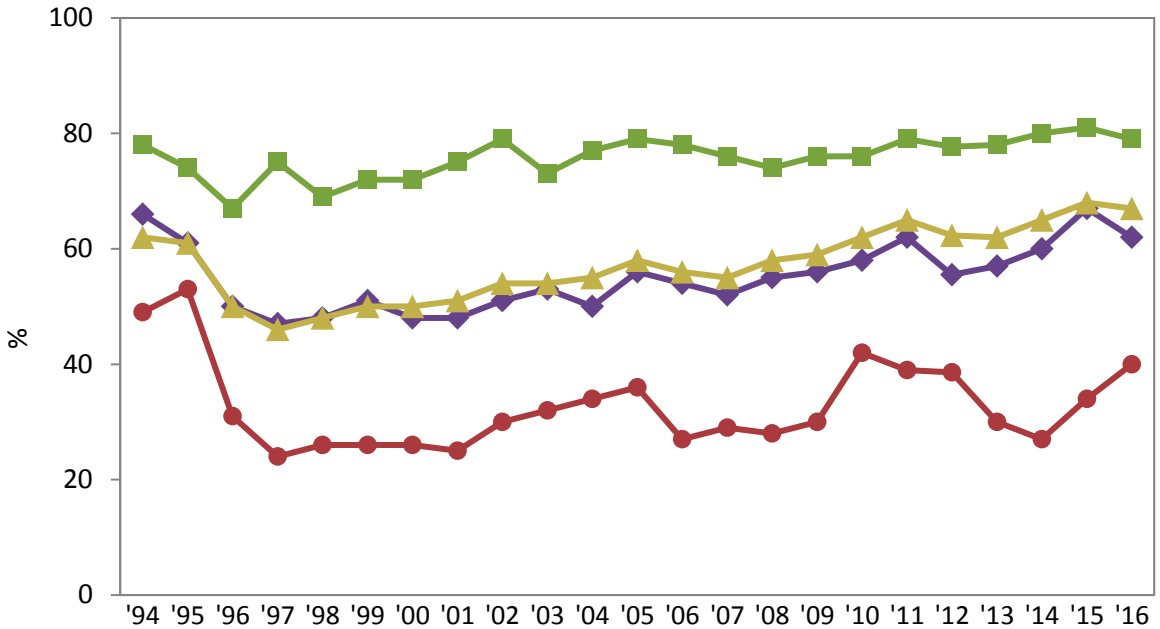
Lifetime Quit Ratio

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 2016, 67% of adults who had ever smoked had quit for at least 30 days at the time of the survey (Figure 5-3).
- Adults aged 18 to 34 had the lowest ratio of quitting (40%) among all ever smokers.
- In recent years, there has been significant change in quit ratios.

[xix] The 2016 and 2017 Canadian Community Health Survey data files were not available when this report was prepared.

Figure 5-3: Quit Ratio (Former Smokers as a Proportion of Ever Smokers), by Age, Ontario, 1994 to 2016



	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16
55+	78	74	67	75	69	72	72	75	79	73	77	79	78	76	74	76	76	79	78	78	80	81	79
35-54	66	61	50	47	48	51	48	48	51	53	50	56	54	52	55	56	58	62	56	57	60	67	62
18-34	49	53	31	24	26	26	26	25	30	32	34	36	27	29	28	30	42	39	39	30	27	34	40
All adults	62	61	50	46	48	50	50	51	54	54	55	58	56	55	58	59	62	65	62	62	65	68	67

Source: Centre for Addiction and Mental Health Monitor 1994–2016.
Note: Full data table for this graph provided in the Appendix (Table 5A-2).

Quit Duration

- In 2016, 8% of former smokers (or 217,867 people) reported quitting between one and 11 months ago, 15% of former smokers quit between one and five years ago and 77% quit smoking more than five years ago (CAMH Monitor 2016, data not shown). This is unchanged in recent years.

Short and Intermediate-Term Outcomes

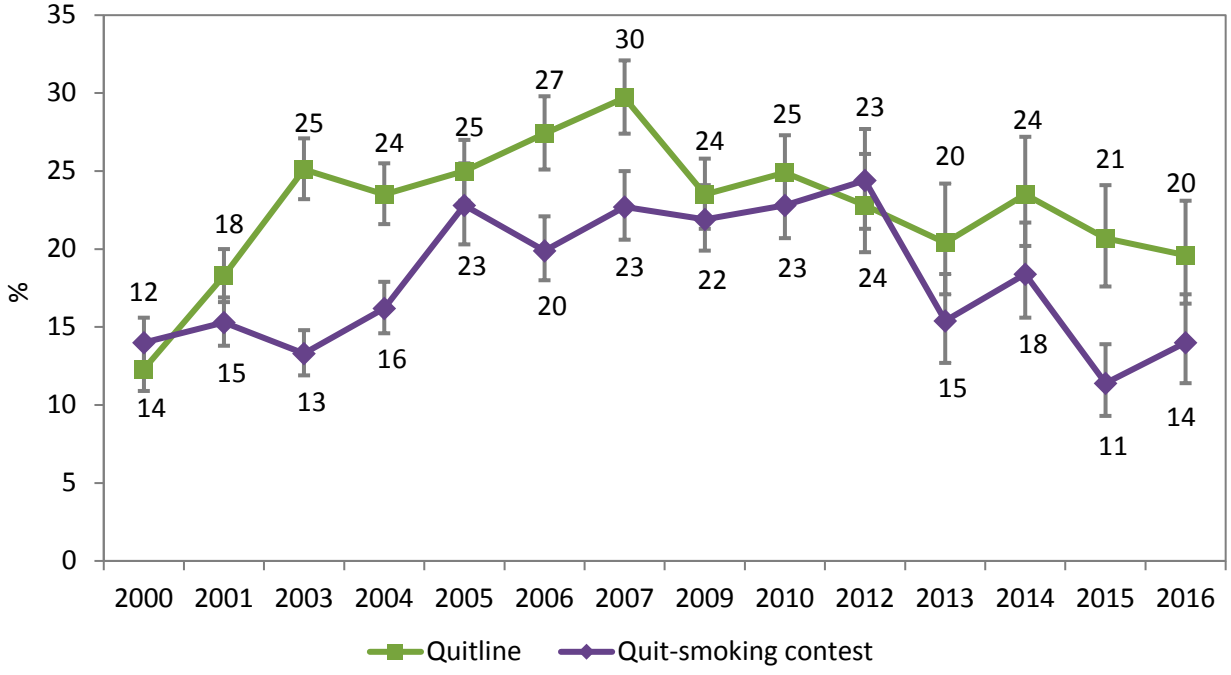
As suggested by the Cessation Path Logic Model (Figure 5-1), to reach desired cessation outcomes, the Strategy must increase the awareness and use of evidence-based cessation initiatives, decrease cigarette consumption, increase the proportion of smokers intending to quit and increase the prevalence and actual number of quit attempts.

Awareness and Use of Quit Aids

Awareness of Quit Programs

- In 2016, 20% of Ontarians 18 years and older were aware of a 1-800 quitline. The level of awareness was similar to what was reported in both 2015 (21%) and 2012 (23%; Figure 5-4).
- Awareness of a quitline differed by smoking status in 2016: 35% of current smokers were aware compared to 19% of former smokers and 17% of never-smokers (CAMH Monitor; data not shown).
- Among Ontarians aged 18 years or over in 2016, 14% reported being aware of a quit-smoking contest, which was similar to the level of awareness reported in 2015 (11%). However, compared to 2012, the level of reported awareness of quit-smoking contests decreased in 2015 (14% vs. 24%, respectively; Figure 5-4).
- Awareness of a quit-smoking contest also differed by smoking status in 2016: 23% (interpret with caution: subject to moderate sampling variability) of current smokers were aware compared to 12% (interpret with caution: subject to moderate sampling variability) of former smokers and 13% of never smokers (CAMH Monitor; data not shown).

Figure 5-4: Awareness of a 1-800 Quitline (Past 30 Days) and Awareness of a Quit Smoking Contest (Past 30 Days), Ages 18+, Ontario, 2000 to 2016

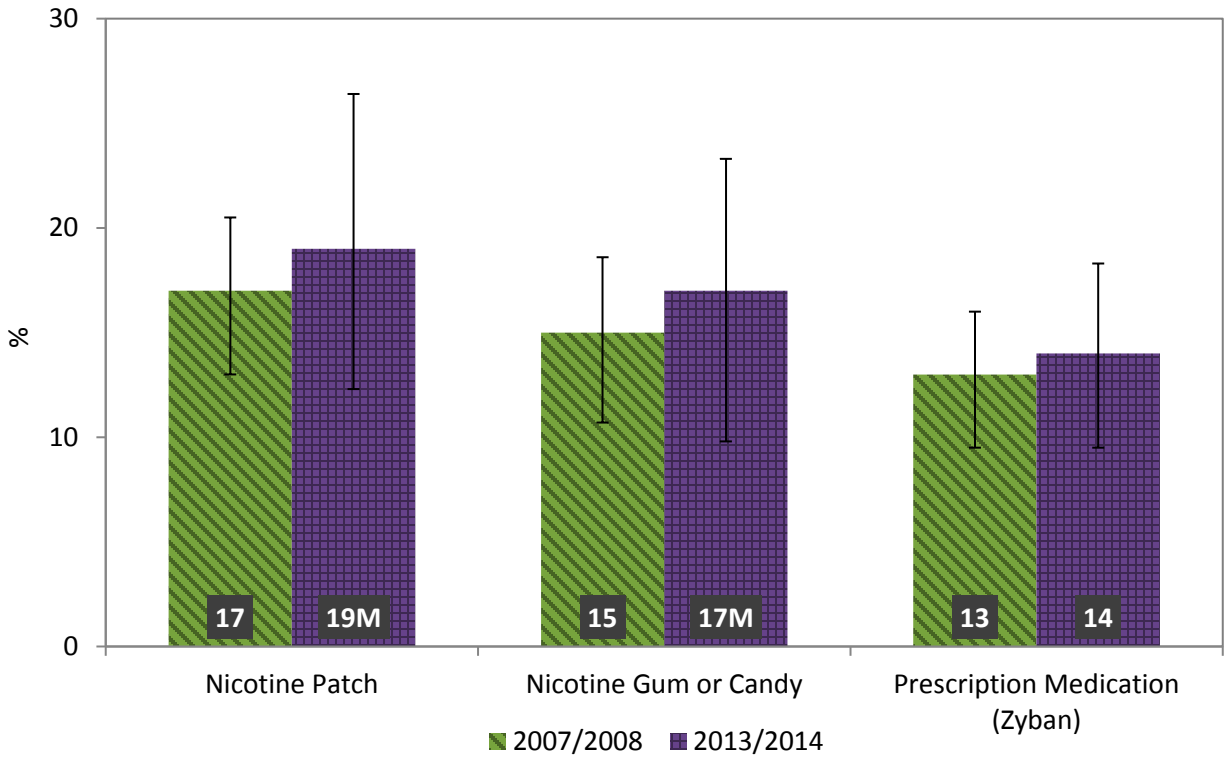


Note: Vertical lines represent 95% confidence intervals. Survey question not asked uniformly over reporting period. Full data table for this graph provided in the Appendix (Table 5A-3) and (Table 5A-4).
Source: Centre for Addiction and Mental Health Monitor 2000, 2001, 2003-2007, 2009, 2010, 2012-2016.

Use of Quit Aids

- In recent years, there has been no change in the use of nicotine gum (17% in 2013/2014 vs. 15% in 2007/2008) or the nicotine patch (19% in 2013/2014 vs. 17% in 2007/2008) among former smokers who quit within the past year (CCHS data; Figure 5-5).[xx]
- In 2013/2014, 14% of recent quitters in Ontario aged 18 years and older representing 21,700 former smokers used a product such as Zyban,™ similar to the 13% reported in 2007/2008 (Figure 5-5) (Note: 1.2% of eligible smokers–or 22,840–received Zyban™ or Champix™ through the ODB Pharmacy program in 2016/17).

Figure 5-5: Use of Smoking Cessation Aids (Past Year), Ages 18+, Ontario, 2007/08 and 2013/14



Note: M = Interpret with caution: subject to moderate sampling variability. Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 5A-5).
Source: Canadian Community Health Survey 2007, 2008, 2013, 2014.

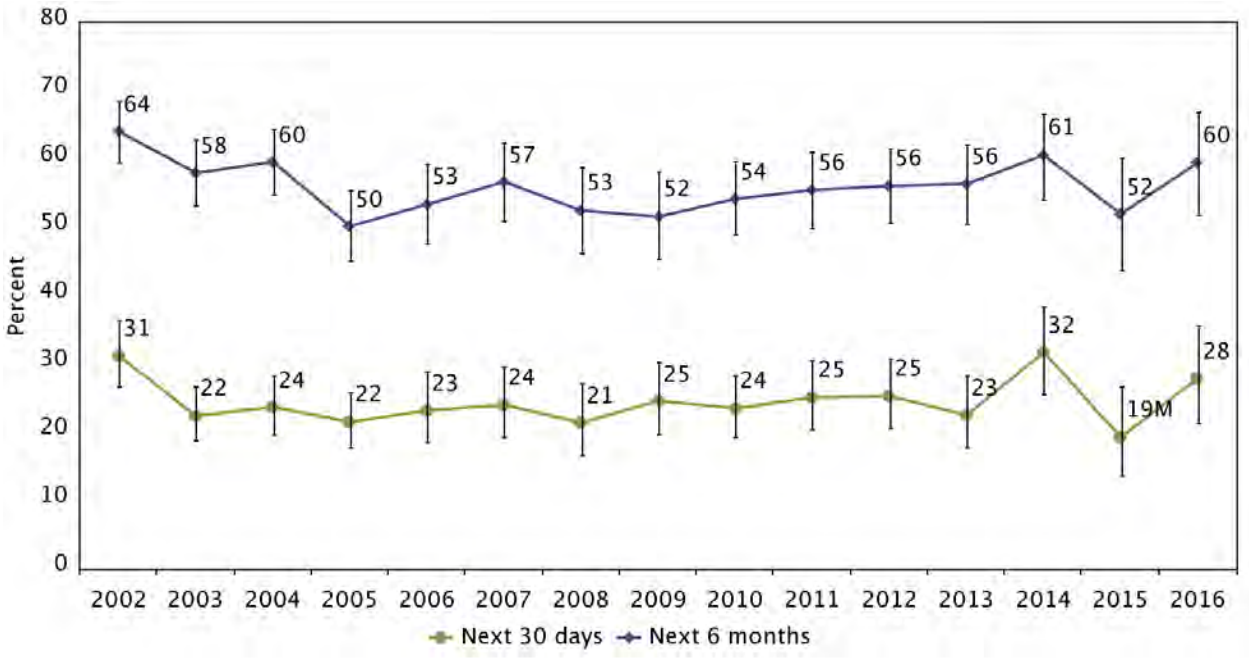
[xx] The combined 2015/16 Canadian Community Health Survey data was not available when this report was prepared.

Quitting Behaviour

Intentions to Quit

- In 2016, more than half of all smokers intended to quit in the next six months (60%), which is unchanged compared to 2015 (52%) and 2012 (56%; CAMH Monitor data; Figure 5-6).
- The prevalence of 30-day quit intentions among Ontario smokers in 2016 was 28%, which is statistically similar to what was reported in 2015 (19%) and 2012 (25%).

Figure 5-6: Intentions to Quit Smoking in the Next Six Months and Next 30 Days, Ages 18+, Ontario, 2002 to 2016

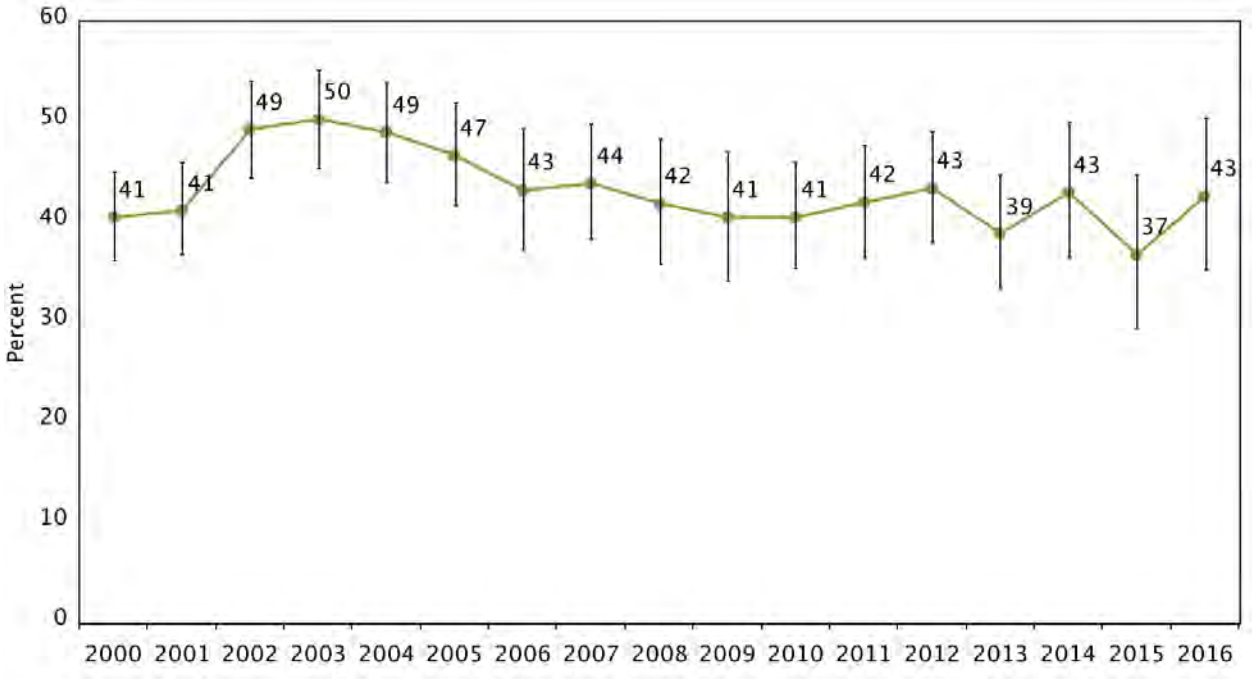


Note: M = Interpret with caution: subject to moderate sampling variability. Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 5A-6) and (Table 5A-7).
Source: Centre for Addiction and Mental Health Monitor 2002–2016.

Quit Attempts

- In 2016, four in ten smokers (43%) made one or more serious quit attempt in the past year (CAMH Monitor data; Figure 5-7).
- Over the last decade, there has been no statistically significant change in the proportion of adult smokers making quit attempts.

Figure 5-7: One or More Quit Attempts in the Past Year, Current Smokers, Ages 18+, Ontario, 2000 to 2016



Note: Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 5A-8).
Source: Centre for Addiction and Mental Health Monitor 2000-2016.

Scientific Advisory Committee: Overview of Potential Contribution of Cessation Interventions

The updated Smoke-Free Ontario Scientific Advisory Committee report, *Evidence to Guide Action: Comprehensive Tobacco Control in Ontario (2016)*,[7] outlined the potential contributions of 21 cessation-related interventions. Below is a summary of the high, innovative and moderate potential contributions related to cessation outcomes, including an assessment of the current status of SFO cessation initiatives related to each potential contribution (Table 5-20)

Table 5-20: Scientific Advisory Committee Potential Contributions Related to Cessation Outcomes

Intervention	Current Status
High Potential Contribution – Intensify	
Banning Flavours in Tobacco Products *(Tobacco Industry assessment)*	The *Smoke-Free Ontario Act* imposes severe restrictions on the sale of flavoured tobacco, including menthol. However, exemptions still allow the sale of any flavoured cigar weighing over 6 grams; wine, port, whiskey or rum flavoured cigars weighing 1.4 grams – 5.9 grams; and flavoured pipe tobacco.
Price and Taxation	Despite a small increase making up for inflation in 2017, Ontario continues to have the second lowest retail price ($102.40) and total tobacco tax ($66.29) for tobacco products compared to other Canadian provinces and territories.
Smoke-Free Policies	The *Smoke-Free Ontario Act* provides broad protection from secondhand smoke in indoor settings, while providing limited protection in outdoor settings. A number of outdoor settings (e.g., parks and trails, beaches) and alternative products (e.g., non-tobacco hookah) are not currently included in the *Smoke-Free Ontario Act* resulting in a patchwork of local bylaws providing additional coverage across the Province.
Mass Media	Ontario ran two campaigns in early 2017, which is an increase from the single campaign that ran in 2016. The 2017 campaigns encouraged young adults and adults to not give up trying to quit smoking. Both campaigns were limited in their duration and intensity.
Technology-Based Interventions: Internet/Computer and Text Messaging	A total of 5,906 smokers were reached through Smokers' Helpline Online and Smokers' Helpline Text in 2016/17 (or 0.3% of all smokers aged 18+). This is an increase from the 4,228 of smokers reached in 2015/16.

Intervention	Current Status
Hospital-Based Cessation Interventions	A total of 17,036 smokers were reached through the Ottawa Model in Hospitals and Specialty Care program in 2016/17 (or 0.9% of all smokers aged 18+). This is an increase from the 14,114 smokers reached in 2015/16. The number of hospitals that implemented the Ottawa Model also increased (83 in 2015/16 vs. 87 in 2016/17), representing approximately 60% of the hospitals in the Province. It is unknown how many hospitals outside of the Ottawa Model program offer at least brief cessation interventions.
Other Health Care Setting Cessation Interventions	A total of 226,312 smokers were reached through the STOP Program, Ottawa Model in Primary Care and Smoking Cessation by Family Physicians in 2016/17 (or 11.9% of all smokers aged 18+). This is a decrease from the 228,869 smokers reached in 2015/16.
Pharmacotherapy	A total of 55,484 smokers were reached through STOP, Leave The Pack Behind and the Ontario Drug Benefit program in 2016/17 (or 2.9% of all smokers aged 18+).This is an increase from the 51,735 smokers reached through direct pharmacotherapy interventions in 2015/16. Of the interventions offering free pharmacotherapy, Leave The Pack Behind and STOP on the Road are the only interventions that are offered to all Ontarians who access the intervention. Eligibility of the other programs is limited to patients enrolled in select practice settings (STOP in Community Health Centres, Family Health Teams, Addiction Agencies, Aboriginal Health Access Centre, and Nurse Practitioner-Led Clinics) or programs (Ontario Drug Benefit).
Behavioural Interventions	A total of 202,509 smokers were reached through Ottawa Model in Primary Care, Pharmacy Smoking Cessation, Smoking Cessation by Family Physicians and Leave The Pack Behind in 2016/17 (or 10.6% of all smokers aged 18+). This is a decrease from the 207,576 smokers reached in 2015/16.
High Potential Contribution – Continue	
Bans on Point of Sale Displays *(Youth Prevention assessment)*	The *Smoke-Free Ontario Act* has banned the display of tobacco products at the retail and wholesale levels since May 1, 2008.
Innovative Potential Contribution	
Cessation Maintenance	Self-help programs and behavioural counselling programs support participants from relapsing. A total of 85,529 smokers were reached through Leave The Pack Behind's counselling and self-help materials, Ontario Drug Benefit program counselling, public health units,

Intervention	Current Status
	Smokers' Helpline, and follow-up visits from the Smoking Cessation by Family Physicians intervention in 2016/17 (or 4.5% of all smokers aged 18+). The degree to which each intervention offers relapse prevention varies by program.
Reducing the Availability of Tobacco Products *(Youth Prevention assessment)*	The sale of tobacco products is currently banned in nine settings in Ontario: provincial government buildings, vending machines, pharmacies, public and private hospitals, health care facilities, residential care facilities, schools, post-secondary schools and child care facilities. No restrictions have been placed on retailers selling tobacco products in areas near schools, campuses or recreation centres.
Moderate Potential Contribution - Intensify	
Workplace-Based Interventions	Workplace-based interventions have been implemented across the Province. However the extent of the interventions and reach in 2016/17 is unknown.
Campus-Based Interventions	A total of 31,312 smokers were reached through all of Leave The Pack Behind's programs in 2016/17 (or 8.3% of all smokers aged 18-29 years). This is an increase from the 30,440 smokers reached in 2015/16. Progress was made this year when McMaster University implemented a 100% smoke-free campus policy as of January 1, 2018.
Quitlines with Cessation Telephone Support	In total 7,079 smokers were reached through Smokers' Helpline in 2016/17 (or 0.4% of all smokers aged 18+). This is a decrease from the 7,161 smokers reached in 2015/16.
Financial Incentives	A total of 9,402 smokers were reached through the First Week Challenge Contest and Leave The Pack Behind's wouldurather… contest in 2016/17 (or 0.5% of all smokers aged 18+). This is a decrease from the 10,606 smokers reached in 2015/16.
Moderate Potential Contribution - Continue	
Self-Help Materials	In general, all cessation interventions offer self-help materials, including materials tailored for specific sub-populations (e.g., pregnant women, LGBTQ). In total of 334,423 smokers were reached through all cessation interventions in 2016/17 (or 17.6% of all smokers aged 18+). This is an increase from the 324,225 smokers reached in 2015/16.

Executive Steering Committee: Overview of Priority Actions for Cessation

The *Smoke-Free Ontario Modernization* report[8] outlined a number of priority actions to motivate and support more Ontarians who smoke to quit and stay quit. Below is a summary of priority actions related to cessation outcomes, including an assessment of how the current SFO initiatives address the priority actions (Table 5-21).

Table 5-21: Executive Steering Committee Priority Actions Related to Cessation Outcomes

Priority Actions	Current Status
1.2 Reduce the availability of tobacco in retail settings *(Tobacco Industry priority action)*	
1.2.1 Use provincial and municipal legislation, zoning restrictions and licensing fees to reduce the number and density of retail tobacco vendors	Tobacco continues to be sold seven days a week, 24 hours a day in some 10,000 outlets with almost no zoning restrictions.
2.1 Create environments that encourage and support quitting	
Maintain and intensify all efforts to create environments that make quitting the easy and obvious choice • Tobacco taxes • Smoke-free policies • Multi-year mass media and social marketing campaigns • Telephone quitline • Ban on point of sale displays	Ontario continues to have the second lowest retail price ($102.40) and total tobacco tax ($66.29) for tobacco products compared to other Canadian provinces and territories. The *Smoke-Free Ontario Act* provides broad protection from secondhand smoke in indoor settings, while providing limited protection in outdoor settings. Ontario ran two campaigns in early 2017 encouraging young adults and adults to not give up trying to quit smoking. Both campaigns were limited in their duration and intensity. Ontario continues to offer cessation assistance through Smokers' Helpline. The *Smoke-Free Ontario Act* has banned the display of tobacco products at the retail and wholesale levels since May 1, 2008.

Priority Actions	Current Status
2.2 Implement a visible network of high quality, person-centred cessation services	
2.2.1 Organize all cessation services into a network that people who smoke can access easily • Organize all population-based, community-based and health care-based cessation services into a network • Network will make it possible to differentiate and target services to meet diverse needs and make effective use of all cessation resources. • A coordinated system will ensure that individuals get the supports to meet their individual needs and, when one support or service ends (e.g., hospital-based intervention), another support (e.g., community support group) is in place if required (i.e., continuity of care and follow up).	Not implemented
2.2.2 Require all health care settings to embed smoking cessation best practices • Every interaction between someone who smokes and a health care provider is an opportunity to help that person quit • Regardless of where people have contact with the health care system – their primary care provider, a hospital, a workplace cessation program, the pharmacist, a cancer centre – they should be able to access cessation services.	Not implemented – A limited number of primary care settings are enrolled in the STOP and/or Ottawa Model cessation interventions. It is unknown how many other primary care settings across the Province offer smoking cessation interventions.
2.2.3 Shift to an opt-out approach to smoking cessation in health care settings • Health providers immediately provide initial cessation or treatment services – unless the person "opts out".	Not implemented
2.2.4 Maintain and enhance robust clinical standards for smoking cessation • Current best practice guidelines (e.g., CAN-	Through TEACH and RNAO, over 9,000 health care practitioners have been trained in smoking cessation interventions since 2006, including best practice

Priority Actions	Current Status
ADAPTT, RNAO) are not applied consistently by all health providers or in all health care settings or cessation programs • More effective implementation of evidence-based guidelines to meet clinical standards would significantly enhance the quality and consistency of cessation services as well as their impact and effectiveness. • Standards would also help reinforce the critical role that all health care providers should be playing in addressing nicotine addiction and ending the tobacco epidemic in Ontario.	guidelines. It is unknown the total number of health care practitioners across the Province who apply clinical best practice smoking cessation guidelines in their daily practice.
2.2.6 Explore the potential of non-combustible nicotine delivery systems (e.g., electronic cigarettes) to reduce harm for people who are unable to unwilling to quit smoking • Taking the smoke out of tobacco use will significantly reduce harm.	The Ontario Tobacco Research Unit's *Research on Electronic Cigarettes and Waterpipe* study, funded through the Ministry of Health and Long-Term Care's Health Systems Research Fund, is currently exploring the use of non-combustible nicotine delivery systems.
2.3 Ensure equity and improve the patient experience	
2.3.1 Provide cost-free pharmacotherapy based on clinical standards and individual needs • One of the greatest barriers to people participating in smoking cessation programs is the cost of cessation pharmacotherapies. • To increase the likelihood that people who smoke will quit and stay quit, the system should provide equitable access to free cessation pharmacotherapies for the length of time each person requires based on individual needs.	A total of 55,484 smokers were reached through STOP, Leave The Pack Behind and the Ontario Drug Benefit program in 2016/17 (or 2.9% of all smokers aged 18+).This is an increase from the 51,735 smokers reached through direct pharmacotherapy interventions in 2015/16.
2.3.2 Provide targeted population-based cessation services • Certain groups have higher rates of smoking, such as: o Ontarians with low income o Ontarians with less formal education o Indigenous people	In total 45,860 smokers were reached through public health units, the Aboriginal Tobacco Program, STOP on the Road, Leave The Pack Behind and the Ontario Drug Benefit Program in 2016/17 (or 2.4% of all smokers 18+). This is an increase from the 44,634 reached in 2015/16.

Priority Actions	Current Status
○ People working in certain occupations (e.g., trades) ○ Young men ○ People with mental health needs ○ Members of the LGBTQ community • Develop targeted programs and services that actively engage populations with high rates of smoking. • The programs should identify effective motivational techniques and messages, supports and interventions for each group, and deliver services where these groups are (e.g., in workplaces to reach those working in industries with high rates of smoking as well as young adults with lower incomes).	
2.3.3 Use population-based behavioural technologies to reach more tobacco users • Leverage and expand all these services and technologies (telephone helplines, interactive internet/computer and text messaging interventions) to: ○ Reach more Ontarians of all ages ○ Triage people to the right services ○ Improve access to pharmacotherapy, and ○ Engage them throughout the quitting process and for some time after to prevent relapse.	A total of 5,906 smokers were reached through Smokers' Helpline Online and Smokers' Helpline Text in 2016/17 (or 0.3% of all smokers aged 18+). This is an increase from the 4,228 of smokers reached in 2015/16.

Chapter Summary

There are close to two million smokers in Ontario. The proportion of Ontario's smokers who successfully quit each year (defined here as 12-month abstinence) is estimated to be 1.4%. While 7% of Ontario's smokers report quitting for 30 days or more at some point in the past year, Ontario data suggest that 79% of these recent quitters relapse during the year. In order to achieve a five percentage-point decrease in the prevalence of smoking over five years (with past 30-day prevalence currently at 16%), the proportion of smokers who successfully quit needs to at least double.

Evidence indicates that population-level policy interventions can be highly effective in achieving cessation outcomes. Price is one of the most effective policy tools to promote cessation. Despite a tobacco tax increase in 2017, tobacco taxes in Ontario remain among the lowest in Canada. 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,[55] we have already achieved most of the short-term benefits of this policy tool in regard to quitting behaviour. Nevertheless, increased compliance with indoor and recent outdoor bans will undoubtedly positively impact some smokers in these settings to become nonsmokers.

Progress is being made on some key cessation interventions identified from the 2016 Scientific Advisory Committee report including:

- Smoke-free policies
- Mass media
- Technology-based interventions
- Behavioural interventions
- Cessation maintenance
- Campus-based interventions
- Quitlines with cessation telephone support

In addition, the Smoke-Free Ontario Strategy did fund interventions that address a couple of the Executive Steering Committee's priority actions for cessation such as: ensuring providers have the core skills and competencies to provide high quality evidence-based cessation services and

providing targeted population-based cessation services.

Despite considerable investment in capacity building and in funding of clinical cessation services, Ontario continues to fall short on seven cessation system policies recommended by the Executive Steering Committee:

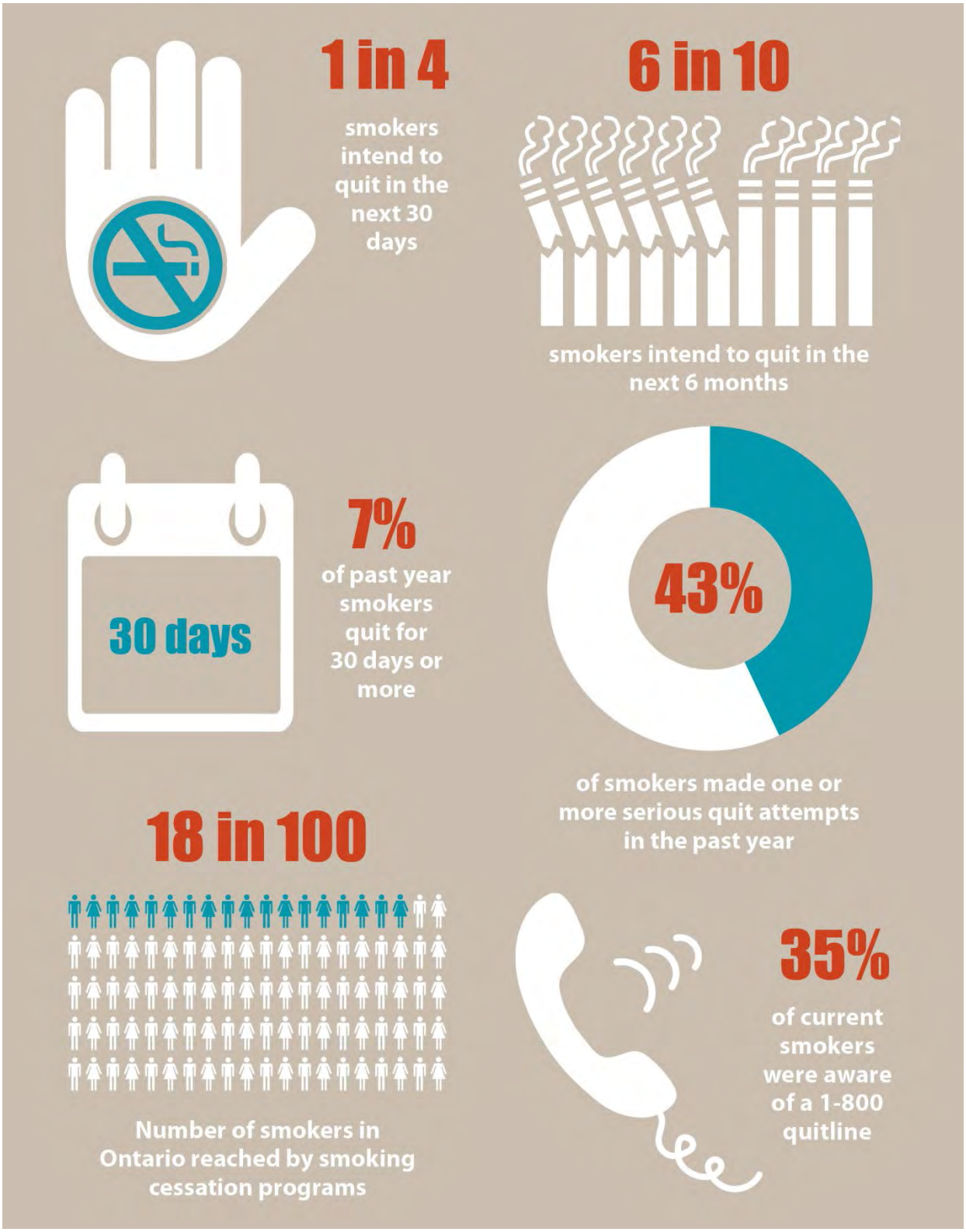
1. Organize all cessation services into a network that people who smoke can access easily
2. Require all health-care settings to embed smoking cessation best practices
3. Shift to an opt-out approach to smoking cessation in health-care settings
4. Maintain and enhance robust clinical standards for smoking cessation
5. Explore the potential of non-combustible nicotine delivery systems (e.g., electronic cigarettes) to reduce harm for people who are unable to unwilling to quit smoking
6. Provide cost-free pharmacotherapy based on clinical standards and individual needs
7. Use population-based behavioural technologies to reach more tobacco users

Ongoing, comprehensive social marketing campaigns are a vital ingredient for promoting quit intentions and quit attempts.[56] Over recent years, Ontario has begun investing more in marketing campaigns, starting with the Quit the Denial campaign in 2013 followed by the 2016 Don't Quit Quitting campaign. Existing publicly available information suggests that neither campaign has been of sufficient duration and intensity and with adequate communication about cessation services and programs.[7] Future province-wide campaigns should be sustained over longer periods to maximize the impact of quit attempts among smokers in the Ontario population.

Provincial cessation support services (Smokers' Helpline, the STOP Program, LTPB, the Ottawa Model, the Ontario Drug Benefit program, YATI's NOT program, and the First Week Challenge Contest) reach approximately 18% 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.

The Executive Steering Committee report makes clear that to achieve substantial gains in the proportion of smokers who quit for good, it is essential to adopt population level policies that considerably increase the cost of tobacco to consumers, decrease access and availability to places where tobacco can be purchased and further limit places where smoking is permitted.

Visual Summary of Key Cessation Indicators



Appendix: Data Tables

Table 5A-1: Proportion of Smokers Reached by Ontario Smoking Cessation Interventions, 2011/12 to 2016/17

Year	Excluding Smoking Cessation by Family Physicians		Including Smoking Cessation by Family Physicians	
	Number of Smokers Reached	Proportion of Smokers Reached (%)	Number of Smokers Reached	Proportion of Smokers Reached (%)
2011/12	73,605	4	276,668	14
2012/13	95,351	5	287,887	14
2013/14	116,152	6	304,990	16
2014/15	139,431	8	329,567	18
2015/16	128,881	7	324,225	17
2016/17	142,212	8	334,423	18

Note: Data table is for Figure 5-2.

Table 5A-2: Quit Ratio (Former Smokers as a Proportion of Ever Smokers), by Age, Ontario, 1994 to 2016

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

Year	55+ (%)	35-54 (%)	18-34 (%)	All Adults (%)
2012	78	56	39	62
2013	78	57	30[M]	62
2014	80	60	27[M]	65
2015	81	67	34	68
2016	79	62	40	67

Note: M = Interpret with caution: subject to moderate sampling variability. Vertical lines represent 95% confidence
Source: Centre for Addiction and Mental Health Monitor 1994-2016.
Note: Data table is for Figure 5-3.

Table 5A-3: Awareness of a 1-800 Quitline (Past 30 Days), Ages 18+, Ontario, 2000 to 2016

Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2000		12.3	10.9	13.8
2001		18.3	16.6	20.0
2003		25.1	23.2	27.1
2004		23.5	21.6	25.5
2005		25.0	23.1	27.0
2006		27.4	25.1	29.8
2007		29.7	27.4	32.1
2009		23.5	21.3	25.8
2010		24.9	22.7	27.3
2012	2,313,900	22.8	19.8	26.1
2013	1,914,800	20.4	17.1	24.2
2014	2,415,700	23.5	20.2	27.2
2015	2,124,500	20.7	17.7	24.1
2016	2,050,600	20	16.5	23.1

Source: Centre for Addiction and Mental Health Monitor 2000, 2001, 2003-2007, 2009, 2010, 2012, 2013, 2016.
Note: Data table is for Figure 5-4.

Table 5A-4: Awareness of a Quit Smoking Contest (Past 30 Days), Ages 18+, Ontario, 2000 to 2016

Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2000		14	12.6	15.6
2001		15.3	13.8	16.9
2003		13.3	11.9	14.8
2004		16.2	14.6	17.9

Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2005		22.8	20.3	25.5
2006		19.9	18	22.1
2007		22.7	20.6	25
2009		21.9	19.9	24.1
2010		22.8	20.7	25.2
2012	2,470,000	24.4	21.3	27.7
2013	1,440,300	15.4	12.7	18.4
2014	1,893,200	18.4	15.6	21.7
2015	1,171,400	11.41	9.3	13.93
2016	1,467,600	14	11.4	17.1

Source: Centre for Addiction and Mental Health Monitor 2000, 2001, 2003-2007, 2009, 2010, 2012-2016.
Note: Data table is for Figure 5-4.

Table 5A-5: Use of Smoking Cessation Aids (past year), Ages 18+, Ontario, 2007/08 and 2013/14

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

Note: M = Interpret with caution: subject to moderate sampling variability. Data table is for Figure 5-5.
Source: Canadian Community Health Survey 2007, 2008, 2013, 2014.

Table 5A-6: Intentions to Quit Smoking in the Next Six Months, Ages 18+, Ontario, 2002 to 2016

Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2002		64.1	59.4	68.5
2003		58.0	53.1	62.8
2004		59.6	54.7	64.4
2005		50.2	45.1	55.4
2006		53.4	47.5	59.2
2007		56.7	50.8	62.4
2008		52.5	46.2	58.7

Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2009		51.6	45.2	58.0
2010		54.2	48.8	59.6
2011		5.5	49.8	61.0
2012	918,200	56.1	50.6	61.5
2013	936,900	56.4	50.4	62.2
2014	884,300	60.6	54.0	66.7
2015	705,900	52.0	43.7	60.2
2016	842,400	59.5	51.7	66.9

Source: Centre for Addiction and Mental Health Monitor 2000, 2001, 2003-2007, 2009, 2010, 2012-2016
Note: Data table is for Figure 5-6.

Table 5A-7: Intentions to Quit Smoking in the Next 30 Days, Ages 18+, Ontario, 2002 to 2016

Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2002		31.2	26.6	36.3
2003		22.4	18.7	26.7
2004		23.7	19.6	28.3
2005		21.5	17.7	25.8
2006		23.2	18.5	28.8
2007		24.0	19.2	29.5
2008		21.4	16.6	27.1
2009		24.6	19.6	30.3
2010		23.5	19.3	28.3
2011		25.1	20.4	30.5
2012	414,500	25.3	20.6	30.7
2013	373,200	22.5	17.7	28.1
2014	462,300	31.7	25.6	38.4
2015	261,400	19.3	13.6	26.6
2016	394,600	27.9	21.2	35.7

Source: Centre for Addiction and Mental Health Monitor 2000, 2001, 2003-2007, 2009, 2010, 2012-2016.
Note: Data table is for Figure 5-6.

Table 5A-8: One or More Quit Attempts in the Past Year, Current Smokers, Ages 18+, Ontario, 2000 to 2016

Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2000		40.5	36.1	45.0
2001		41.2	36.7	45.9
2002		49.3	44.5	54.1
2003		50.3	45.3	55.2
2004		49.0	43.9	54.0
2005		46.7	41.6	51.9
2006		43.2	37.2	49.3
2007		43.9	38.3	49.8
2008		41.9	35.8	48.3
2009		40.5	34.2	47.1
2010		40.5	35.3	46.0
2011		42.0	36.5	47.7
2012	700,600	43.4	38.0	49.1
2013	637,800	38.9	33.3	44.8
2014	623,800	43.0	36.5	49.9
2015	488,900	36.8	29.4	44.8
2016	590,500	42.6	35.2	50.4

Source: Centre for Addiction and Mental Health Monitor 2000-2016.
Note: Data table is for Figure 5-7.

References

[1] Chuang YC, Cubbin C, Ahn D, Winkleby MA. Effects of neighbourhood socioeconomic status and convenience store concentration on individual level smoking. *Journal of Epidemiology and Community Health* 2005 Jul;59(7):568-573.

[2] Reitzel LR, Cromley EK, Li Y, Cao Y, Dela Mater R, Mazas CA, et al. The effect of tobacco outlet density and proximity on smoking cessation. *American Journal of Public Health* 2011 Feb;101(2):315-320.

[3] Alesci NL, Forster JL, Blaine T. Smoking visibility, perceived acceptability, and frequency in various locations among youth and adults. *Preventive Medicine* 2003 Mar;36(3):272-281.

[4] Christakis NA, Fowler JH. The collective dynamics of smoking in a large social network. *New England Journal of Medicine* 2008 May 22;358(21):2249-2258.

[5] Alamar B, Glantz S. Effect of increased social unacceptability of cigarette smoking on reduction in cigarette consumption. *American Journal of Public Health* 2006 Aug;96(8):1359-1362.

[6] Stuber J, Galea S, Link BG. Smoking and the emergence of a stigmatized social status. *Social Science and Medicine* 2008 Aug;67(3):420-430.

[7] Smoke-Free Ontario. Scientific Advisory Committee, Ontario Agency for Health Protection and Promotion (Public Health Ontario). *Evidence to Guide Action: Comprehensive Tobacco Control in Ontario (2016).* Toronto, ON: Queen's Printer for Ontario, 2017. Accessed on December 18, 2017.

[8] Ontario Ministry of Health and Long-Term Care. *Smoke-Free Ontario Modernization: Report of the Executive Steering Committee.* Toronto, ON: Queen's Printer for Ontario, 2017. Accessed on November 30, 2017.

[9] Hoek J, Gifford H, Pirikahu G, Thomson G, Edwards R. How do tobacco retail displays affect cessation attempts? Findings from a qualitative study. *Tobacco Control* 2010 Aug;19(4):334-337.

[10] Institute of Medicine. *Ending the Tobacco Problem: A Blueprint for the Nation.* Washington: National Academies Press, 2007.

[11] Li L, Borland R, Yong H, Hitchman SC, Wakefield MA, Kasza KA, et al. The association between exposure to the point-of-sale anti-smoking warnings and smokers' interest in quitting and quit attempts: Findings from the International Tobacco Control Four Country Survey. *Addiction* 2012 Feb;107(2):425-433.

[12] IARC Working Group on the Evaluation of Carcinogenic Risks to Humans. *Tobacco Smoke and Involuntary Smoking.* IARC Monographs on the Evaluation of Carcinogenic Risk to Humans, Volume 83. Lyon: IARC Press, 2004. Accessed on January 11, 2018.

[13] Brownson RC, Hopkins DP, Wakefield MA. Effects of smoking restrictions in the workplace. *Annual Review of Public Health* 2002;23:333-348.

[14] Farkas AJ, Gilpin EA, Distefan JM, Pierce JP. The effects of household and workplace smoking restrictions on quitting behaviours. *Tobacco Control* 1999 Autumn;8(3):261-265.

[15] Shields M. Smoking bans: Influence on smoking prevalence. *Health Reports* 2007;18(3):9-24.

[16] Chaiton M, Diemert L, Zhang B, Kennedy RD, Cohen JE, Bondy SJ, et al. Exposure to smoking on patios and quitting: a population representative longitudinal cohort study. *Tobacco Control* 2016 Jan 1;25(1):83-8.

[17] Anderson SJ. Menthol cigarettes and smoking cessation behaviour: a review of tobacco industry documents. *Tobacco Control* 2011;20:ii49-ii56.

[18] Huang L-L, Baker HM, Meernik C, Ranney LM, Richardson A, Goldstein AO. Impact of non-menthol flavours in tobacco products on perceptions and use among youth, young adults and adults: a systematic review. *Tobacco Control* 2017; 26:709-719.

[19] Chaiton M, Schwartz R, Cohen J, Soule E, Eissenberg T. Association of Ontario's ban on menthol cigarettes with smoking behavior 1 month after implementation. *JAMA Internal Medicine* 2018 March 5 [epub ahead of print].

[20] Cohen JE, Anglin L. Outlet density: A new frontier for tobacco control. *Addiction* 2009 Jan;104(1):2-3.

[21] Ontario Ministry of Health and Long-Term Care. *Tobacco Inspection System* [Unpublished data], August 17, 2017.

[22] Chaiton MO, Mecredy GC, Cohen JE, Tilson ML. Tobacco retail outlets and vulnerable populations in Ontario, Canada. *International Journal of Environmental Research and Public Health* 2013 Dec 17;10(12):7299-309.

[23] Chaiton M, Mecredy G, Cohen J. Tobacco retail availability and risk of relapse among smokers who make a quit attempt: a population-based cohort study. *Tobacco Control* 2018;27:163-169.

[24] Bader P, Boisclair D, Ferrence R. Effects of tobacco taxation and pricing on smoking behavior in high risk populations: A knowledge synthesis. *International Journal of Environmental Research and Public Health* 2011 Nov;8(11);4118-4139.

[25] Chaloupka FJ, Cummings KM, Morley CP, Horan JK. Tax, price and cigarette smoking: Evidence from the tobacco documents and implications for tobacco company strategies. *Tobacco Control* 2002 Mar;11(Suppl 1):i62-i72.

[26] Chaloupka FJ, Grossman M. Price, tobacco control policies and smoking among young adults. *Journal of Health Economics* 1997 Jun;16(3):359-373.

[27] Gruber J, Sen A, Stabile M. Estimating price elasticities when there is smuggling: The sensitivity of smoking to price in Canada. *Journal of Health Economics* 2003 Sep;22(5):821-842.

[28] International Agency for Research on Cancer. *Effectiveness of Tax and Price Policies for Tobacco Control.* IARC Handbooks of Cancer Prevention, Volume 14. Lyon: IARC, 2011.

[29] Cavazos-Rehg P, Krauss M, Spitznagel E, Chaloupka F, Luke D, Waterman B., et al. Differential effects of cigarette price changes on adult smoking behaviours. *Tobacco Control* 2014 Mar;23(2):113-118.

[30] Chaloupka FJ, Pacula RL. The impact of price on youth tobacco use. In: National Cancer Institute. *Changing Adolescent Smoking Prevalence.* Smoking and Tobacco Control Monograph No. 14.

Bethesda: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute, 2001:193-199.

[31] Tauras JA. Public policy and smoking cessation among young adults in the United States. *Health Policy* 2004;68(3):321-332.

[32] United States Dept. of Health and Human Services. *Reducing Tobacco Use: A Report of the Surgeon General.* Atlanta: U.S. Department of health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2000.

[33] Schwartz R, Zhang B. Debunking the taxation–contraband tobacco myth. *Canadian Medical Association Journal* 2016 April; 188(6):401-402.

[34] Ontario Ministry of Finance. Tobacco Tax. Accessed on January 20, 2018.

[35] World Health Organization. *WHO Report on the Global Tobacco Epidemic, 2008: The MPOWER Package*. Geneva, SZ: WHO, 2008. Accessed on February 15, 2018.

[36] Leave The Pack Behind. *Leave The Pack Behind Final Report: April 1, 2016-March 31, 2017.* St. Catharines, ON: Brock University.

[37] Chaiton M, Bondy S, Cohen J, Schwartz R, Selby P. *Mass media campaigns, quit attempts, and risk of relapse: A longitudinal population-based study*. Poster presentation at the 22nd Annual Meeting of the Society for Research on Nicotine & Tobacco, Chicago, IL. March 2016.

[38] North American Quitline Consortium (NAQC). *Measuring Quit Rates. Quality Improvement Initiative.* NAQC Issue Paper. Phoenix: NAQC, 2009. Accessed on February 10, 2017.

[39] Zawertailo L, Dragonetti R, Bondy SJ, Victor JC, Selby P. Reach and effectiveness of mailed nicotine replacement therapy for smokers: six-month outcomes in a naturalistic exploratory study. *Tobacco Control* 2013 May:22(3):e4.

[40] Ontario Ministry of Health and Long-Term Care. *Ontario Public Drug Programs* [Unpublished data], September 11, 2017.

[41] Wong L, Burden AM, Liu YY, Tadrous M, Pojskic N, Dolovich L, et al. Initial uptake of the Ontario Pharmacy Smoking Cessation Program: Descriptive analysis over 2 years. *Canadian Pharmacy Journal* 2015 Jan;148(1):29-40.

[42] University of Ottawa Heart Institute. *Ottawa Model for Smoking Cessation in Primary Care: August 1, 2016 to July 31, 2017 Report.*

[43] Ontario Ministry of Health and Long-Term Care. *Ontario Public Health Standards, 2008 (Revised March 2017)*. Toronto, ON: Queen's Printer for Ontario, May 2016. Accessed on May 17, 2017.

[44] Smokers' Helpline. *Ontario Smokers' Helpline Activity Report, 2016-17*. Toronto, Ontario: Canadian Cancer Society, June 2017.

[45] North American Quitline Consortium. *Quitline Map*. Accessed on January 17, 2018.

[46] Health Canada, Tobacco Control Directorate. *Evaluation of the Pan-Canadian Toll-Free Quitline*

Initiative–Ontario Findings. February 2016.

[47] North American Quitline Consortium. Results from the FY2015 NAQC Annual Survey of Quitlines. February 2016. Accessed February 8, 2017.

[48] Ontario Ministry of Health and Long-Term Care. *Ontario Health Insurance Plan* [Unpublished data], October 24, 2017.

[49] Travis H, Lawrance K. A randomized controlled trial examining the effectiveness of a tailored self-help smoking cessation intervention for post-secondary smokers. *Journal of American College Health* 2009 Jan-Feb;57(4):437- 443.

[50] Taylor L, Lawrance K. *Outcome Evaluation of a Campus-Based Quit and Win Contest.* (Master's Thesis). St. Catharines: Brock University, 2013.

[51] Taylor L, Lawrance K, Kirkwood A. *Quit and Win Contests–Is Quitting the Only Option?* Poster presentation at the 19th Annual Meeting of the Society for Research on Nicotine & Tobacco, Boston, MA. March 2013.

[52] Youth Advocacy Training Institute/YATI. Final Activity Report 2016/2017. Toronto, ON: Lung Association, 2017.

[53] Kaufman P, Borland T, Diemert L, Schwartz R. *YATI Not-On-Tobacco (N-O-T) Evaluation.* Toronto, ON : Ontario Tobacco Research Unit, May 2017.

[54] Hughes JR, Keely J, Naud S. Shape of the relapse curve and long-term abstinence among untreated smokers. *Addiction* 2004 Jan;99(1):29-38.

[55] Non-smokers' Rights Association and Ontario Campaign for Action on Tobacco, as cited in: Ontario Tobacco Research Unit. *Indicators of OTS Progress.* [Special Reports: Monitoring and Evaluation Series, 2003-2004 (Vol. 10, No. 3)]. Toronto: Ontario Tobacco Research Unit, 2004.

[56] Durkin S, Brennan E, Wakefield M. Mass media campaigns to promote smoking cessation among adults: An integrative review. *Tobacco Control* 2012 Mar;21(2):127-138.

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:

Protection

Table of Contents

List of Tables

List of Figures

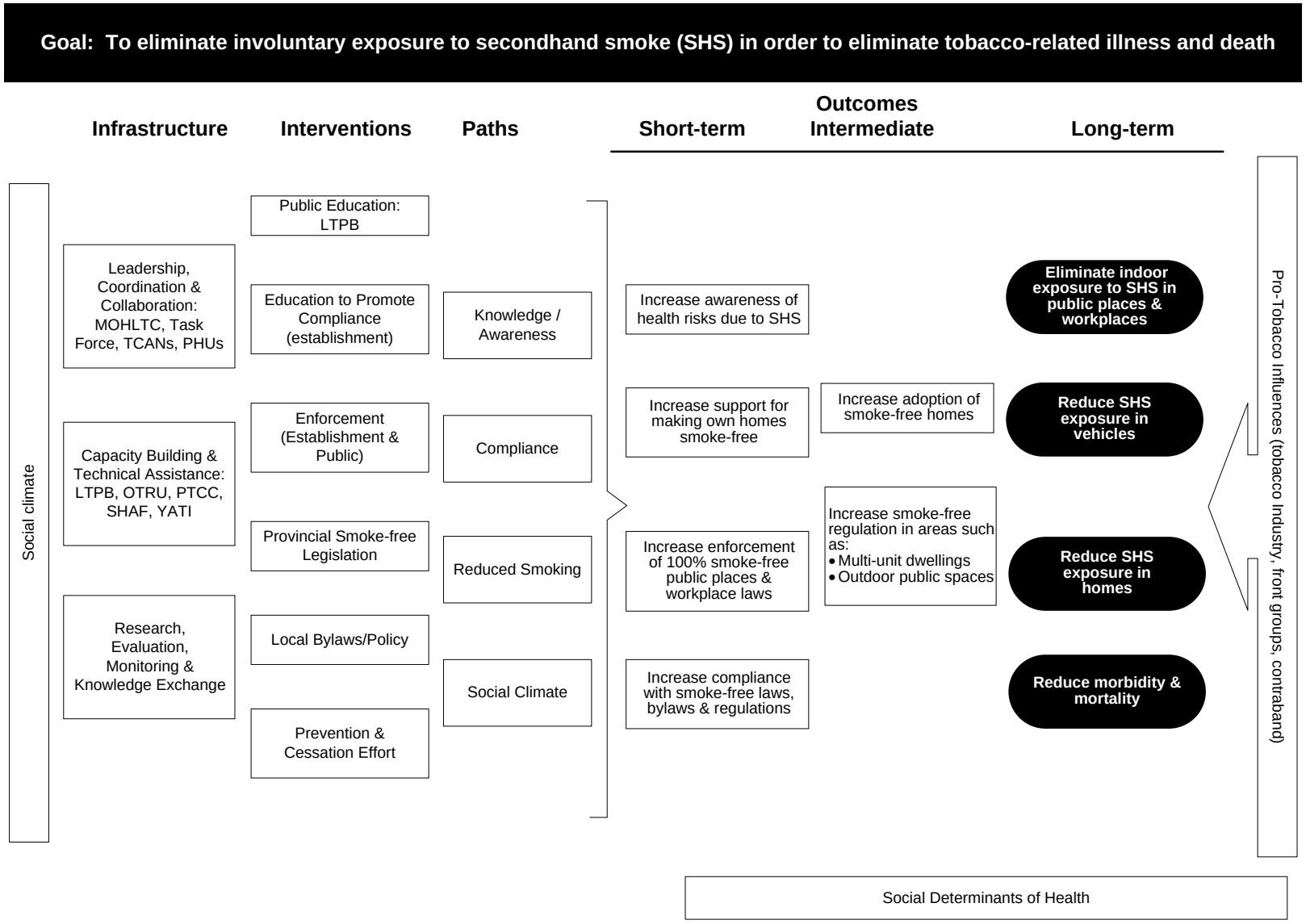
Protection: Smoke-Free Ontario Strategy Components

An important goal of tobacco control is to protect the population from exposure to tobacco smoke. Desired outcomes include eliminating nonsmokers' exposure to tobacco smoke in public places, workplaces, vehicles in which children are present and in the home. In Ontario, the protection component of the Smoke-Free Ontario (SFO) Strategy is the main avenue by which progress toward these desired outcomes is expected to be achieved (Figure 6-1). A secondary desired outcome of the protection goal is to reduce nonsmokers' social exposure to tobacco use (visual and sensory cues associated with the use of tobacco products).[1]

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

New this year, we highlight throughout the chapter the protection-related assessments from the Smoke-Free Ontario Scientific Advisory Committee report, *Evidence to Guide Action: Comprehensive Tobacco Control in Ontario (2016)*[1] and recommendations from the Executive Steering Committee report, *Smoke-Free Ontario Modernization*.[2] In addition, we have included summary tables at the end of the chapter that compare the current status of SFO-funded initiatives to the protection-related assessments and recommendations from the Scientific Advisory Committee and Executive Steering Committee reports.

Figure 6-1: Protection Path Logic Model



Protection Infrastructure

Several protection infrastructure components support the development and implementation of a variety of policies and services. To ensure success, the protection infrastructure system has been designed to build capacity, provide technical assistance, offer research and evaluation support to key stakeholders, and to deliver evidence-based policies and services to the public. Please refer to the summary presented in the Infrastructure chapter outlining the protection infrastructure activities delivered by several key organizations, including the Aboriginal Tobacco Program, Ontario Tobacco Research Network, Ontario Tobacco Research Unit, Program Training Consultation Centre, Public Health Units, Smoking and Health Action Foundation, Tobacco Control Area Networks and the Youth Advocacy Training Institute.

Protection Interventions

The main interventions for protection are smoke-free policies that aim to protect the public from harmful exposures to tobacco smoke.

The Scientific Advisory Committee assessed protection from tobacco smoke exposure in outdoor settings and in the workplace as having a high potential contribution towards protection.

The Scientific Advisory Committee assessed protection from tobacco smoke exposure in institutional settings, in hospitality settings and in vehicles as having a moderate potential contribution towards protection.

The Scientific Advisory Committee assessed the integration of e-cigarettes into smoke-free policies as having an innovative potential contribution towards protection.

As priority actions to establish more smoke-free spaces, the Executive Steering Committee identified amending the *Smoke-Free Ontario Act* to ban smoking of tobacco, shisha and cannabis:

- Within 9 metres of entrances, exits, windows and air intakes of public buildings
- In outdoor spaces on post-secondary campuses
- In outdoor workplaces

Smoke-Free Ontario Act

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

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

Before the *SFOA* came into force, nine out of ten Ontarians were covered by local smoke-free restaurant and bar bylaws (91% and 87%, respectively).[3] However, more than half of these bylaws (54%) allowed for designated smoking rooms.

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

In an amendment to the *SFOA,* Ontario banned smoking in vehicles with children under the age of 16 effective January 21, 2009.

Additional regulations banning smoking on all restaurant and bar patios, within 20 metres of playgrounds and within 20 metres of publically-owned sports fields and surfaces (e.g., areas for

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

basketball, baseball, soccer or beach volleyball, ice rinks, tennis courts, etc.) went into effect January 1, 2015.[4] The new smoking prohibitions compliment the patchwork of municipal-level patio, playground and recreation field policies across the Province. Before the new outdoor regulations came into force, two-thirds of Ontarians were covered by local smoke-free playground, sports and recreational field bylaws (67% each) and 10% of Ontarians were covered by a complete smoke-free restaurant and bar patio local bylaw.[ii]

Further regulations banning smoking on the outdoor grounds of all hospitals and psychiatric facilities and within 9 metres of entranceways to Ontario Government office buildings came into effect January 1, 2016. The regulations allowed hospitals to have a temporary outdoor designated smoking shelter for 24 months to ease the transition to 100% smoke-free grounds. As of January 1, 2018, smoking on outdoor hospital grounds was banned completely. Smoking continues to be banned 9 metres from the entranceways of long-term care facilities and independent health facilities.[5]

In December 2017, Bill 174 *Cannabis, Smoke-Free Ontario and Road Safety Statute Law Amendment Act* was passed, which expanded the SFOA smoking prohibitions in scope to include the use of e-cigarettes (including e-cigarettes containing medical cannabis) and the smoking of medical cannabis.[6] The implementation date for the expanded smoking prohibitions had not been announced at the time of writing this report.

SFOA Enforcement

The Ministry of Health and Long-Term Care's Tobacco Compliance Protocol applies a continuum of progressive enforcement actions—starting with education and progressing from warnings to increasingly more serious charges to match the nature and frequency of contraventions under the *SFOA*.[7]

The Province's 36 public health units actively enforce the smoke-free provisions of the *SFOA* through proactive (schools, hospitals) and complaint-driven inspections (enclosed workplaces

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

and public places, outdoor settings). In 2016, enforcement staff conducted 11,403 enclosed workplace and public place inspections, 2,178 restaurant and bar inspections, 1,015 playground inspections, 685 sports field inspections and 429 hospital inspections across the Province. At the time of the inspection, compliance was highest for restaurant and bar patios (94%), followed by enclosed workplace and public places (80%), sports fields (79%), playgrounds (79%) and hospitals (62%).[8]

In 2016/17, Peel Public Health conducted a proactive workplace inspection pilot where they sought to expand the reach of the tobacco enforcement programme to more effectively and efficiently decrease workers' exposure to secondhand smoke. Tobacco enforcement officers inspected 304 randomly selected workplaces across the seven industries with the highest smoking prevalence in Peel (construction, other services, real estate/rental/leasing, admin and support/waste, management/remedial, services, manufacturing, transportation/warehousing, and retail trade). Where non-compliance was found, a combination of education and progressive enforcement was applied, as necessary. The majority of inspected workplaces (83%) and a quarter of workplace vehicles (24%) were non-compliant with the *SFOA* due to missing "no smoking" signs. Smoking was occurring (or likely occurring) in 12% of inspected workplaces. As a result, 18 workplaces were issued warnings and two workplaces were charged.[iii]

Electronic Cigarettes Act

In May 2015, Ontario passed the *Electronic Cigarettes Act* (*ECA*) that extended the current tobacco smoking prohibitions in the *SFOA* to e-cigarette use.[9,10] The *ECA* vaping prohibitions were never implemented. In December 2017, the *ECA* vaping prohibitions were merged into the *SFOA* when Bill 174 *Cannabis, Smoke-Free Ontario and Road Safety Statute Law Amendment Act* was passed. The *SFOA* vaping prohibitions are not yet implemented. When in force, the use of an e-cigarette will be prohibited in enclosed public places, vehicles with children under the age of 16 present, enclosed workplaces and work vehicles, and on restaurant and bar patios, children's playgrounds, sporting surfaces and outdoor hospital grounds.[6]

[iii] Cindy Baker-Barill, Central East Tobacco Control Area Network Coordinator, Personal Communication, December 15, 2017.

Local Policy Initiatives

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

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

As of November 2017, 65 jurisdictions had strengthened smoke-free municipal bylaws beyond settings and tobacco products covered by the *SFOA* or *ECA* (Table 6A-1 lists jurisdictions). Regarding waterpipes, establishments are in contravention of the *SFOA* if tobacco is used in the waterpipe, otherwise use is permitted (for instance, with flavoured herbal shisha). Determining the tobacco content of the shisha being smoked in waterpipes onsite can be difficult. Through amendments to the *SFOA*, public health unit enforcement staff have the power to remove a sample of the shisha from an establishment to send for laboratory testing to assess tobacco content. In a recent study conducted in Toronto, air quality levels hazardous to human health were observed in indoor waterpipe venues regardless of whether tobacco or other non-tobacco shisha was being smoked.[11]

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

- Enclosed workplaces and public places (Barrie, Bradford West Gwillimbury, Chatham-Kent, Orillia, Ottawa, Peel, Peterborough, Windsor)
- 9 metres from doorways to public buildings (Chatham-Kent, Englehart, Kingsville, Niagara Region, Orillia, Renfrew County, Tecumseh, Township of King, Town of Lasalle,

Windsor)
- Municipally-owned property (Casselman, Chatham-Kent, East Zorra-Tavistock, Mississauga, Ottawa, Peterborough, Renfrew County, Town of Essex, Township of King)
- Outdoor recreation fields (Amherstburg, Chatham-Kent, East Zorra-Tavistock, Hamilton, Niagara Region, Orillia, Ottawa, Peel, Tecumseh, Township of King, Town of Lasalle)
- Parks (Cassleman, Chatham-Kent, East Zorra-Tavistock, Hamilton, Kingsville, Niagara Region, Ottawa, Peterborough, Tecumseh, Township of King, Town of Lasalle, Windsor)
- Playgrounds (Amherstburg, Casselman, Chatham-Kent, East Zorra-Tavistock, Hamilton, Niagara Region, Peel, Orillia, Ottawa, Township of King)
- Conservation area (Windsor)
- Licensed premises (Toronto)
- Licensed outdoor patios (Ottawa, Peel, Peterborough, Toronto)
- Outdoor markets (Ottawa)
- Trails (Amherstburg, Chatham-Kent, Hamilton, Ottawa, Township of King, Windsor)
- Beaches (Amherstburg, Ottawa, Township of King, Windsor)
- Transit stops (Chatham-Kent, Niagara Region, Tecumseh, Windsor)

All of the listed jurisdictions ban the use of waterpipes containing tobacco. The majority of the municipalities have further extended the waterpipe ban to include waterpipes containing any non-tobacco/nicotine substance (Amherstburg, Barrie, Bradford West Gwillimbury, Casselman, Chatham-Kent, East Zorra-Tavistock, Kingsville, Orillia, Ottawa, Peel, Peterborough, Tecumseh, Toronto, Town of Essex, Township of King, Town of Lasalle, and Windsor).[12]

The Scientific Advisory Committee assessed protection from waterpipe smoke as having a moderate potential contribution towards protection.

The Executive Steering Committee identified amending the *SFOA* to ban vaping and the smoking of non-tobacco products in all the indoor and outdoor setting where tobacco is banned as a priority action to establish more smoke-free spaces.

Other Local Interventions

Breast Cancer and Secondhand Smoke Exposure

In October 2017, Central East Tobacco Control Area Network launched the 'That's RISKY' campaign to raise awareness about the increased risk of breast cancer at a younger age from smoking and exposure to secondhand smoke during breast development. Secondary objectives of the campaign included increasing the number of young adults who would limit their exposure to secondhand smoke and/or abstain from tobacco use. The campaign video received 84,291 full video views on YouTube and 166,387 partial video views through social media. In addition, the campaign website had 5,334 visits and there were 2,202 social interactions on Facebook and Instagram associated with the campaign.[iv] Results from an online evaluation survey conducted by the Ontario Tobacco Research Unit suggests that 37% of those surveyed were aware of the campaign [unpublished data].

The Scientific Advisory Committee assessed mass media campaigns that address awareness about the dangers of secondhand smoke, increase support for smoke-free policies and reduce secondhand smoke exposure as having a high potential contribution towards protection.

First Nation Community Smoke-Free Policies

The Aboriginal Tobacco Program continued the discussion of smoke-free bylaws and policies through engagement with First Nation communities (upon request from community leadership and/or health staff). Communities and community partners were provided with resources, such as smoke-free decals, to support the development of smoke-free bylaws and policies. The Aboriginal Tobacco Program also continued to discuss options for support with interested communities (i.e., information and briefings for Chief and Council, and examples of successful initiatives for community consideration).[v]

[iv] Cindy Baker-Barill, Central East Tobacco Control Area Network Coordinator, Personal Communication, December 15, 2017
[v] Richard Steiner, Group Manager, Aboriginal Cancer Control Unit/Aboriginal Tobacco Program. Personal communication, December 11, 2017

Multi-Unit Housing

The Scientific Advisory Committee assessed protection from tobacco smoke exposure in the home environment as having a high potential contribution towards protection.

As priority actions to continue to reduce exposure to secondhand smoke at home, the Executive Steering Committee identified:

- Raising awareness about the importance of smoke-free homes through a public engagement campaign
- Increasing the number of smoke-free multi-unit housing buildings in Ontario
- Amending the Ministry of Housing Residential Tenancies Act to allow landlords to evict a tenant who violates the no-smoking provision in a tenancy agreement and include an optional smoke-free housing clause in the new standard lease

On February 7, 2018, the Ministry of Housing announced a new standard lease[13] that includes a section for additional rules on smoking beyond the current *SFOA* ban on smoking in indoor common areas.[14] Section 10 of the lease gives space to describe the smoking policy in detail, facilitating agreement between landlords and tenants. The new standard lease will become mandatory for private residential leases[vi] across the Province on or after April 30, 2018.

As of December 2017, 164 multi-unit housing sites and 158 non-profit housing corporations across 121 municipalities in Ontario had adopted or were in the process of adopting a 100% smoke-free policy.[15] Some health units have focused attention on the issue of smoke-free multi-unit housing.

In 2016/17, the East Tobacco Control Area Network implemented a young adult multi-unit housing social marketing campaign. The campaign aimed to raise awareness and increase the demand for smoke-free housing amongst the young adult population in Eastern Ontario. The

[vi] Excludes most social and supportive housing, retirement and nursing homes, mobile home parks and land lease communities, and commercial properties.

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

In October 2017, Simcoe-Muskoka District Health Unit and the North East Tobacco Control Area Network conducted education campaigns during the Smoke-Free Multi Unit Housing Fire Prevention Week (October 8-14, 2017). The goals of the campaign were to:

- Increase awareness of the dangers of indoor/in-home tobacco use and secondhand smoke
- Encourage people to ask for smoke-free multi-unit housing
- Encourage all landlords to offer or transition their housing units to smoke-free
- Increase traffic to the Smoke-Free Housing Ontario website

The North East Tobacco Control Area Network ran ads on screens in 35 Tim Horton locations across the region, leading to 61,152 plays over two weeks with a reach of 252,000 customers. Individual public health units placed ads on social media (Facebook: Algoma Public Health, North Bay-Parry Sound District Health Unit, Porcupine Health Unit, Simcoe-Muskoka District Health Unit, Timiskaming Public Health; Twitter: North Bay-Parry Sound District Health Unit, Simcoe-Muskoka District Health Unit) and on buses (Timiskaming Health Unit). Porcupine also conducted two radio interviews and sent out a press release.[viii,ix]

Post-Secondary Campus Policies

In 2016/17, 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:

[vii] Angela McKercher-Mortimer, Youth Development Specialist, East Tobacco Control Area Network, Personal Communication, December 12, 2017.
[viii] Cindy Baker-Barill, Central East Tobacco Control Area Network Coordinator, Personal Communication, December 15, 2017.
[ix] Leila Tikkanen Pilon, Regional Coordinator North East Tobacco Control Area Network, Personal Communication, December 14, 2017.

- Educating all students on tobacco policies
- Encouraging self- and peer-to-peer regulation
- Disseminating enforcement cards to smokers who fail to observe smoking restrictions[16]
- Establishing concrete, actionable approaches for policy enforcement by appropriate campus personnel[17,18]

All campuses were engaged in some aspect of these actions.

Leave The Pack Behind's 2016/17 annual environmental scan of Ontario's 44 public universities and colleges revealed that all institutions banned smoking indoors (including residences) and three-quarters (n=33/44) restricted smoking to specific outdoor designated areas positioned at least 9 metres away from a building entrance.[19] However, it appears that very few institutions formally addressed policy enforcement practices.

In 2016/17, Leave The Pack Behind continued to support and work with interested colleges and universities to develop, adopt and enforce progressive tobacco control policies. The following campuses were exploring the possibility of becoming tobacco-free in the near future: Durham College/ University of Ontario Institute of Technology, George Brown, McMaster, Ottawa, Queen's and Western. As of January 1, 2018, McMaster University became the first post-secondary school in Ontario to completely ban smoking indoors and outdoors on campus. In working towards becoming smoke-free, Western University established some clear air corridors and will be looking at phasing out the other designated smoking areas by 2019.

A working group to address smoking on Ontario's college and university campuses was established in 2016/17 as a subgroup of the Provincial Young Adult Prevention Advisory Group. The objective of the working group was to develop resources that support public health units, campus personnel and students to advocate towards having a smoke-free campus policy. Leave The Pack Behind and Central East Tobacco Control Area Network developed a campaign and resources (toolkit, brochure, fact sheet, poster, sticky notes) to increase awareness of the key messages and to promote 1 Day Stand events that raise awareness about the need for smoke-free campuses. Three post-secondary institutions in various locations across Ontario (McMaster University, University of Ottawa, and Trent University) participated in the 1 Day Stand Against

Commercial Tobacco on November 17th, 2017. Facebook, Instagram and YouTube ads ran in in October and November 2017. The videos were viewed over 200,000 times on YouTube. During the campaign 1,979 people visited the Leave The Pack Behind website.[x]

Prevention and Cessation Interventions Contributing to Protection

Progress toward Strategy prevention and cessation goals is expected to result in fewer smokers in the Province.[20,21,22,23] Reduced smoking can result in less exposure to tobacco 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.

[x] Cindy Baker-Barill, Central East Tobacco Control Area Network Coordinator, Personal Communication, December 15, 2017.

Protection Outcomes: Population Level

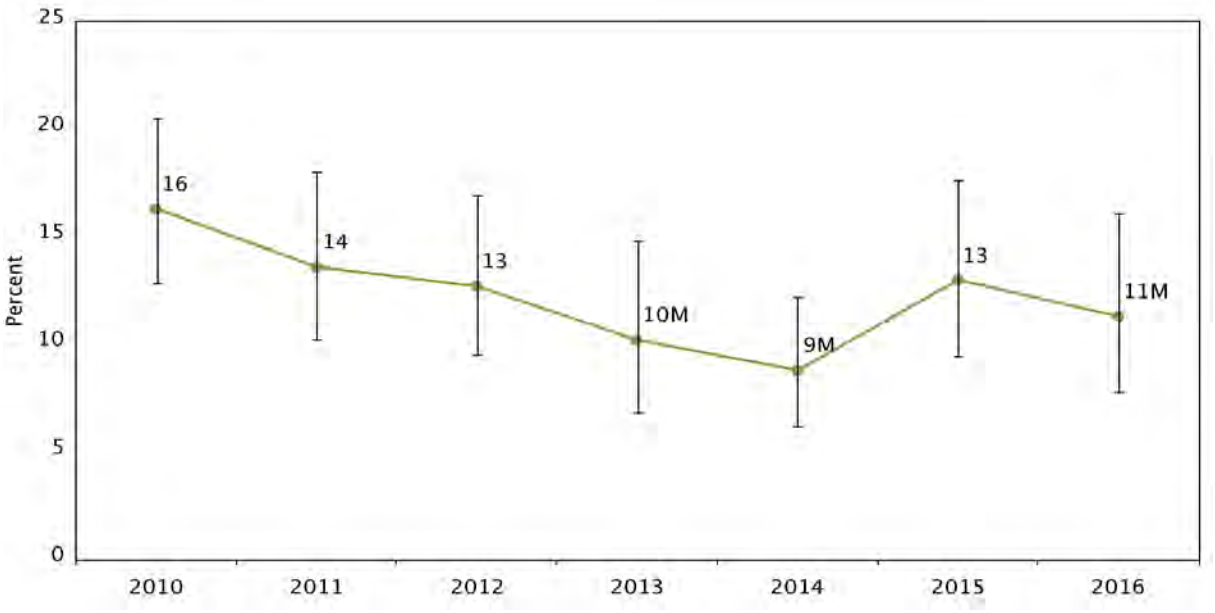
In this section, we present data about exposure to secondhand smoke and public opinion about smoke-free policies from the 2016 Centre for Addiction and Mental Health Monitor and the 2015 Canadian Community Health Survey. At the time of writing, data from the Canadian Community Health Survey were only available for 2015 even though Statistics Canada has released select 2016 results.

Workplace Exposure

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

- In 2016, 11% (or 727,600) of adult workers (aged 18 years or older) were exposed to secondhand smoke indoors at work or inside a work vehicle for five or more minutes in the past week (CAMH Monitor data), which has not changed significantly from 2015 (13%) and recent years (Figure 6-2)

Figure 6-2: Workplace Exposure (Past Week) Indoors or Inside a Work Vehicle, Ages 18+, Ontario, 2010 to 2016



Note: M = Interpret with caution: subject to moderate sampling variability. Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 6A-2)
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2010 –2016.

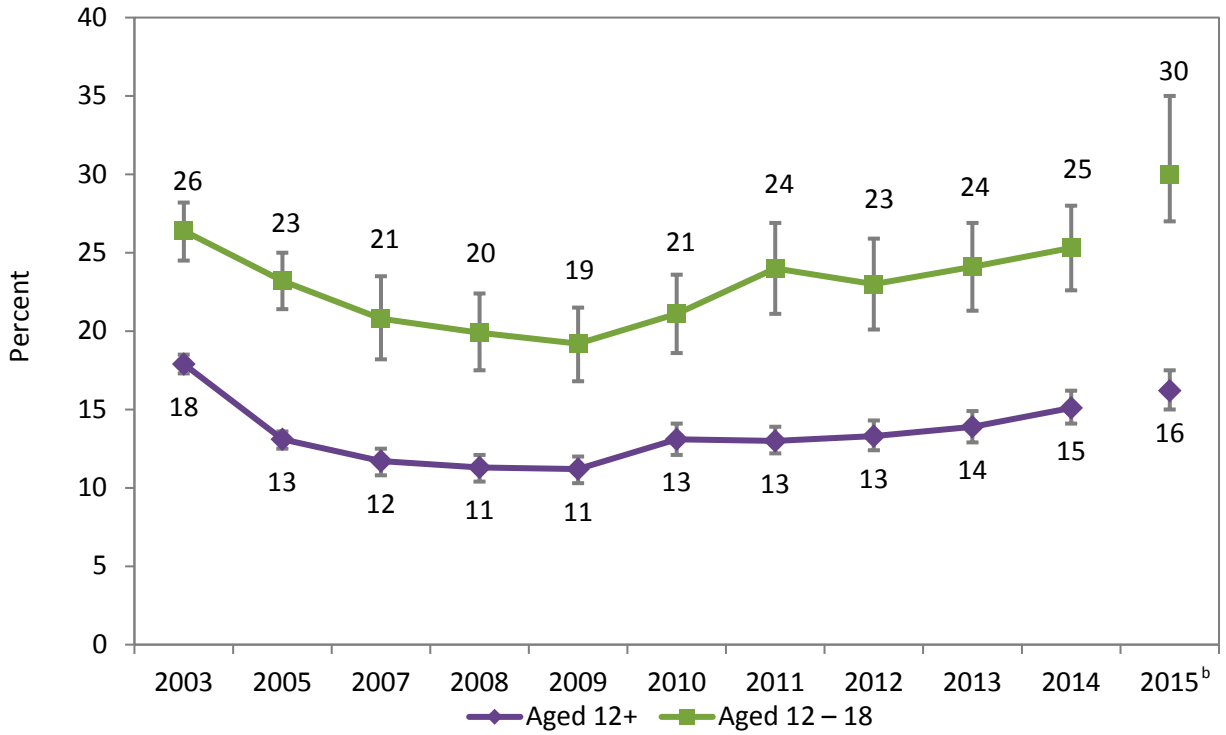
Exposure in Public Places

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

- In 2015,[xi] 16% (or 1,529,600) of non-smoking Ontarians aged 12 years and over were exposed to secondhand smoke every day or almost every day in public places (e.g., restaurants, bars, shopping malls and arenas) over the past month. This is similar to the level of exposure reported in 2014 (15%), but represents an increase compared to the level of exposure reported in 2011 (13%; Figure 6-3; CCHS data)
- Among young nonsmokers aged 12 to 18, 30% (or 293,600) were exposed to secondhand smoke in public places in 2015. This is similar to what was reported in 2014 (25%), however an increase to what was reported in 2011 (24%; Figure 6-3)
- Exposure among 12 to 18 year old nonsmokers was significantly higher in 2015 compared to all Ontarians aged 12 years and older (30% vs. 16%)
- In 2013/14,[xii] exposure to secondhand smoke in public places among nonsmoking Ontarians aged 12 years and over ranged across the Province from a low of 8% in Chatham-Kent Health Unit to a high of 19% in Peel Regional Health Unit (Appendix, Table 6A-4)

[xi] The 2016 and 2017 Canadian Community Health Survey data files were not available when this report was prepared.
[xii] The combined 2015/16 Canadian Community Health Survey data was not available when this report was prepared.

Figure 6-3: Nonsmokers' Exposure to Secondhand Smoke in Public Places[a] (Every Day or Almost Every Day), by Age, Ontario, 2003 to 2015



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

[b] The Canadian Community Health Survey was redesigned in 2015. Interpret trend with caution.

Note:. Vertical lines represent 95% confidence intervals. X-axis scale (Year) not uniform—interpret with caution. Full data table for this graph provided in the Appendix (Table 6A-3)

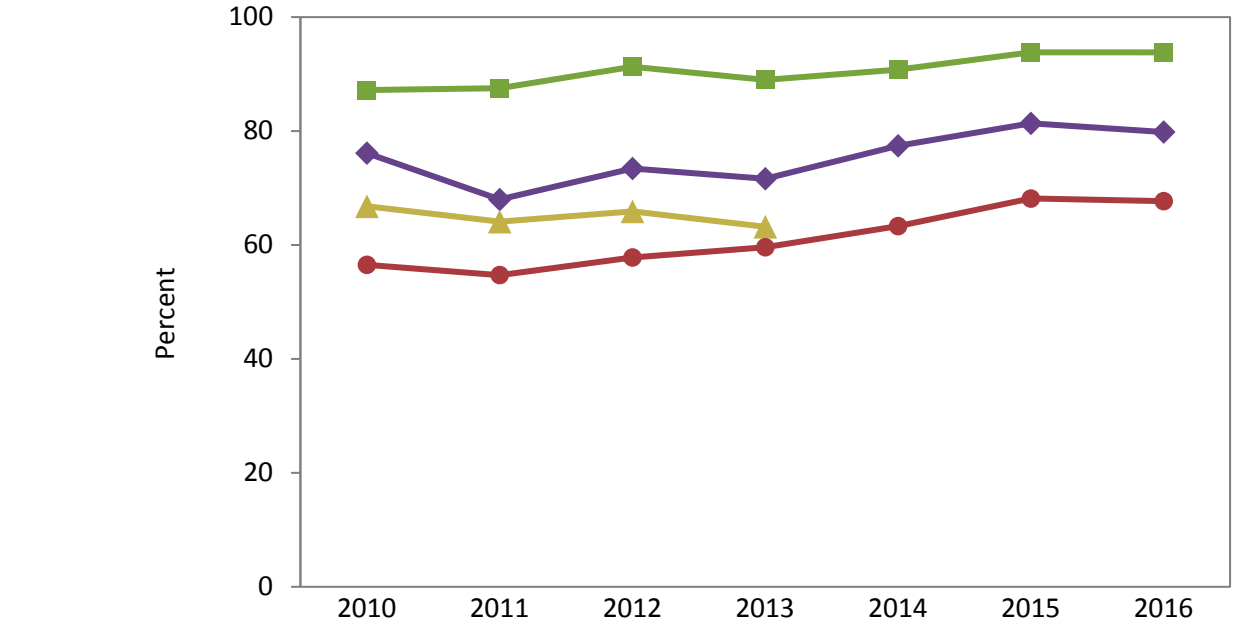
Source: Canadian Community Health Survey 2003, 2005, 2007-2015.

Public Opinion about Smoking in Outdoor Public Places

- Among the general population, support for smoking bans in public parks and on beaches, at outdoor recreational facilities and outdoor playgrounds was unchanged from 2015 estimates; however support for smoking bans in public parks and on beaches was significantly higher in 2016 compared to five years before in 2012 (Figure 6-4; CAMH Monitor data)
- Similar to 2015, fewer current smokers agreed in 2016 that smoking should be banned in public parks and on beaches (42%) or near outdoor recreation facilities (such as sports fields, stadiums and entrances to arenas, 59%) compared to former smokers (67% and 80%, respectively) and never-smokers (73% and 84%, respectively; Figure 6-5)

- Support for banning smoking at outdoor children's playgrounds and wading pools was high at 94% among all respondents (Figure 6-4). Similar levels of support were reported among never smokers (97%), former smokers (93%) and current smokers in 2016 (86%; Figure 6-5)

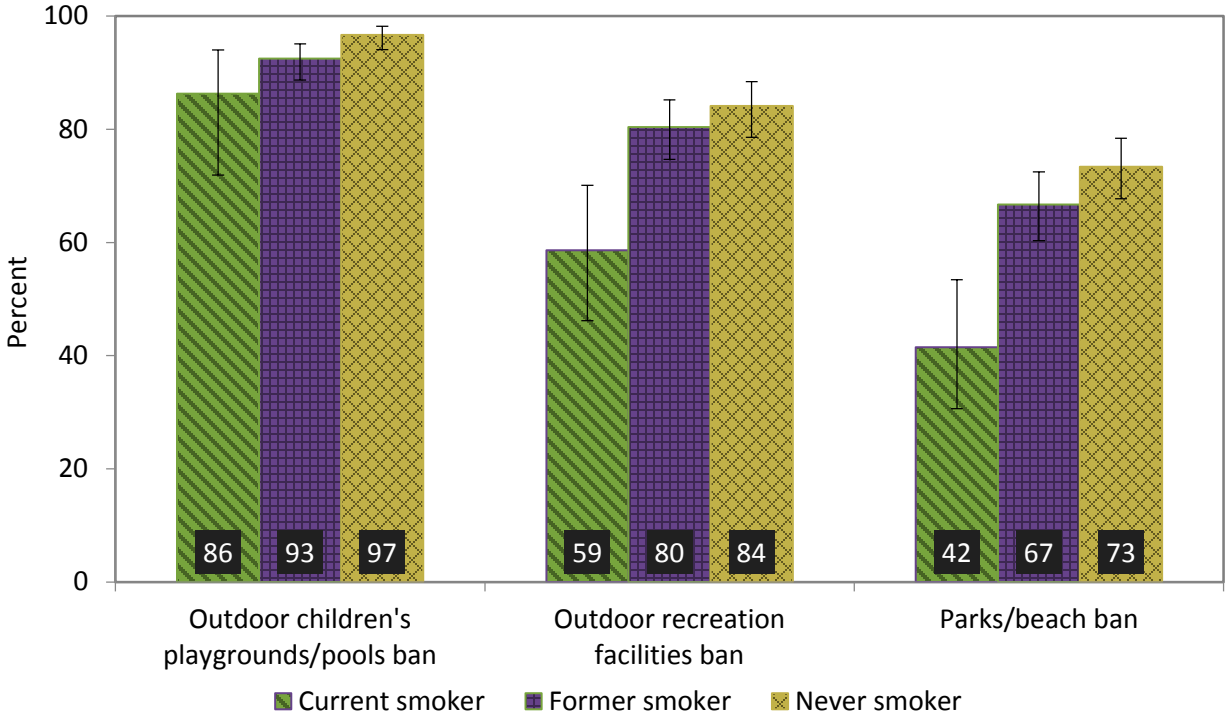
Figure 6-4: Agreement that Smoking Should be Banned in Playgrounds, Recreation Facilities, Outdoor Special Events and Parks, Ages 18+, Ontario, 2010 to 2016



	2010	2011	2012	2013	2014	2015	2016
Outdoor children's playgrounds/ pools ban	87	88	91	89	91	94	94
Outdoor recreation facilities ban	76	68	73	72	77	81	80
Outdoor special events ban	67	64	66	63			
Parks/beach ban	57	55	58	60	63	68	68

Note: Public opinions related to smoking bans at outdoor special events were not collected in 2014 and 2015. Full data table for this graph provided in the Appendix (Table 6A-5)
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2010-2016.

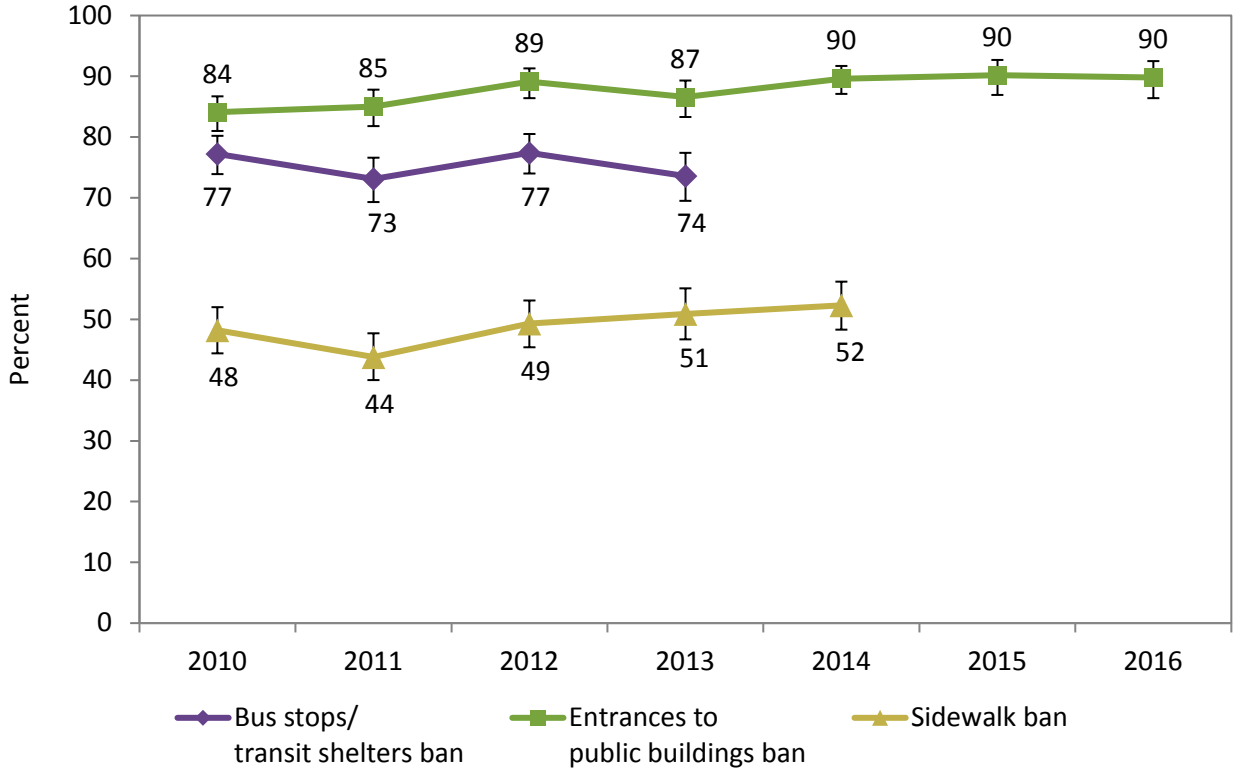
Figure 6-5: Agreement that Smoking Should be Banned in Playgrounds, Recreation Facilities and Parks, by Smoking Status, Ages 18+, Ontario, 2016



Note: Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 6A-6)
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2016.

- In 2016, public support for smoking bans at entrances to public buildings was similar to 2015 and 2012 estimates (90% in both 2015 and 2016, 89% in 2012). Similarly, public support for smoking bans on public sidewalks and bus stops/transit shelters has remained unchanged in recent years (sidewalks: 52% in 2014 vs. 48% in 2010; bus shelters 74% in 2013 vs. 77% in 2010; Figure 6-6; CAMH Monitor data)
- In 2016, similar levels of support for smoking bans at entrances to public buildings were reported among never smokers (92%), former smokers (91%) and current smokers (82%)

Figure 6-6: Agreement that Smoking should be Banned on Sidewalks, Entrances and Bus Stops, Ages 18+, Ontario, 2010 to 2016



Note: Vertical lines represent 95% confidence intervals; Public opinions related to smoking bans at bus stops and transit shelters were not collected in 2014, 2015 and 2016; Public opinions related to smoking bans on sidewalks were not collected in 2015 or 2016. Full data table for this graph provided in the Appendix (Table 6A-7)
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2010-2016.

Public Opinion about Smoking on Restaurant and Bar Patios

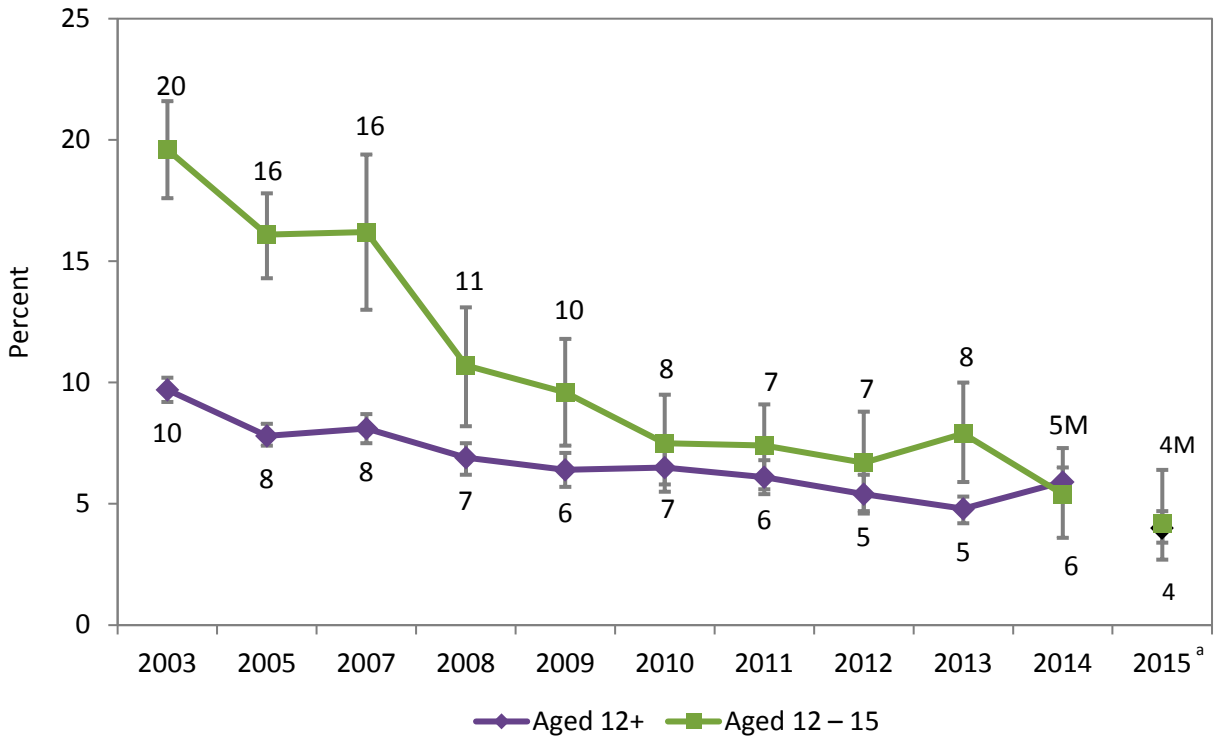
- In 2016, 72% of Ontario adults (including 80% of never-smokers) agreed that smoking should be banned on outdoor patios of restaurants and bars. This is unchanged from 2015 levels (72%), but significantly higher than in 2012 (61%; CAMH Monitor data, data not shown). Ontario's regulation banning smoking on patios came into effect in 2015

Exposure in Vehicles

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

- Among nonsmoking Ontarians aged 12 years and over, exposure to secondhand smoke every day or almost every day in vehicles over the past month was significantly lower in 2015 (4% or 405,200 Ontarians) than in 2014 (6%; Figure 6-7; CCHS data)
- In 2015, exposure to secondhand smoke in vehicles among young nonsmokers aged 12 to 15 was 4% (or 22,800 Ontarians). This is similar to what was reported in 2014 (5%), however a significant decrease compared to 2011 (7%; Figure 6-7)

Figure 6-7: Nonsmokers' Exposure to Secondhand Smoke in Vehicles (Every Day or Almost Every Day), by Age, Ontario, 2003 to 2015



[a] The Canadian Community Health Survey was redesigned in 2015. Interpret trend with caution.
Note: M = Interpret with caution: subject to moderate sampling variability. Vertical lines represent 95% confidence intervals. X-axis scale (Year) not uniform—interpret with caution. Full data table for this graph provided in the Appendix (Table 6A-8)
Source: Canadian Community Health Survey 2003, 2005, 2007-2015.

- Exposure among nonsmoking youth aged 12 to 15 years was similar to all nonsmoking Ontarians aged 12 years and older in 2015 (4% for both age groups)
- In 2013/14,[xiii] exposure to secondhand smoke in private vehicles among nonsmoking

[xiii] The 2015/16 Canadian Community Health Survey data was not available when this report was prepared.

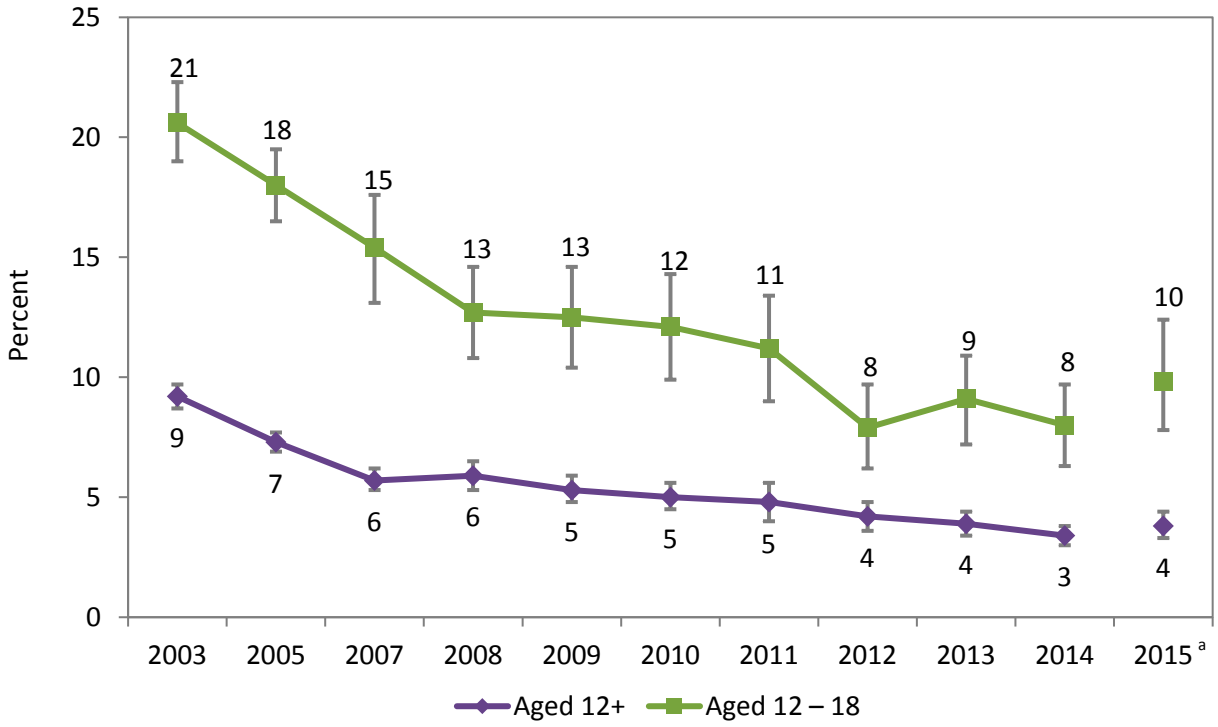
Ontarians aged 12 years and over ranged across the Province from a low of 4% in Elgin-St. Thomas Health Unit to a high of 14% in Huron County Health Unit (Appendix, Table 6A-9)

Household Exposure

The Strategy aims to increase the adoption of smoke-free homes and reduce secondhand smoke exposure in homes.

- In 2015, 4% (or 370,000) of nonsmoking Ontarians aged 12 years and older were exposed to secondhand smoke in their home every day or almost every day, which is unchanged from 2014 (3%) and 2011 (5%; Figure 6-8; CCHS data)

Figure 6-8: Nonsmokers' Exposure to Secondhand Smoke at Home (Every Day or Almost Every Day), by Age, Ontario, 2003 to 2015



[a] The Canadian Community Health Survey was redesigned in 2015. Interpret trend with caution.
Note: Vertical lines represent 95% confidence intervals. X-axis scale (Year) not uniform—interpret with caution. Full data table for this graph provided in the Appendix (Table 6A-10)
Source: Canadian Community Heath Survey 2003, 2005, 2007-2015.

- Among 12 to 18 year old nonsmokers, 10% (or 99,400 Ontarians) were exposed to secondhand smoke in their home in 2015, which is more than double the exposure

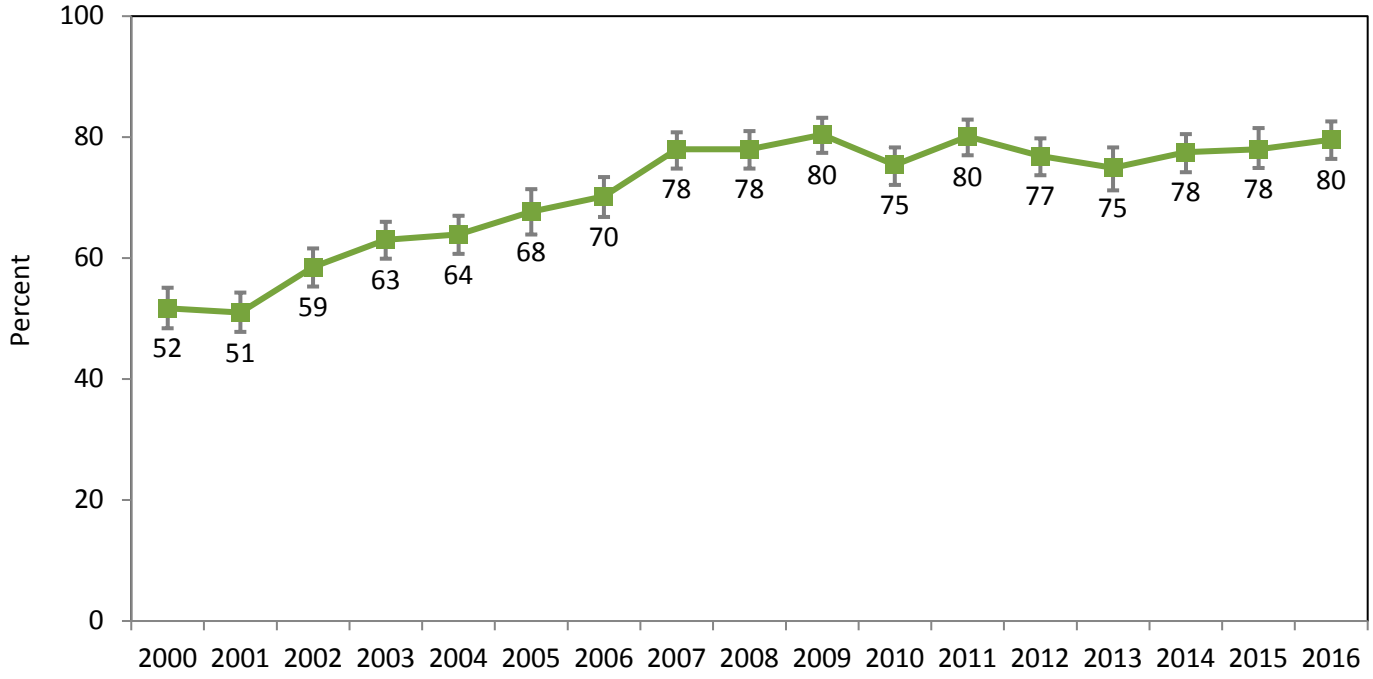
reported by all respondents aged 12 and over (4%). Respondents aged 12 to 18 had a similar level of exposure in 2014 (8%) and 2011 (11%) as they did in 2015

- In 2013/14,[xiv] exposure to secondhand smoke in the home among nonsmoking Ontarians aged 12 years and over ranged from a low of 2% in Halton Regional Health Department to a high of 9% in Huron County Health Unit (Appendix, Table 6A-11)

Public Opinion about Smoking in Homes with Children

- In 2016, over three-quarters of respondents (80%) agreed that there should be a law that parents cannot smoke inside their home if children are living there. This rate has held steady since 2007 and is significantly higher than the level of agreement reported in 2006 (70%) and earlier (Figure 6-9; CAMH Monitor data)

Figure 6-9: Agreement That There Should Be a Law that Parents Cannot Smoke Inside their Home if Children are Living There, Ages 18+, Ontario, 2000 to 2016



Note: Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 6A-12)
Source: Centre for Addiction and Mental Health Monitor 2000–2009 (half year sample); 2010-2016 (full year sample)

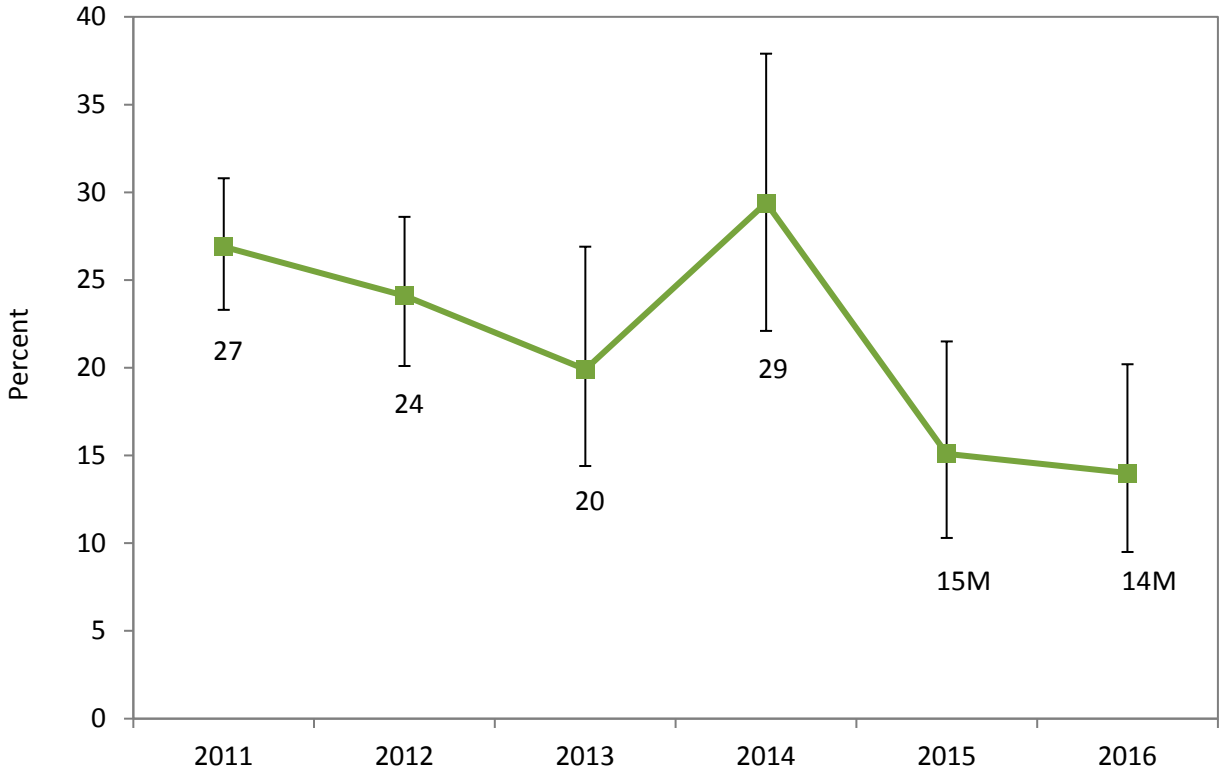
[xiv] The 2015/16 Canadian Community Health Survey data was not available when this report was prepared.

Exposure in Multi-Unit Housing

The Strategy aims to increase smoke-free regulation in multi-unit housing and reduce secondhand smoke exposure in homes. It is estimated that one third (31%) of Ontarians live in multi-unit housing.[24]

- In 2016, 14% of Ontario adults living in multi-unit dwellings (or 328,300) were exposed to secondhand smoke drifting between units at least once in the past month. This is similar to what was reported in 2015 (15%). Both the 2015 and 2016 estimates are much lower than what was reported between 2011 and 2014, but of questionable validity due to moderate sampling variability (Figure 6-10; CAMH Monitor data)

Figure 6-10: Exposure to Secondhand Smoke in Multi-Unit Dwellings (Past Month), 18+, Ontario, 2011 to 2016



Note: M = Interpret with caution: subject to moderate sampling variability. Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 6A-13)
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2011-2016

Public Opinion about Smoking in Multi-Unit Housing

- Four out of five adults in Ontario (85%) believed that smoking should not be allowed inside multi-unit dwellings including apartment buildings, rooming houses and retirement homes in 2016. The level of support has increased significantly since 2007 (85% vs. 79%, respectively; CAMH Monitor data, data not shown)

Risk Perception about Secondhand and Thirdhand Smoke

- In 2016, 86% of adults in Ontario believed that exposure to secondhand smoke posed a moderate or great risk of physical or other harm, which is unchanged from 2015 (88%). Two-thirds of adults in Ontario (62%) believed thirdhand smoke posed a moderate or great risk of physical or other harm, similar to what was reported in 2015 (64%; CAMH Monitor data, data not shown)

Scientific Advisory Committee: Overview of Potential Contribution of Protection Interventions

The updated Smoke-Free Ontario Scientific Advisory Committee report, *Evidence to Guide Action: Comprehensive Tobacco Control in Ontario (2016)*[1] outlined the potential contributions of 10 protection-related interventions. Below is a summary of the nine high, innovative and moderate potential contributions related to protection outcomes, including an assessment of the current status of SFO Protection initiatives related to each potential contribution (Table 6-1)

Table 6-1: Scientific Advisory Committee Potential Contributions Related to Protection Outcomes

Intervention	Current Status
High Potential Contribution – Intensify	
Mass Media	No provincial media campaign has been conducted in recent years, rather media campaigns are conducted by some public health units and Tobacco Control Area Networks.
Protection from Tobacco Smoke Exposure in Outdoor Settings	*SFOA* addresses outdoor hospital grounds, playgrounds, sporting surfaces and restaurant/bar patios. Many municipalities have implemented bylaws to ban smoking in additional outdoor settings (e.g., beaches, trails, outdoor festivals). However not all municipalities have smoke-free outdoor bylaws.
Protection from Tobacco Smoke Exposure in the Home Environment	Private dwellings are not included in the *SFOA*. Ongoing efforts to encourage multi-unit housing landlords to transition to smoke-free units have seen some moderate success with a 35% increase of available smoke-free multi-unit housing sites in 2017 compared to 2016 (322 sites in 2017 vs. 239 sites in 2016). However this only represents a very small number multi-unit housing sites across the Province.
Protection from Tobacco Smoke Exposure in the Workplace	*SFOA* addresses all enclosed workplaces and public places in the locations where smoking is prohibited. However outdoor workplaces are not included in the smoking bans.
Innovative	
Integrating E-Cigarettes Into Smoke-Free Policies	The *ECA* vaping provisions have now been incorporated into the *SFOA.* However the implementation date has not been established. Many, but not all, municipal bylaws have included e-cigarettes in their smoke-free policies.

Intervention	Current Status
Moderate Potential Contribution – Intensify	
Protection from Tobacco Smoke Exposure in Institutional Settings	*SFOA* prohibits smoking inside hospitals and residential care facilities. However controlled smoking areas are still permitted in residential care facilities.
Protection from Tobacco Smoke Exposure in Hospitality Settings	*SFOA* prohibits smoking inside restaurant and bars and on outdoor patios. However, hotels, motels and inns can still offer designated smoking rooms.
Protection from Tobacco Smoke Exposure in Vehicles	*SFOA* bans smoking in workplace vehicles and in cars travelling with children under the age of 16. However other passengers (aged 16+) travelling in non-workplace vehicles are not protected.
Protection from Waterpipe Smoke	*SFOA* bans only the use of tobacco shisha anywhere tobacco use is prohibited (enclosed workplaces and public places; outdoor playgrounds, sporting surfaces and restaurant and bar patios). Twenty-two municipalities have passed bylaws that ban the use of tobacco shisha in a variety of settings (e.g., conservation areas, parks, beaches) not currently covered in the *SFOA*, including 17 bylaws that have also banned the use of non-tobacco shisha.

Executive Steering Committee: Overview of Priority Actions for Protection

The *Smoke-Free Ontario Modernization* report[2] outlined a number of priority actions to prevent exposure to all secondhand smoke and harmful aerosol from vaped products. Below is a summary of priority actions for protection, including an assessment of how the current SFO initiatives address the priority actions (Table 6-2).

Table 6-2: Executive Steering Committee Priority Actions for Protection

Priority Actions	Current Status
4.1 Continue to reduce exposure to secondhand smoke at home	
4.1.1 Raise awareness through a public engagement campaign about the importance of smoke-free homes • encourage more people who smoke tobacco, shisha or cannabis to voluntarily decide to smoke outside the home to avoid exposing their families and friends to secondhand smoke	No provincial media campaign has been conducted in recent years. Some public health units and Tobacco Control Area Networks have engaged in public campaigns. The Smoke-Free Housing Ontario initiative has a comprehensive website that includes information for tenants and landlords, as well as a directory of smoke-free multi-unit housing sites across the province.
4.1.2 Increase the number of smoke-free multi-unit housing buildings in Ontario	In 2017, there was a modest increase (35%) in available smoke-free multi-unit housing sites compared to 2016 (322 sites in 2017 vs. 239 sites in 2016). This only represents a very small number multi-unit housing sites across the Province.
4.1.3 Amend the Ministry of Housing *Residential Tenancies Act* to allow landlords to evict a tenant who violates the no-smoking provision in a tenancy agreement and include an optional smoke-free housing clause in the new standard lease	The Ministry of Housing announced a new standard lease to come into effect on April 30, 2018, which includes a section for landlords and tenants to agree to a smoke-free policy.
4.2 Establish more smoke-free spaces	
4.2.1 Amend the *Smoke-Free Ontario Act* to ban vaping and the smoking of non-tobacco products, including shisha and cannabis, in all the indoor and outdoor settings where tobacco is banned	The *Cannabis Act* was recently passed (though not yet implemented) and will ban recreational cannabis use in most public places with very few exceptions. Seventeen municipalities have banned the use of non-tobacco shisha in a variety of public settings.

Priority Actions	Current Status
4.2.2 Amend the *Smoke-Free Ontario Act* to prohibit smoking of tobacco, shisha and cannabis: • within a 9-metre buffer zone around the entrances, exits, windows and air intakes of public buildings • in outdoor spaces on post-secondary campuses (i.e., universities, colleges, vocational institutions, trade schools)	Not implemented
4.2.3 Protect workers in outdoor workplaces from exposure to secondhand smoke by: • expanding the *Smoke-Free Ontario Act* to prohibit smoking in outdoor workplaces • working with employers to develop effective smoke-free outdoor workplaces policies	Not implemented

Chapter Summary

While the Smoke-Free Ontario Strategy offers considerable protection from involuntary exposure to secondhand smoke, the current *SFOA* smoking restrictions do not meet the scope of smoke-free policies assessed by the 2016 Scientific Advisory Committee and the policy priority actions recommended by the Executive Steering Committee. Ontarians continue to be exposed to secondhand smoke in a variety of settings:

- 16% of the population continues to be exposed in public places
- 11% of workers are exposed to secondhand smoke indoors at work or inside a workplace vehicle
- 10% of nonsmokers aged 12 to 18 are exposed in their home
- 4% of nonsmokers aged 12 to 15 are exposed in vehicles[xv]

The US Surgeon General's review of scientific evidence concluded that there is no risk-free level of exposure to secondhand smoke.[23] In addition to the adverse health effects of secondhand smoke, exposure to other people smoking results in social exposure to tobacco use. Social exposure is associated with normalization of tobacco use, triggering of smoking initiation in youth and young adults through processes of social influence and modeling, encouragement of the continued use of tobacco among smokers and relapse among quitters.[25,26]

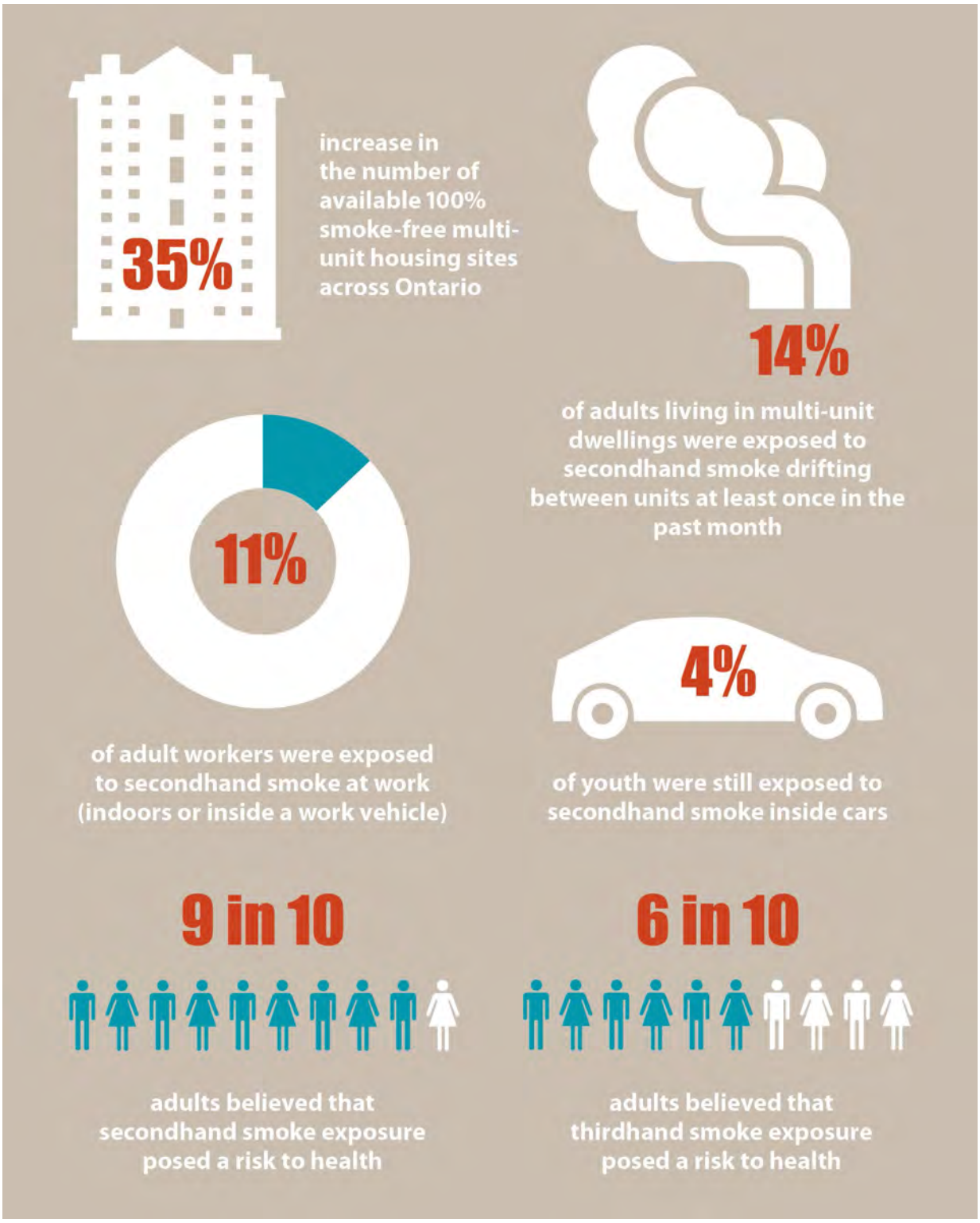
The 2016 Scientific Advisory Committee[1] identified interventions to offer further protection for Ontarians including:

- Integrating e-cigarettes into smoke-free policies
- Protection from tobacco smoke in outdoor settings, home environments, workplace environments, institutional settings and hospitality settings
- Protection from waterpipe smoke

Recent legislative amendments and regulatory changes implemented by the Government of Ontario have closed many of the gaps in regulating outdoor smoking and integrating e-cigarettes into the *SFOA*, while a growing number of municipalities have closed other gaps in outdoor smoking and waterpipe use in regulated areas. Further policy implementation is needed at the provincial level to protect all Ontarians from the remaining exposures to tobacco smoke.

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

Visual Summary of Key Protection Indicators



Appendix: Data Tables

Table 6A-1: NSRA's Smoke-Free Laws Database: Leading Edge Bylaws, Ontario (November 2017)

Name of Jurisdiction	Legislation and Bylaw Name	Date Passed (dd/mm/yyyy)	Date Last Amended (dd/mm/yyyy)
Arnprior	Bylaw No. 6076-12, Regulation of Smoking on Municipally-Owned Property & Public Places in the Town of Arnprior ("The Regulation of Smoking By-law")	09/04/2012	
Amherstburg	By-law 2016-113 being a By-law to prohibit smoking on property owned or leased by the Town of Amherstburg	12/12/2016	
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. ("The Water Pipe Bylaw").	26/08/2013	
Barrie	Bylaw No. 2009-086, A Bylaw to Prohibit Smoking Outdoors on City Owned Property Bylaw No. 2011-106, An amendment to Bylaw No. 2009-086, A Bylaw to Prohibit Smoking Outdoors on City Owned Property	11/05/2009	15/08/2011
Bradford West Gwillimbury	By-law 2013-87 - A By-law to Prohibit the Use of Waterpipes in Enclosed Public Places and in Enclosed Workplaces	03/09/2013	
Brighton	By-Law No. 007-2014, Being a By-Law to regulate and prohibit all tobacco use on municipally owned parkland property in the Municipality of Brighton	03/03/2014	
Brockville	By-law Number 093-2003, Being a By-law to Regulate Smoking in Public Places	22/07/2003	28/04/2015
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	
Casselman	Smoking By-law within Municipal Properties 2016-030	10/05/2016	
Chatham-Kent	Bylaw 137-2014, being a by-law to regulate smoking of tobacco or tobacco-like products on lands within the Municipality of Chatham-Kent ("Smoke-Free Chatham-Kent By-law")	11/08/2014	
Cobalt	Bylaw No. 2012-003, Being a Bylaw to Regulate Smoking in the Town of Cobalt: Smoking on Municipal Property; and Smoking in Workplace Entrances and Exits; and the Sale of Tobacco Products through Licensing Requirements ("Smoke-free and Tobacco Control Bylaw")	10/01/2012	
Cobourg	By-law No.019-2015, a By-law to Prohibit Smoking and the Use of Tobacco Products in Public Places in the Town of Cobourg	23/02/2015	16/04/2015
Cochrane	Bylaw No. 989-2013, Being a bylaw to regulate smoking on Tim Horton's Event Centre property within the Town of Cochrane	10/12/2013	
Cramahe	By-law No. 2014-06, Being a By-law to prohibit smoking and the use of all tobacco products within Municipal Playgrounds or nine (9) meters of any entrance ways surrounding Municipal Buildings.	04/03/2014	
East Gwillimbury	By-Law 2012-029, Being a by-law to prohibit smoking and holding of lit tobacco products at all town playgrounds, sports fields, splash pads and other designated spaces	19/03/2012	

Name of Jurisdiction	Legislation and Bylaw Name	Date Passed (dd/mm/yyyy)	Date Last Amended (dd/mm/yyyy)
East Zorra-Tavistock, Township of	By-Law #2015-36, Being a By-Law to prohibit smoking at any township facility and to repeal By-law #2012-15	16/09/2015	
Elliot Lake	Bylaw No. 03-4, A Bylaw to Regulate Smoking in Public Places and Workplaces	11/05/2009	
Englehart	Bylaw No. 2012-06, Smoke-Free and Tobacco Control By-Law	23/04/2012	
Essa, Township of	Bylaw No. 2011-62, A Bylaw of the Corporation of the Town of Essa to prohibit smoking outdoors on Township owned property	19/10/2011	
Essex, Town of	By-Law Number 1228, being a by-law to prohibit smoking on any property owned or leased by the Town of Essex	06/10/2014	
Georgina	Bylaw No. 2012-0061 (Reg-1), Being a By-law to prohibit smoking and use of tobacco products at all designated Town of Georgina outdoor areas	25/06/2012	
Gravenhurst	Smoke Free Outdoor Spaces By-law 2012-149, Being a By-Law to prohibit smoking outdoors on property owned by the Town of Gravenhurst	18/12/2012	
Hamilton	By-law No. 11-080, To Prohibit Smoking within City Parks and Recreation Properties	09/03/2011	
Huron County	Bylaw No. 21, 2003, A Bylaw of the Corporation of the County of Huron to Regulate Smoking in Public Places and Workplaces in Huron County and to Repeal Bylaw No. 9, 2003.	04/09/2003	
Huron Shores	Bylaw No. 04-06, Being a Bylaw to Regulate Smoking in Public Places and Workplaces	11/02/2004	
Innisfil	By-Law 111-13, A By-Law of The Corporation of the Town of Innisfil to Prohibit Smoking and Use of Tobacco Products at all designated Town of Innisfil Outdoor Sports and Recreational Spaces. By-Law No. 021-16, A By-Law of The Corporation of the Town of Innisfil to amend By-law 111-13	16/10/2013	06/04/2016
King, Township of	By-law #2016-103 – a By-law for the Regulation, Protection and Government of Parks, Facilities as well as the Regulation of Loitering, Nuisance and Smoking in the Township of King	12/12/2016	
Kingston	Bylaw No. 2002-231, A Bylaw to Regulate Smoking in Public Places and Workplaces in the City of Kingston Bylaw No. 2004-336 A By-Law to Amend By-Law No. 2002-231 (consolidated) By-Law No. 2012-150, A By-Law to Amend By-Law No. 2002-231, A By-Law to Regulate Smoking in Public Places and Workplaces in the City of Kingston as Amended	22/10/2002	06/11/2012
Kingsville, Town of	Bylaw 96-2016, Being a Bylaw to Prohibit Smoking in Public Places Within the Town of Kingsville	11/10/2016	
Kirkland Lake	Bylaw 13-072, Being a Bylaw to Prohibit Smoking in Children's Playgrounds and on Joe Mavrinac Community Complex Property Within Town of Kirkland Lake (“Smoke-Free Recreation Space Bylaw”)	13/08/2013	

Name of Jurisdiction	Legislation and Bylaw Name	Date Passed (dd/mm/yyyy)	Date Last Amended (dd/mm/yyyy)
Lasalle, Town of	By-Law Number 7775, Being a By-Law to Prohibit Smoking within Town of Lasalle Owned Parks, Facilities, Playgrounds and Sports Fields	14/07/2015	
Mattawa	Bylaw No. 08-25, Smoke-free Hospital Bylaw Bylaw No. 09-20, Being a Bylaw to amend Bylaw No. 08-25 By-Law No. 13-22, Being a By-Law to Regulate Smoking in Public Places and Workplaces Smoke Free Hospital By-Law	10/11/2008	09/12/2013
Mississauga	The Corporation of The City of Mississauga Smoking By-Law 94-14 A bylaw to prohibit smoking tobacco-based products (including waterpipe) anywhere on Mississsauga Celebration Square. Amended by By-Law 180-15.	23/04/2014	24/07/2015
Napanee, Greater	By-Law No. 03-05, Being a By-law to Regulate Smoking in Public Places and Workplaces in the Town of Greater Napanee	24/02/2003	
Newmarket	Bylaw 2011-73, A Bylaw to prohibit smoking of tobacco products at all town playgrounds, sports and playing fields and other outdoor youth related spaces.	28/11/2011	
Newmarket	By-Law Number 2009-24, A bylaw to prohibit smoking in Sunnyhill Park	30/03/2009	
Niagara Falls	A Consolidated Bylaw Being By-law No. 2011 - 51 as amended by: By-law No. 2011 - 152 (“The Anti-Smoking Bylaw”)	18/04/2011	
Niagara Region	By-law No. 112-2013, A regional by-law to protect children and vulnerable persons from exposure to outdoor second-hand smoke	13/10/2013	
North Bay	Bylaw No. 2012-97, A By-Law to Regulate Smoking in Public Places and Workplaces in the Corporation of the City of North Bay (and to Repeal By-Law No. 2003-05) Bylaw 2012-232, A By-Law to Amend By-Law No. 2102-97 (Schedules "A" and "D").	19/03/2012	02/07/2014
Orangeville	Bylaw No. 36-2012, A by-law to regulate and prohibit smoking at all municipally owned/operated public places (“Smoke-Free Municipal Public Spaces Bylaw”)	07/05/2012	
Orillia	Chapter 953, Smoking Regulation, Public Places and Workplaces Latest amending bylaw was By-law 2015-8, 9 February 2015	17/12/2001	09/02/2015
Ottawa	Bylaw No. 2004-276, A by-law of the City of Ottawa to regulate and to promote responsible enjoyment and use of parks and facilities (Parks and Facilities Bylaw) Bylaw No. 2006-6, A Bylaw of the City of Ottawa to amend Bylaw No. 2004-276 respecting smoking in the vicinity of a City facility Bylaw No. 2012-86, A bylaw of the City of Ottawa to amend Bylaw No. 2004-276 to prohibit smoking in city parks and facilities	23/06/2004	27/06/2012
Ottawa	Bylaw No. 2012-47, A bylaw of the City of Ottawa to amend Bylaw No. 2008-449 to create smoke-free market stands in the ByWard Market	01/03/2012	

Name of Jurisdiction	Legislation and Bylaw Name	Date Passed (dd/mm/yyyy)	Date Last Amended (dd/mm/yyyy)
Ottawa	Bylaw No. 2016-305 Waterpipes in Public Places and Workplaces Bylaw, a bylaw of the City of Ottawa to amend Bylaw No. 2008-448 to prohibit the use of water pipes in the Parkdale Market	01/03/2012	31/08/2016
Ottawa	Bylaw No. 2012-85, A bylaw of the City of Ottawa to amend Bylaw No. 2003-446 to prohibit smoking on outdoor patio encroachments and at café seating. Bylaw No. 2016-305 Water Pipes in Public Places and Workplaces Bylaw	02/04/2012	31/08/2016
Ottawa	Bylaw 2007-268, A bylaw of the City of Ottawa respecting public transit (Transit Bylaw)	13/06/2007	
Parry Sound	Bylaw No. 2009-5389, Being a bylaw to regulate smoking at the West Parry Sound Health Centre	01/10/2009	
Parry Sound	Bylaw No. 2012-6087, A By-law to prohibit smoking within nine (9) metres from any entrance or exit of a building owned or leased by the Town of Parry Sound and in or within 9 metres of any municipal outdoor public place. To repeal Bylaw 2011-5578.	20/03/2012	
Peel Region	Bylaw Number 30-2016 – A bylaw to regulate waterpipe smoking in the Regional Municipality of Peel	28/04/2016	
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 (“Water Pipe By-law").	10/12/2012	
Peterborough	By-Law Number 16-021, Being a By-Law to repeal By-Law 11-074 (as amended by 13-002) and By-Law 13-002 of the City of Peterborough and enact City of Peterborough Smoking By-Law Number 16-021	22/02/2016	
Peterborough, County of	Bylaw 2009-50, A By-law Respecting Smoking in Certain Public Places under the Jurisdiction of The County of Peterborough	03/06/2009	
Prince Edward County	Bylaw 2818-2011, Being a bylaw to prohibit smoking and tobacco use within 25 m surrounding playground structures, sport playing fields, park facilities, tennis courts, outdoor rinks, youth park, skate parks, and within 9 m of recreation facilities owned by the Corporation of the County of Prince Edward	08/03/2011	
Renfrew County	Bylaw No. 84-09, A Bylaw to Prohibit Smoking on the Property of Bonnechere Manor & Miramichi Lodge by Residents, Staff and the General Public.	24/06/2009	
Renfrew County	Bylaw 57-16, A Bylaw to Amend Bylaw 59-02 Corporate Policies and Procedures for the County of Renfrew to Approve a Smoking Policy on Designated County Properties (2016)	28/04/2016	
Sault Ste. Marie	Bylaw 2003-7, A by-law to regulate smoking in public places and city buildings in the City of Sault Ste. Marie (Consolidated as of February 21, 2012)	13/01/2003	21/02/2012
Scugog, Township of	The Corporation of the Township of Scugog By-Law Number 31-14 being a By-Law to regulate smoking in outdoor public places	02/06/2014	
Severn, Township	By-law No. 2013-68 Being a By-law to prohibit smoking of tobacco in	05/09/2013	

Name of Jurisdiction	Legislation and Bylaw Name	Date Passed (dd/mm/yyyy)	Date Last Amended (dd/mm/yyyy)
of	areas within the Township of Severn		
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 ("The Smoke-free Outdoor Spaces By-law")	08/07/2014	
Thunder Bay	Bylaw No. 052-2010, A By-law to repeal the City's prior Smoking Prohibition By-law (Number 34-2004) and to enact a replacement by-law that contains only those prohibitions that are more restrictive than the ones set out in the Smoke Free Ontario Act, 1994 (S.O. 1994, c. 10, as amended). By-Law Number 110-2013, A by-law to Appoint Municipal Law Enforcement Officers for the purposes of enforcing the Smoking Prohibition By-law No. 052-2010 at the Thunder Bay Regional Health Sciences Centre	10/05/2010	21/10/2013
Tillsonburg	Bylaw Number 3596, To Prohibit Smoking In Certain Public Places Within The Town Of Tillsonburg	14/05/2012	
Timmins	Bylaw No. 2011-7123, Being a bylaw to repeal Bylaw 2003-5815 and amendments thereto and regulate smoking in Public Places and Workplaces Bylaw No. 2012-7250, Being a bylaw to amend Bylaw No. 2011-7123 to Prohibit Smoking at Timmins and District Hospital	14/11/2011	27/08/2012
Toronto	Bylaw No. 87-2009, To Amend City of Toronto Municipal Code Chapter 608, Parks, to prohibit smoking in playgrounds and other areas of City	28/01/2009	

Name of Jurisdiction	Legislation and Bylaw Name	Date Passed (dd/mm/yyyy)	Date Last Amended (dd/mm/yyyy)
	parks.		
Toronto	Bill 1725, To amend City of Toronto Municipal Code Chapter 709, Smoking, to regulate and prohibit smoking at entrances and exits to public buildings and to repeal certain Articles. Bill 1726, To amend City of Toronto Municipal Code Chapter 608, Parks, to prohibit smoking in and around certain facilities within City parks.	13/11/2013	
Toronto	Toronto Transit Commission Bylaw No. 1	21/01/2009	
Toronto	Toronto Municipal Code Chapter 545, Licensing (Pertaining to Waterpipe)	03/11/2015	
Toronto	Bylaw No. 285-2014 To amend City of Toronto Municipal Code Chapter 636, Public Squares, and to amend former City of Toronto Municipal Code Chapter 237, Nathan Phillips Square, to ban smoking on public squares.	03/04/2014	
Trent Hills	By-law 2012-75, to prohibit smoking and holding lighted tobacco products within defined Municipal-owned outdoor public spaces	17/07/2012	
Uxbridge	Bylaw No. 2015-055, Being a by-law to prohibit smoking within fifteen (15) metres of entrance ways of municipal buildings	27/04/2015	
White River	Bylaw 2012-03, Being a by-law to amend By-Law No. 2004-07, A Bylaw to regulate smoking in public places and workplaces in the Corporation of the Township of White River	11/03/2012	
Windsor	Bylaw No. 113-2006, A Bylaw to Prohibit Smoking in the City of Windsor Amending Bylaw No. 175-2016	12/07/2006	21/11/2016
Woodstock	Bylaw No. 8461-08, Smoke Free Workplaces and Public Places Also known as Chapter 835 (of the Municipal Code), Smoke-free Workplaces and Public Places Bylaw No. 8978-15, A by-law to amend the City of Woodstock Municipal Code Chapter 835 Smoke Free Workplaces and Public Places.	05/06/2008	18/06/2015

Table 6A-2: Workplace Exposure (Past Week) Indoors or Inside a Work Vehicle, Ontario 2010 to 2016

Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2010		16.3	12.8	20.5
2011		13.6	10.2	18.0
2012	824,700	12.7	9.5	16.9
2013	626,300	10.2[M]	6.8	14.8
2014	544,000	8.8[M]	6.2	12.2
2015	843,200	13.0	9.4	17.6
2016	727,600	11.3[M]	7.8	16.1

[M] Interpret with caution: subject to moderate sampling variability.
Note: Data table is for Figure 6-2
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2010 –2016

Table 6A-3: Nonsmokers' Exposure to Secondhand Smoke in Public Places[a] (Every Day or Almost Every Day), by Age, Ontario, 2003 to 2015

	Aged 12+				Aged 12 – 18			
Year	Population Estimate	%	Lower 95% Confidence Limit	Lower 95% Confidence Limit	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2003	1,405,000	17.9	17.3	18.5	268,300	26.4	24.5	28.2
2005	1,077,600	13.1	12.5	13.6	247,300	23.2	21.4	25.0
2007	994,500	11.7	10.8	12.5	229,100	20.8	18.2	23.5
2008	983,000	11.3	10.4	12.1	219,700	19.9	17.5	22.4
2009	1,006,700	11.2	10.3	12.0	213,300	19.2	16.8	21.5
2010	1,176,300	13.1	12.1	14.1	228,600	21.1	18.6	23.6
2011	1,177,200	13.0	12.2	13.9	258,300	24.0	21.1	26.9
2012	1,227,200	13.3	12.4	14.3	254,400	23.0	20.1	25.9
2013	1,308,800	13.9	12.9	14.9	254,600	24.1	21.3	26.9
2014	1,442,000	15.1	14.1	16.2	273,800	25.3	22.6	28.0
2015[b]	1,529,600	16.2	15.0	17.5	293,600	30.0	27.0	35.0

[a] Exposure to secondhand smoke in public places, such as restaurants, bars, shopping malls, arenas, bingo halls and bowling alleys
[b] The Canadian Community Health Survey was redesigned in 2015. Interpret trend with caution.
Note: Data table is for Figure 6-3
Source: Canadian Community Health Survey 2003, 2005, 2007-2015

Table 6A-4: Nonsmokers' Exposure to Secondhand Smoke in Public Places[a] (Every Day or Almost Every Day), by Public Health Unit, Ages 12+, Ontario, 2007/08, 2009/10, 2011/12, 2013/14

	Exposure to Secondhand Smoke in Public Places			
Public Health Unit	**2007/08**	**2009/10**	**2011/12**	**2013/2014[b]**
Chatham-Kent	11.6	4.6[M,Y]	5.7[M]	8.0[M]
Huron County	5.2[M]	9.1[M,+Y]	8.7[M]	8.4[M]
Peterborough County-City	9.7	15.4[+Y]	7.0[M,Y]	9.4[M]
Perth District	12.2	10.8[M]	10.3	9.5
Haliburton, Kawartha, Pine Ridge District	7.8	9.3[M]	9.6	10.1
Elgin-St. Thomas	16.3	13.5[M]	11.5[M]	10.3[M]
Kingston, Frontenac and Lennox and Addington	6.7	10.9[+Y]	11.4[M]	10.4
Timiskaming	F	8.4[M]	9.2[M]	10.4[M]
Wellington-Dufferin-Guelph	13.2	11.1	12.6	11.0
Thunder Bay District	8.1	7.6	12.4[+Y]	11.5
Middlesex-London	9.5	12.3	11.8	11.9
Grey Bruce	8.7	9.9[M]	8.6	12.1
Windsor-Essex County	7.8	6.8	11.0[+Y]	12.1
Northwestern	10.3[M]	8.4[M]	9.1[M]	12.2[M]
North Bay Parry Sound District	9.9[M]	10.6[M]	9.4[M]	12.5
Leeds, Grenville and Lanark District	9.0	8.2[M]	11.0	12.6
Niagara Regional Area	12.1	10.5	10.8	12.8
District of Algoma	17.3	13.8	11.5[M]	12.9
City of Hamilton	12.5	12.1	12.1	13.0
Sudbury and District	11.7	11.9	15.0	13.0
Oxford County	3.7[M]	6.7[M]	10.4	13.3[M]
Simcoe Muskoka District	13.2	12.2	14.9	13.5
Brant County	8.9[M]	9.5[M]	10.7	13.8
Lambton	5.2[M]	9.0[+Y]	12.7	13.9
York Regional	12.4	10.6	13.3	14.4
Eastern Ontario	8.6	9.4[M]	14.3[+Y]	14.5
Halton Regional	12.3	11.2	12.8	14.6
City of Toronto	14.9	15.3	13.7	14.7
Waterloo	6.4	8.9	11.5	15.0
Porcupine	11.9[M]	10.5[M]	11.3[M]	15.2

	Exposure to Secondhand Smoke in Public Places			
Public Health Unit	**2007/08**	**2009/10**	**2011/12**	**2013/2014[b]**
Durham Regional	13.5	16.4	18.0	15.3
Haldimand-Norfolk	10.2	9.1[M]	14.7[+Y]	16.0
Renfrew County and District	9.2[M]	10.5[M]	12.2[M]	16.1[M]
Hastings and Prince Edward Counties	6.9[M]	7.4	9.7	16.7[+Y]
City of Ottawa	8.7	13.2[+Y]	18.5[+Y]	18.1[M]
Peel Regional	11.0	12.7	13.2	18.6[+Y]
Ontario	**11.5**	**12.1**	**13.2[+Y]**	**14.5[+Y]**

[a] Exposure to secondhand smoke in public places, such as restaurants, bars, shopping malls, arenas, bingo halls, and bowling alleys
[b] Ordered by 2013/14 exposure (lowest to highest)
[M] Marginal. Interpret with caution: subject to moderate sampling variability
[F] Not reportable due to a small sample size
[Y] Significantly lower than the previous year
[+Y] Significantly higher than the previous year

Source: Canadian Community Health Survey 2007/08, 2009/10, 2011/12 and 2013/14 (from the Canadian Socio-economic Information Management System [CANSIM]) Table 105-0502. Health indicator profile, two year period estimates, by age group and sex, Canada, provinces, territories, health regions (2012 boundaries) and peer groups.

Table 6A-5: Agreement that Smoking Should be Banned in Playgrounds, Recreation Facilities, Outdoor Special Events and Parks, Ages 18+, Ontario, 2010 to 2016

	Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Outdoor children's playgrounds/pools ban	2010		87.2	84.5	89.4
	2011		87.5	84.3	90.0
	2012	9,258,800	91.3	88.8	93.2
	2013	8,350,800	89.0	86.0	91.4
	2014	9,326,400	90.8	88.4	92.8
	2015	9,629,000	93.8	91.2	95.7
	2016	9,820,300	93.8	91.2	95.6
Outdoor recreation facilities ban	2010		76.1	72.8	79.1
	2011		68.0	64.1	71.7
	2012	7,443,300	73.4	69.8	76.7
	2013	6,714,900	71.6	67.5	75.4
	2014	7,929,200	77.4	73.9	80.5
	2015	8,350,300	81.4	77.7	84.5
	2016	8,350,100	79.8	75.8	83.3

	Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Outdoor special events ban	2010		66.8	63.2	70.3
	2011		64.1	60.2	67.8
	2012	6,683,700	65.9	62.1	69.5
	2013	5,923,800	63.2	58.9	67.2
Parks/beach ban	2010		56.5	52.7	60.2
	2011		54.7	50.7	58.6
	2012	5,861,200	57.8	54.0	61.5
	2013	5,594,000	59.6	55.4	63.7
	2014	6,498,100	63.3	59.4	67.0
	2015	6,996,200	68.2	64.3	71.8
	2016	7,092,800	67.7	63.6	71.6

Note: Public opinions related to smoking bans at outdoor special events were not collected in 2014, 2015 and 2016. Data table is for Figure 6-4
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2010-2016.

Table 6A-6: Agreement that Smoking Should be Banned in Playgrounds, Recreation Facilities and Parks, by Smoking Status, Ages 18+, Ontario, 2016

	Smoking Status	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Outdoor children's playgrounds/pools ban	Current	1,090,800	86.3	71.9	94.0
	Former	2,499,300	92.5	88.7	95.1
	Never	6,192,400	96.7	94.1	98.2
Outdoor recreation facilities ban	Current	741,200	58.6	46.2	70.1
	Former	2,172,600	80.4	74.7	85.2
	Never	5,380,000	84.1	78.6	88.4
Parks/beach ban	Current	524,700	41.5	30.6	53.4
	Former	1,800,300	66.7	60.3	72.5
	Never	4,697,400	73.4	67.7	78.4

Note: Data table is for Figure 6-5
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2016.

Table 6A-7: Agreement that Smoking should be Banned on Sidewalks, Entrances and Bus Stops, Ages 18+, Ontario, 2010 to 2016

	Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Bus stops/transit shelters ban	2010		77.2	73.9	80.2
	2011		73.1	69.3	76.6
	2012	7,854,200	77.4	74.0	80.5
	2013	6,900,400	73.6	69.5	77.4
Entrances to public buildings ban	2010		84.1	81.0	86.7
	2011		85.0	81.8	87.8
	2012	9,036,400	89.1	86.4	91.3
	2013	8,118,700	86.6	83.3	89.3
	2014	9,204,700	89.6	87.1	91.7
	2015	9,255,800	90.2	86.9	92.7
	2016	9,407,400	89.8	86.4	92.5
Sidewalk ban	2010		48.2	44.4	52.0
	2011		43.8	40.0	47.7
	2012	4,996,600	49.3	45.4	53.1
	2013	4,773,900	50.9	46.7	55.1
	2014	5,365,100	52.3	48.3	56.2

Note: Public opinions related to smoking bans at bus stops and transit shelters were not collected in 2014 and 2015; Public opinions related to smoking bans on sidewalks were not collected in 2015. Data table is for Figure 6-6.
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2010-2016.

Table 6A-8: Nonsmokers' Exposure to Secondhand Smoke in Vehicles (Every Day or Almost Every Day), by Age, Ontario, 2003 to 2015

	Aged 12+				Aged 12 – 15			
Year	Population Estimate	%	Lower 95% Confidence Limit	Lower 95% Confidence Limit	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2003	761,500	9.7	9.2	10.2	125,000	19.6	17.6	21.6
2005	648,400	7.8	7.4	8.3	101,900	16.1	14.3	17.8
2007	688,900	8.1	7.5	8.7	105,700	16.2	13	19.4
2008	599,400	6.9	6.2	7.5	71,300	10.7	8.2	13.1
2009	574,200	6.4	5.7	7.1	62,400	9.6	7.4	11.8
2010	588,000	6.5	5.8	7.3	45,600	7.5	5.5	9.5
2011	549,600	6.1	5.4	6.8	44,600	7.4	5.6	9.1
2012	501,000	5.4	4.7	6.2	43,400	6.7	4.6	8.8

	Aged 12+				Aged 12 – 15			
Year	Population Estimate	%	Lower 95% Confidence Limit	Lower 95% Confidence Limit	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2013	450,800	4.8	4.2	5.3	44,700	7.9	5.9	10
2014	561,700	5.9	5.2	6.5	32,600	5.4[M]	3.6	7.3
2015[a]	405,200	4.3	3.7	5.0	22,800	4.2[M]	2.7	6.4

[a] The Canadian Community Health Survey was redesigned in 2015. Interpret trend with caution.
[M] Interpret with caution: subject to moderate sampling variability.
Note: Data table is for Figure 6-7
Source: Canadian Community Health Survey 2003, 2005, 2007-2015

Table 6A-9: Nonsmokers' Exposure to Secondhand Smoke in Private Vehicles (Every Day or Almost Every Day), by Public Health Unit, Ages 12+, Ontario, 2007/08, 2009/10, 2011/12, 2013/14

	Exposure to Secondhand Smoke in Private Vehicles			
Public Health Unit	2007/08	2009/10	2011/12	2013/2014[a]
Elgin-St. Thomas	15.9	10.1[M,Y]	8.7[M]	3.7[M,Y]
Leeds, Grenville and Lanark District	8.1	6.4[M]	4.6[M]	3.8[M]
Oxford County	7.6[M]	6.8[M]	7.1[M]	3.8[M,Y]
City of Toronto	6.7	5.1	4.4[M]	3.9
Halton Regional	6.9[M]	5.6[M]	5.1[M]	4.0[M]
York Regional	5.6	5.9[M]	5.2[M]	4.0
Haliburton, Kawartha, Pine Ridge District	6.7[M]	6.3[M]	8.6[M]	4.4[M]
Niagara Regional Area	7.6	6.2[M]	5.7[M]	4.7[M]
Peel Regional	7.2	7.3	4.0[Y]	4.9
Middlesex-London	6.9	8.1	5.6[M]	5.0[M]
City of Ottawa	3.4[M]	4.3[M]	5.9[M]	5.1[M]
Kingston, Frontenac and Lennox and Addington	6.7	7.2[M]	6.5[M]	5.3[M]
Windsor-Essex County	7.2	8.7[M]	8.8[M]	5.4[M]
City of Hamilton	9.0	4.8[M,Y]	6.2	5.5[M]
Perth District	7.5[M]	9.3[M]	5.7[M]	5.7
Wellington-Dufferin-Guelph	8.0	8.0[M]	5.1[M]	5.8[M]
Simcoe Muskoka District	8.7	8.1	7.0	5.9
Thunder Bay District	8.0	7.2	9.8[M]	5.9[M,Y]
Chatham-Kent	9.9	6.6[M]	4.4[M]	6.0[M]

	Exposure to Secondhand Smoke in Private Vehicles			
Public Health Unit	**2007/08**	**2009/10**	**2011/12**	**2013/2014[a]**
Peterborough County-City	7.9[M]	10.2[M]	4.8[M,Y]	6.0[M]
Waterloo	6.4	6.0	5.1[M]	6.2[M]
Hastings and Prince Edward Counties	12.2[M]	8.7	8.5	6.3[M]
Lambton	7.3[M]	7.7	5.4[M]	6.6[M]
Renfrew County and District	6.7[M]	7.3[M]	7.7[M]	6.6[M]
Timiskaming	7.1[M]	F	F	6.7[M]
North Bay Parry Sound District	10.7	6.2[M,Y]	7.2	6.8[M]
District of Algoma	13.8	5.8[M,Y]	4.1[M]	7.1[M]
Brant County	10.4	12.0[M]	7.2[M]	7.9[M]
Northwestern	8.8[M]	10.8	5.7[M,Y]	8.2[M]
Durham Regional	11.2	8.3	7.7[M]	8.5
Eastern Ontario	10.2	7.4[M]	12.9[M,+Y]	9.1[M]
Sudbury and District	11.9	6.0[M,Y]	9.8[M]	9.3
Haldimand-Norfolk	9.2[M]	7.8[M]	7.2[M]	9.8[M]
Grey Bruce	7.4[M]	6.2[M]	5.2[M]	9.9[M,+Y]
Porcupine	12.2	8.8[M]	11.0[M]	11.1[M]
Huron County	8.3[M]	8.8[M]	6.1[M]	14.4[M,+Y]
Ontario	**7.5**	**6.5[Y]**	**5.8**	**5.3**

[a] Ordered by 2013/14 exposure (lowest to highest).
[M] Marginal. Interpret with caution: subject to moderate sampling variability.
[F] Not reportable due to a small sample size.
[Y] Significantly lower than the previous year.
[+Y] Significantly higher than the previous year.

Source: Canadian Community Health Survey 2007/08, 2009/10, 2011/12 and 2013/14 (from the Canadian Socio-economic Information Management System [CANSIM]) Table 105-0502). Health indicator profile, two year period estimates, by age group and sex, Canada, provinces, territories, health regions (2012 boundaries) and peer groups.

Table 6A-10: Nonsmokers' Exposure to Secondhand Smoke at Home (Every Day or Almost Every Day), by Age, Ontario, 2003 to 2015

	Aged 12+				Aged 12 – 18			
Year	Population Estimate	%	Lower 95% Confidence Limit	Lower 95% Confidence Limit	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2003	724,700	9.2	8.7	9.7	210,200	20.6	19.0	22.3
2005	606,400	7.3	6.9	7.7	192,300	18.0	16.5	19.5
2007	487,600	5.7	5.3	6.2	169,000	15.4	13.1	17.6
2008	518,000	5.9	5.3	6.5	140,000	12.7	10.8	14.6
2009	481,100	5.3	4.8	5.9	139,400	12.5	10.4	14.6
2010	453,600	5.0	4.5	5.6	131,300	12.1	9.9	14.3
2011	434,500	4.8	4.0	5.6	120,500	11.2	9.0	13.4
2012	385,700	4.2	3.6	4.8	87,900	7.9	6.2	9.7
2013	364,800	3.9	3.4	4.4	95,800	9.1	7.2	10.9
2014	322,500	3.4	3.0	3.8	86,900	8.0	6.3	9.7
2015[a]	370,000	3.8	3.3	4.4	99,400	9.8	7.8	12.4

[a] The Canadian Community Health Survey was redesigned in 2015. Interpret trend with caution.
Note: Data table is for Figure 6-8
Source: Canadian Community Heath Survey 2003, 2005, 2007-2015.

Table 6A-11: Nonsmokers' Exposure to Secondhand Smoke in Homes (Every Day or Almost Every Day), by Public Health Unit, Ages 12+, Ontario, 2007/08, 2009/10, 2011/12, 2013/14

	Exposure to Secondhand Smoke in Homes			
Public Health Unit	2007/08	2009/10	2011/12	2013/14[a]
Halton Regional	5.4	3.4[M]	2.8[M]	2.2[M]
Oxford County	8.8	6.6[M]	6.4[M]	2.2[M,Y]
Middlesex-London	4.8	5.9[M]	4.0[M]	2.4[M]
Waterloo	6.2	5.5	2.9[M,Y]	2.5[M]
Peel Regional	3.7[M]	4.9	3.0[Y]	2.6
York Regional	2.9[M]	3.5[M]	3.2[M]	2.7[M]
District of Algoma	8.6	8.0[M]	4.7[M]	2.8[M]
Elgin-St. Thomas	7.6[M]	5.9[M]	3.5[M]	2.9[M]
Durham Regional	8.2	4.3[M,Y]	6.3[M]	3.1[M]
City of Ottawa	4.1	3.6[M]	3.2[M]	3.3[M]
Windsor-Essex County	6.9	5.2[M]	4.8	3.5[M]
City of Toronto	4.5	4.8	4.8[M]	3.5

	Exposure to Secondhand Smoke in Homes			
Public Health Unit	**2007/08**	**2009/10**	**2011/12**	**2013/14** [a]
Niagara Regional Area	7.6	5.5[M]	5.2[M]	3.6[M]
Renfrew County and District	6.3[M]	7.4[M]	5.3[M]	3.8[M]
Perth District	6.2[M]	6.2[M]	3.2[M]	3.9[M]
Leeds, Grenville and Lanark District	9.2	9.6	6.7[M]	4.1[M]
Peterborough County-City	5.9[M]	6.9[M]	2.1[M,Y]	4.1[M,+Y]
Thunder Bay District	7.6	7.6	4.7[M]	4.5[M]
Chatham-Kent	7.8[M]	7.0[M]	3.9[M]	4.6[M]
Sudbury and District	10.3	7.1[M]	7.4[M]	4.6[M]
Wellington-Dufferin-Guelph	6.0[M]	5.6[M]	5.0[M]	4.8[M]
Eastern Ontario	12.7	7.4[M,Y]	8.4	5.0[M]
Grey Bruce	7.5	3.8[M,Y]	5.2[M]	5.2[M]
Simcoe Muskoka District	7.5	4.5[M,Y]	5.0	5.3
Haldimand-Norfolk	9.6	8.7[M]	5.6[M]	5.4[M]
Porcupine	9.4[M]	7.4[M]	7.2[M]	5.4[M]
Brant County	8.3[M]	7.8[M]	4.2[M]	5.5[M]
Lambton	6.3[M]	7.9[M]	6.0[M]	5.5[M]
Kingston, Frontenac and Lennox and Addington	6.9[M]	5.9[M]	4.7[M]	5.7[M]
City of Hamilton	7.7	6.1[M]	5.5[M]	6.0[M]
Northwestern	8.1[M]	6.8[M]	5.6[M]	6.3[M]
Hastings and Prince Edward Counties	12.0	9.2[M]	8.1[M]	7.3[M]
Huron County	7.2[M]	5.3[M]	4.8[M]	9.4[M]
Haliburton, Kawartha, Pine Ridge District	8.6	6.8[M]	6.6[M]	F
North Bay Parry Sound District	8.3[M]	5.4[M]	5.4[M]	F
Timiskaming	10.7[M]	8.5[M]	9.4[M]	F
Ontario	**5.8[Y]**	**5.2[Y]**	**4.5[Y]**	**3.6[Y]**

[a] Ordered by 2013/14 exposure (lowest to highest).
[M] Marginal. Interpret with caution: subject to moderate sampling variability.
[F] Not reportable due to a small sample size.
[Y] Significantly lower than the previous year.
[+Y] Significantly higher than the previous year.

Source: Canadian Community Health Survey 2007/08, 2009/10, 2011/12 and 2013/2014 (from the Canadian Socio-economic Information Management System [CANSIM]) Table 105-0502). Health indicator profile, two year period estimates, by age group and sex, Canada, provinces, territories, health regions (2012 boundaries) and peer groups.

Table 6A-12: Agreement That There Should Be a Law that Parents Cannot Smoke Inside their Home if Children are Living There, Ages 18+, Ontario, 2000 to 2016

Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2000		51.7	48.4	55.1
2001		51.0	47.8	54.3
2002		58.5	55.3	61.6
2003		63.0	59.9	66.0
2004		63.9	60.7	67.0
2005		67.7	63.9	71.4
2006		70.2	66.8	73.4
2007		78.0	74.8	80.8
2008		78.0	74.8	81.0
2009		80.4	77.4	83.2
2010		75.4	72.1	78.3
2011		80.1	77.0	82.9
2012	7,780,300	76.9	73.7	79.8
2013	7,013,400	74.9	71.2	78.3
2014	7,955,100	77.5	74.2	80.5
2015	8,025,300	78.4	74.9	81.5
2016	8,322,700	79.6	76.4	82.6

Note: Data table is for Figure 6-9
Source: Centre for Addiction and Mental Health Monitor 2000-2009 (half year sample); 2010-2016(full year sample).

Table 6A-13: Exposure to Secondhand Smoke in Multi-Unit Dwellings (Past Month), 18+, Ontario, 2011 to 2016

Year	Population Estimate	%	Lower 95% Confidence Limit	Upper 95% Confidence Limit
2011		26.9	23.3	30.8
2012	590,600	24.1	20.1	28.6
2013	441,800	19.9	14.4	26.9
2014	689,500	29.4	22.1	37.9
2015	287,100	15.1[M]	10.3	21.5
2016	328,300	14.0[M]	9.5	20.2

[M] Interpret with caution: subject to moderate sampling variability.
Note: Data table is for Figure 6-10
Source: Centre for Addiction and Mental Health Monitor (Full Year) 2011-2016

References

[1] Smoke-Free Ontario. Scientific Advisory Committee, Ontario Agency for Health Protection and Promotion (Public Health Ontario). *Evidence to Guide Action: Comprehensive Tobacco Control in Ontario (2016).* Toronto, ON: Queen's Printer for Ontario, 2017. Accessed December 18, 2017.

[2] Ontario Ministry of Health and Long-Term Care. *Smoke-Free Ontario Modernization: Report of the Executive Steering Committee.* Toronto, ON: Queen's Printer for Ontario, 2017. Accessed November 30, 2017.

[3] Non-smokers' Rights Association and Ontario Campaign for Action on Tobacco, as cited in: *Ontario Tobacco Research Unit. Indicators of OTS Progress.* Special Reports: Monitoring and Evaluation Series, 2003-2004 (Vol. 10, No. 3). Toronto, ON: Ontario Tobacco Research Unit, 2004.

[4] Government of Ontario. *Smoke-Free Ontario Act. Ontario Regulation 206/14*. Accessed December 18, 2017.

[5] Government of Ontario. *Smoke-free Ontario Act. Ontario Regulation 336/15*. Accessed December 18, 2017.

[6] Government of Ontario. *Bill 174 Cannabis, Smoke-Free Ontario and Road Safety Statute Law Amendment Act, 2017.* Accessed December 18, 2017.

[7] Ontario Ministry of Health and Long-Term Care. *Tobacco Compliance Protocol, 2016*. Toronto, ON: Queen's Printer for Ontario, May 2016. Accessed December 18, 2017.

[8] Ontario Ministry of Health and Long Term Care. *Tobacco Inspection System* [Unpublished data]. February 6, 2017.

[9] Government of Ontario. *Electronic Cigarettes Act. 2015*. Accessed December 18, 2017.

[10] Government of Ontario. *Electronic Cigarettes Act. Ontario Regulation 337/15*. Accessed December 18, 2017.

[11] Zhang B, Haji F, Kaufman P, Muir S, Ferrence R. 'Enter at your own risk': A multimethod study of air quality and biological measures in Canadian waterpipe cafes. *Tobacco Control* 2015 Mar;24(2):175-181.

[12] Non-Smokers' Rights Association. *NSRA's Smoke-Free Laws Database*. Accessed December 20, 2017.

[13] Government of Ontario. *News Release: Ontario Introduces New Easy-to-Understand Standard Lease*. Accessed February 15, 2018.

[14] Smoke-Free Housing Ontario. *Standard Lease Template: Good News for Smoke-free Housing.* Accessed February 15, 2018.

[15] Smoke-Free Housing Ontario. *Directory of Smoke-free Housing* (Includes those in Transition). Accessed December 20, 2017.

[16] Harris K J, Stearns JN, Kovach RG, Harrar SW. Enforcing an outdoor smoking ban on a college

campus: Effects of a multicomponent approach. *Journal of American College Health* 2009 Sep-Oct;58(2):121-126.

[17] Leave the Pack Behind. *Tobacco-Free Campus Guide.* St. Catharines, ON: Brock University, 2011. Accessed January 25, 2018.

[18] Leave the Pack Behind. *Making Campuses Tobacco-Free: A Student Guide to Action.* St. Catharines, ON: Brock University, 2017. Accessed January 25, 2018.

[19] Leave the Pack Behind. *Leave the Pack Behind Final Report: April 1, 2016 – March 31, 2017*. St. Catharines, ON: Brock University, 2017.

[20] United States Community Preventive Services Task Force. *Reducing Tobacco Use and Secondhand Smoke Exposure: Interventions to Increase the Unit Price for Tobacco Products.* Accessed December 22, 2017.

[21] Hopkins DP, Razi S, Leeks KD, Priya Kalra G, Chattopadhyay SK, Soler RE. Smokefree policies to reduce tobacco use a systematic review. *American Journal of Preventive Medicine* 2010 Feb;38(2 Suppl):S275-S289.

[22] IARC Working Group on the Effectiveness of Smoke-Free Policies. *Evaluating the Effectiveness of Smoke-Free Policies.* IARC Handbooks of Cancer Prevention Volume 13. Lyon, FR: International Agency for Research on Cancer, 2009. Accessed December 22, 2017.

[23] US Department of Health and Human Services. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*. Atlanta, GA: U.S. Dept. of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006. Accessed December 22, 2017.

[24] Statistics Canada. *Occupied private dwellings by structural type of dwelling, percentage distribution (2016), Canada, provinces and territories, 2016 Census – 100% data.* Accessed January 25, 2018.

[25] O'Loughlin J, Karp I, Koulis T, Paradis G, DiFranza, JR. Determinants of first puff and daily cigarette smoking in adolescents. *American Journal of Epidemiology* 2009 Sep 1;170(5):585-597.

[26] Alesci N, Forster J, Blaine T. Smoking visibility, perceived acceptability and frequency in various locations among youth and adults. *Preventive Medicine* 2003 Mar;36(3):272–281.

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:

Pro-Tobacco Influences

Table of Contents

List of Tables

List of Figures

Pro-Tobacco Influences

Pro-tobacco influences are any factors that promote commercial tobacco use.[i] These factors are often direct efforts from tobacco companies but may also include efforts by other groups that directly or indirectly encourage tobacco use. Pro-tobacco influences can be viewed as working in opposition to comprehensive tobacco control programs, which aim to prevent smoking, protect individuals from secondhand smoke, and promote quitting.

To gain a deeper understanding of tobacco control efforts, several leading organizations and jurisdictions—including the US Surgeon General, Centers for Disease Control and Prevention, and the State of California[1,2,3]—have recognized the importance of monitoring pro-tobacco influences. Doing so provides relevant context for interpreting the outcomes of Strategy programs and has the potential to inform future tobacco control initiatives. Monitoring these influences also increases awareness of efforts by pro-tobacco parties to counter existing programs, services, and policies.

This chapter summarizes findings on key indicators of pro-tobacco influence across 7 focal areas:

1. Price and Taxation
2. Illicit Sales
3. Agriculture and Production
4. Distribution & Consumption
5. Availability
6. Product and Package Innovation
7. Advertising and Promotion

New this year, we highlight throughout the chapter assessments of pro-tobacco influences, based on the Smoke-Free Ontario Scientific Advisory Committee (SFO-SAC) report, *Evidence to Guide Action: Comprehensive Tobacco Control in Ontario (2016)*[4] and recommendations from the Executive Steering Committee (ESC) in their *Smoke-Free Ontario Modernization Report*.[5] Additionally, we include summary tables at the end of the chapter that compare the current state of affairs of pro-tobacco influences with related assessments and recommendations from these

[i] In this report (unless otherwise stated), tobacco refers to commercial tobacco products (e.g., cigarettes, waterpipe, cigars, etc.). It does not mean Sacred Tobacco used for Indigenous cultural or spiritual purposes. We recognize that sacred/traditional tobacco is an important aspect of many First Nation communities.

reports.

Price and Taxation

The Scientific Advisory Committee made the assessment that an increase in tobacco price and taxation would make a 'high potential contribution' toward encouraging smoking cessation and reducing smoking prevalence, tobacco consumption and smoking initiation.

The Executive Steering Committee identified the following as priority actions to create environments that encourage and support and quitting:

- Raising tobacco taxes to at least the highest level of all other provinces and territories
- Regularly increasing taxes to at least double the price of tobacco product

In Canada, tobacco companies have vigorously lobbied against tobacco tax increases and have attempted to link illicit trade in cigarettes with high taxes, as suggested by the following excerpt from Imperial Tobacco Canada's website: "The problem [of illegal cigarettes] is exacerbated by excessive levels of tobacco taxation."[6] Yet, tobacco companies in Canada continue to raise their portion of the retail price of cigarettes, which helps to enhance their financial position.[7] What has become clear in recent years is that tobacco companies lobby governments not to raise taxes (with the argument that taxes will increase illicit tobacco), yet they continue to implement price increases.

There is strong evidence that increasing cigarette taxes is an effective policy measure to drive down cigarette consumption, encourage current smokers to quit and prevent youth from becoming regular smokers.[8,9,10,11,12,13] On average, a 10% increase in price results in a 3 to 5% reduction in demand in higher income countries.[14,15,16] Moreover, contrary to industry claims, research suggests that increased taxation does not noticeably lead to an increase in illicit tobacco,[17] a position supported by current tax rates across Canada. That is, high tax provinces appear to have lower levels of illicit tobacco than low tax provinces.

In 2018 and 2019, the Government of Ontario will increase tobacco taxes annually by an additional 2 cents per cigarette or gram of tobacco.[18] This approach replaces the inflation-based tax increases announced in the provincial Budget. Ontario tobacco tax rates, as set by the provincial

government, were last changed on April 28, 2017 (Table 7-1). The current rates are:[18]

- 16.475¢ per cigarette, which translates to $3.30 for a pack of 20 cigarettes, $4.12 for a pack of 25 cigarettes, and $32.95 for a carton of 200 cigarettes. In 2018, with an additional 2 cents per cigarette, this will translate to 18.475¢ per cigarette, $3.70 for a pack of 20, $4.62 for a pack of 25, and $36.95 for a carton. The latter is about a 4% increase in total price of a carton of 200 cigarettes over the 2017 price ($106.93 vs. $102.40)
- 16.475¢ per gram or part gram of cut tobacco
- Tax on cigars is 56.6% of the taxable price

The province of Ontario continues to have the second lowest total taxes (federal and provincial) on tobacco ($66.29) of any Canadian province or territory (Table 7-2). Overall, total tobacco taxes account for 64.7% of the retail price of a carton of cigarettes. Recent tobacco tax increases in Ontario have not been sufficient to reach the WHO MPOWER minimum standard for taxation,[19] which is 75% of the retail price.

Table 7-1: Ontario Specific Tobacco Tax Rates, 1987 to 2017

Effective Date	Cigarettes (¢/unit)	Cut Tobacco (¢/gram)	Cigars
4/28/2017	16.475	16.475	56.6% of the taxable price
2/26/2016	15.475	15.475	56.6% of the taxable price
5/2/2014	13.975	13.975	56.6% of the taxable price
2/1/2006	12.35	12.35	56.6% of the taxable price
1/19/2005	11.725	11.725	56.6% of the taxable price
5/19/2004	11.1	11.1	56.6% of the taxable price
11/25/2003	9.85	9.85	56.6% of the taxable price
6/18/2002	8.6	8.6	56.6% of the taxable price
11/2/2001	4.45	4.45	45% of the taxable price
8/1/2001	3.65	3.65	45% of the taxable price
4/6/2001	3.65	3.65	45% of the price at retail
11/6/1999	2.65	2.65	45% of the price at retail
2/14/1998	2.35	2.35	45% of the price at retail
11/29/1996	2.05	2.05	45% of the price at retail
2/22/1994	1.7	1.7	45% of the price at retail
4/30/1991	6.5	6.5	45% of the price at retail
4/25/1990	4.83	4.83	45% of the price at retail
4/21/1988	3.83	2.2	45% of the price at retail
1/1/1987	2.83	1.6	45% of the price at retail

Source: Ontario Ministry of Finance.[18]

Table 7-2: Federal/Provincial/Territorial Tobacco Tax Rates per 200 Cigarettes, July 2017

	Average pre-Tax Price[a] (2017 Figure)	Federal Excise Duty[b]	Provincial/ Territorial Excise Tax	Provincial/ Territorial Sales Tax or Harmonized Sales Tax[c]	Federal GST[d] 5%	Total Tobacco Taxes	Total Retail Price
Northwest Territories	$45.32	$21.56	$60.80[e]	No PST	$6.38	$88.74	$134.06
Nunavut	$37.08	$21.56	$60.00[f]	No PST	$5.93	$87.49	$124.57
Manitoba	$40.89	$21.56	$59.00	PST: 8% = $9.72	$6.07	$96.35	$137.24
Nova Scotia	$36.31	$21.56	$55.04	HST: 15% = $16.94	See HST	$93.54	$129.85
Saskatchewan	$40.48	$21.56	$54.00[g]	PST: 6% = $6.96	$5.80	$88.32	$128.80
New Brunswick	$28.38	$21.56	$51.04	HST: 15% = $15.15	See HST	$87.75	$116.13
Yukon	$47.08	$21.56	$50.00[h]	No PST	$5.93	$77.49	$124.57
Prince Edward Island	$43.27	$21.56	$50.00	HST: 14% = $16.07	See HST	$87.63	$130.90
Alberta	$39.04	$21.56	$50.00	No PST	$5.53	$77.09	$116.13
Newfoundland	$35.93	$21.56	$49.00	HST: 15% = $15.97	See HST	$86.53	$122.46
British Columbia	$32.15	$21.56	$47.80	No PST	$5.08	$74.44	$106.59
ONTARIO	$36.11	$21.56	$32.95[i]	HST: 13% = $11.78	See HST	$66.29	$102.40
Quebec	$38.12	$21.56	$29.80	No PST	$4.47	$55.83	$93.95

[a] This average estimate of "pre-tax price" for each province is calculated by using the Consumer Price Index and the CPI Intercity Index from Statistics Canada for a carton of 200 cigarettes available in May 2017. The full methodology for the calculations is available upon request.
[b] Canada tobacco tax increase effective 23 March 2017. Accessed on March 7, 2018.
[c] PST/HST is calculated on the total of pre-tax price + federal excise duty + provincial excise tax.
[d] GST is calculated on the total of pre-tax price + federal excise duty + provincial excise tax.
[e] NWT tobacco tax increase effective 1 April 2017. Accessed on March 7, 2018.
[f] Nunavut tobacco tax increase effective 15 March 2017. Accessed on March 7, 2018.
[g] Saskatchewan tobacco tax increase effective 23 March, 2017. Accessed on March 7, 2018.
[h] Yukon tobacco tax increase effective 1 July 2017. Accessed on March 7, 2018.
[i] Ontario tobacco tax increase effective 28 April, 2017. Accessed on March 7, 2018.
Note: Ordered highest to lowest by provincial/territorial excise tax.
Source: Non-Smokers Rights Association (NSRA). Federal and Provincial/Territorial Tobacco Tax Rates, July 2017 per 200 Cigarettes. Accessed on December 3, 2017.

Illicit Sales

While a detailed discussion of illicit cigarette sales is beyond the scope of this chapter, this topic merits coverage in the context of pro-tobacco influences. It is a critical (negative) vector working against tobacco control efforts in Ontario. Widespread use of illicit cigarettes poses a significant risk to Ontario's accomplishments in tobacco control and likely contributes to a slower rate of decline in the prevalence of smoking than would otherwise be the case.[20]

The Scientific Advisory Committee has flagged anti-contraband measures as a potential contribution to countering pro-tobacco influences in Ontario.

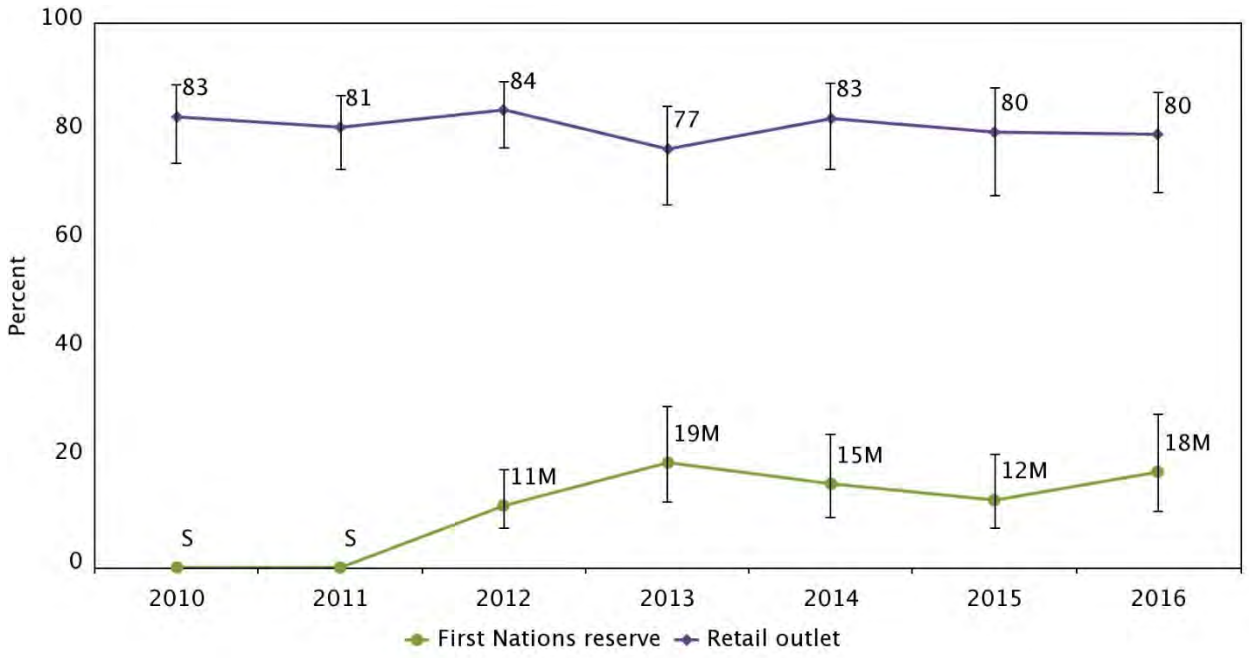
The Executive Steering Committee recommended significantly enhanced enforcement efforts to combat unregulated tobacco.

The actual level of contraband use is difficult to ascertain. An estimate of the relative change in contraband from one year to the next may be more informative than an estimate of the absolute level of contraband in any given year. It is also useful to triangulate the level of illicit tobacco by comparing multiple data sources. Below, we use population survey data and administrative data on police seizures to gain a better understanding of the illicit market.

Illicit sales data is hard to capture. Location of last purchase is one indicator, although these data do not correspond directly with illicit sales, as it is unknown who is making the purchase. For instance, in 2016, 80% of respondents indicated that the location of their last purchase of cigarettes was at a retail store, with 18% making their last purchase on a First Nation Reserve, findings that have not significantly changed in recent years (Figure 7-1). Although it is unknown what percentage of purchases beyond retail stores is illicit and what proportion of the respondents' annual consumption is illicit, these data inform us that the situation appears stable in recent years. (Note: It is illegal for non-Indigenous people to purchase tax-exempt tobacco—indicated by a peach-coloured duty stamp—on First Nations Reserves. Unmarked tobacco—no duty stamp—is considered illicit, whether purchased off or on a First Nation Reserve).

The quantity of tobacco seized by law enforcement is another accessible measure of change in the contraband market. It should be noted, however, that it is an imperfect measure. For instance, as more resources are put into policing, one would expect more seizures, which may or may not reflect a growth in illicit tobacco.

Figure 7-1: Location of Last Purchase, Ontario, 2010 to 2016



Note: S=Suppressed. Results too unreliable to be published due to (unweighted) sample size less than 30 or coefficient of variation greater than 33.3% (extreme sampling variability). M = Interpret with caution: subject to moderate sampling variability. Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 7A-1).
Source: Centre for Addiction and Mental Health Monitor 2010-2016.

Recently released statistics by the RCMP for Ontario and the Central region (Ontario and Quebec) provide evidence of the current status, as of 2016:

- The RCMP's Ontario division conducted 44 tobacco seizures in 2016[21]
- Across the Central region (Ontario and Quebec), 3,541 illicit cigarettes (of 200 units) were seized in 2016, which is a decrease from previous years (Table 7-3)[21]
- The RCMP seized 58,949 kilograms of fine-cut tobacco in 2016, up from 11,295 kilograms seized in 2015 (Table 7-3).[21] One possible reason provided by the RCMP for an increase in fine-cut seizures relative to manufactured cigarettes is that the latter has higher fines compared to fine-cut tobacco, which may deter criminal organizations[21]
- Cigar/cigarillo (200 units) seizures in the Central region reached 186 units in 2016, down from previous years (Table 7-3)[21]

Table 7-3: RCMP Cigarette Seizures, Cartons and Fine-Cut Tobacco (KG), Central Region (Ontario and Quebec), 2014 to 2016

Year	Cartons (200 units)	Fine Cut (KG)	Cigar/Cigarillo (200 units)
2014	70,000	55,400	24,000
2015	15,400	11,295	650
2016	3,541	58,949	186

Source: Royal Canadian Mounted Police, 2017.[21]

In early 2016, the Ontario Ministry of Community Safety and Correctional Services announced the creation of the Contraband Tobacco Enforcement Team within the Ontario Provincial Police (OPP).[21] Forming part of the OPP's Organized Crime Enforcement Bureau, the team is expected to work with the RCMP's Cornwall Regional Task Force and the Ontario Ministry of Finance "to investigate organized crime involvement in illicit tobacco trade."[21]

As of January 1, 2015, the Ontario Ministry of Finance assumed control over raw leaf tobacco (including all varieties of unmanufactured tobacco grown in or brought into Ontario), with the goal of managing and monitoring the movement of tobacco products and impeding the flow of untaxed products.[22] Under the *Tobacco Tax Act*, Ontario's Raw Leaf Tobacco Program includes: "A registration and reporting system for those producing, processing, transporting, exporting, importing, buying and selling raw leaf tobacco, inspection and audit oversight activities, seizure authority, and civil penalties and offence provisions."[22]

Agriculture and Production

The Executive Steering Committee has two recommendations regarding tobacco agriculture and production:

1. Establish a mandatory timeline (5 to 10 years) to phase out tobacco production on non-Indigenous lands
2. Work with tobacco producers to develop crop replacements

Currently, no specific initiatives are in place to address these recommendations.

Number of Farms and Production

Tobacco agriculture and production is a marker for both the financial health of the tobacco industry and possible political influence. Tobacco industry stakeholders have used local political influence, especially in areas of greater density of tobacco farms, to oppose tobacco control measures. For example, in North Carolina, there is evidence that individual farmers influenced the policy agenda around tobacco control, and that growers' associations developed consistent messages about the economic impact of tobacco in that area.[23]

Knowledge of key economic indicators—such as the number and location of tobacco farms across Ontario—as well as the amount of tobacco sold, provides insight into the regional economic base of the industry and has the potential to identify possible areas of opposition to tobacco control legislation.

- In 2017, Ontario had 192 flue-cured tobacco growers and 27 non flue-cured growers (Table 7-4)[24]
- In 2016, there were 195 tobacco farms in Ontario. Although the number of tobacco farms in Ontario has declined since 2001 (1,021 farms) and 2006 (560 farms), it has increased since 2011 (137 tobacco farms) (Table 7-5)[25]
- Expressed as a percentage of total census farms in Ontario, the proportion of tobacco farms decreased from a high of 1.7% in 2001 to 0.4% in 2016 (Table 7-5)
- In 2014 (the latest data available), the growing of flue-cured tobacco was concentrated in four counties/districts in southwest Ontario: Brant, Elgin, Norfolk and Oxford (Table 7-6)[26]
- After a period of substantial decline in the late 2000s, production in Ontario has more than doubled, both in terms of acreage planted and in production (Table 7-7, as well as Table 7-4 and Table 7-6)

Table 7-4: Annual Registered Grower Data in Ontario on Flue-Cured and Non Flue-Cured Raw Leaf Tobacco, 2017

2017 Flue-Cured	2017 Non Flue-Cured
192 licensed growers	27 licensed growers
18,715 total acres approved to be grown	850 total acres approved to be grown
23,336,728 expected kilograms to be grown	1,055,978 expected kilograms to be grown

Note: This information is subject to change as new registrant applications are received and processed. Reported as of June 30, 2017.
Source: Ontario Ministry of Finance.

Table 7-5: Number of Tobacco Farms[a] in Ontario, by Year (2001, 2006, 2011 and 2016)

Year	Farms, n	Percent of all Farms, %
2001	1021	1.7
2006	560	1.0
2011	137	0.3
2016	195	0.4

[a] Farms classified as tobacco farming under the North American Industry Classification System.
Source: Statistics Canada, Census of Agriculture.

Table 7-6: Flue-Cured Tobacco in Ontario: Area, Production and Farm Value, by County, 2014

Counties & Districts	Area (acres)	Marketed Production ('000 lbs)	Marketed Production ('000 kg)	Unit Value (cents/lb)	Unit Value (cents/kg)	Total Value ($'000)
Brant	2,819	7,953	3,607	227.2	500.9	18,070
Elgin	2,144	6,057	2,747	227.2	500.9	13,762
Norfolk	13,214	37,294	16,917	227.2	500.9	84,738
Oxford	1,638	4,315	1,957	227.2	500.9	9,805
Other	1,003	2,862	1,298	227.2	500.9	6,503
TOTAL	**20,818**	**58,482**	**26,527**	**227.2**	**500.9**	**132,879**

Source: Ontario Ministry of Agriculture, Food and Rural Affairs.

Table 7-7: Flue-Cured Tobacco in Ontario: Area, Production and Farm Value, 2003 to 2014

Year	Area (acres)	Marketed Production ('000 lbs)	Unit Value (cents/lb)	Total value ($'000)
2003	35,700	93,955	227.6	213,827
2004	36,600	87,852	225.1	197,788
2005	34,400	83,905	216.6	181,735
2006	30,094	55,495	236.1	131,003
2007	17,000	34,381	222.1	76,343
2008	9,700	22,011	205.1	45,139
2009	9,600	22,019	209.2	46,064
2010	NA	47,730	216.0	103,098
2011	18,887	49,668	212.5	105,545
2012	19,938	53,800	209.0	112,442
2013	21,521	53,832	237.1	127,638
2014	20,818	58,482	227.2	132,879

Note: Dollar values are not inflation adjusted.
Source: Ontario Ministry of Agriculture, Food and Rural Affairs.

Distribution and Consumption

In recent years, Ontario has not taken action to decrease the amount of tobacco made available for sale in Ontario. In line with the Scientific Advisory Committee's 'innovative' assessment, the Executive Steering Committee report recommends reducing the annual quota of tobacco products in Ontario by implementing a "sinking lid" system that gradually reduces the amount of tobacco released to the market for sale.

Canada has three main cigarette companies: Imperial Tobacco Canada Ltd. (Imperial Tobacco), Rothmans, Benson & Hedges Inc. (RBH), and JTI-MacDonald Corporation (JTI). Tobacco company market share and sales data provide insight into the strength of the tobacco industry and the performance of individual tobacco companies.

- In 2016, Imperial Tobacco had the highest market volume share (51%), followed by RBH (33%) and JTI (8%), with the remaining market share split between several smaller companies, the largest of which was Grand River Enterprises[27]

- In Canada, total value of sales of cigarettes and fine-cut cigarettes in 2016 was $1.3 billion[27]
- In 2016, wholesale cigarette sales in Ontario totaled 10,307,189,350 units, which comprised 36% of total sales in Canada (28,642,383,251 units).[28] This is a 7.5% decrease in sales over the 5-year (2012) benchmark (11,143,878,995 units)

Availability

The Scientific Advisory Committee suggested several 'innovative assessments' to address the availability of tobacco products including zoning restrictions to create tobacco retail-free areas and retail licenses.

The Executive Steering Committee made recommendations that centred on using provincial and municipal legislation, zoning restrictions and licensing fees to reduce the number and density of retail tobacco vendors.

The Committee's 'innovative' assessment of implementing government-controlled outlets for tobacco does not appear to be on Ontario's policy agenda; however, Ontario states that government-controlled outlets will be the approach used in the retail sale of cannabis, once it is legalized in mid-2018.[29]

Tobacco Retail-Free Areas

Restricting the retail distribution and availability of tobacco products is considered an important mechanism to limit consumption of, and subsequent health effects caused by, tobacco.[30,31] In Ontario, tobacco sales are banned from a variety of places including vending machines, pharmacies, college and university campuses, hospitals, and other healthcare and residential-care facilities (Table 7-8). Despite these advances, tobacco products continue to be available across the province through a large number of retail outlets.

- In Ontario, approximately 9,725 retail outlets sell tobacco, primarily corner

store/convenience and grocery stores (2017, June estimate)[32]

- There is widespread agreement among Ontario adults that the number of cigarette retail outlets should be reduced: 80% of never smokers, 58% of former smokers, and 41% of current smokers are in agreement (CAMH Monitor 2016, data not shown)

Retail Licensing

Requiring retailers to obtain a tobacco license and pay an annual fee is a first step toward potentially reducing the retail availability of tobacco. The fee itself, if high enough, might dissuade some retailers from carrying tobacco. Increasing the number of retail outlets with paid licenses to sell tobacco products has several other potential advantages. In Los Angeles, California, the tobacco retailer's permit fee is set at $300US to recover "the cost of both the administration and enforcement of the permit including the cost of issuing the permit, renewing the permit, administering the retailer permit program, retailer education, retailer inspection and compliance checks, documentation of violations, adjudications, and convictions, and prosecution of violators."[33]

In Ontario, effective July 1, 2018, all retail dealers who held a vendor permit under the *Retail Sales Tax Act* are required to hold a tobacco retail dealer's permit issued under the *Tobacco Tax Act.*[34] However, there is no fee for this permit. Several municipalities in Ontario do charge an annual tobacco retail license fee including those located within the East (Ottawa, Kingston, Cornwall), Central East (Vaughan, Richmond Hill, Markham, Brampton, Mississauga, Wasaga Beach), Toronto, Central West (Oakville, Hamilton, Burlington), South West (London, Chatham-Kent, Windsor) and North East (Greater Sudbury, North Bay, Hearst) TCANs.[35] Annual fees range from a high of $877 in Ottawa to under $50 in several jurisdictions.[35]

Table 7-8: Places Where Tobacco Sales are Prohibited by Law, Provinces and Territories

	Places Where Tobacco Sales Are Prohibited by Law												
Location	**Province/Territory**												
	AB	**BC**	**MN**	**NB**	**NL**	**NS**	**NT**	**NWT**	**ON**	**PEI**	**QC**	**SK**	**YK**
Provincial government buildings		X			X	X			X	X		X	
Municipal government buildings		X			X	X				X		X	
Vending machines				a	X	X	X	X	X	X	X	b	
Pharmacies	X			X	X	X	X	X	X	X	X	X	X
Hospitals	X	X			X	X	X		X	c	X	X	
Health care facilities	X	X			X	X	X		X	X	X	X	
Residential care facilities	X	X			X	X	X		X	X	X	X	
Schools	X				X	X			X	X	X	X	
Post-secondary schools	X	X			X	X		d	X	X	X		
Child care facilities					X		X		X		X		
Indoor sport/recreation		X			X	X		X		X	X	e	
Community centres						X					X		
Theatres/cinemas					X	X				X	X	X	
Libraries/galleries					X	X					X		
Outdoor recreational facilities, e.g. amusement parks												X	
Temporary outdoor locations					X	X					X		
Restaurants						X					X		
Bars						X					X		
Gaming facilities						X							

[a] No vending machine sales in retail stores.
[b] Vending machine sales permitted only in places off-limits to minors.
[c] Except psychiatric hospitals.
[d] NWT has only one post-secondary institution, which has a policy not to sell tobacco products.
[e] Sales prohibited in recreation facilities only.
Source: NSRA. Prohibiting Tobacco Sales in Specified Outlets: Policy Analysis.

Product and Package Innovation

The introduction of new tobacco products (e.g., heated tobacco products, vape products, etc.), as well as changes to existing products (e.g., flavours, filter technology, etc.), generally run counter to tobacco control efforts to decrease tobacco use. New tobacco products have the potential to grow rapidly in popularity in part by enticing people who might otherwise never have considered smoking tobacco products—such as cigarettes—to experiment with these emerging products and in part by maintaining the nicotine dependence of smokers who would otherwise have quit altogether.

The Executive Steering Committee recommended evaluating and regulating the marketing and use of all inhaled drug delivery devices and, ultimately, phasing out the sale of all combustible delivery devices.

Cigarettes

Banning Flavours in Tobacco Products

The Scientific Advisory Committee assessed banning flavoured tobacco as having 'high potential for substantial impact' in Ontario.

The Scientific Advisory Committee report notes that such a policy, including its enforcement, has the potential to have substantial impact in reducing tobacco use, especially among youth and young adults.[4] As of January 1, 2016, it is against the law to sell, distribute and offer to distribute flavoured tobacco products in Ontario. Initial exceptions included menthol in all tobacco products, some cigars weighing more than 1.4 grams but less than 6 grams (a flavour or aroma of wine, port, whiskey or rum is permitted), cigars weighing 6 or more grams, and pipe tobacco. As of January 1, 2017, flavoured tobacco products that contain the taste or smell of menthol have been prohibited.

The industry has responded to the prohibition of menthol cigarettes by relaunching several non-menthol alternative brands. As shown in Figure 7-2, RBH relaunched *Next Menthol* as *Next Green*,

with the latter containing no menthol flavour, which is in compliance with regulations. Similarly, Imperial Tobacco recommended *Pall Mall Blue XL (without capsules)* as an alternative to *Pall Mall XL Convertibles* (menthol-flavoured capsules). As part of this transition, *Pall Mall XL Convertibles* included an advertisement on the back portion of the cellophane, which highlighted that the best alternative without menthol was *Pall Mall Blue XL* (Figure 7-3).

According to Health Canada, menthol cigarette sales in Ontario increased 58% from 2015 to 2016,[36] which would appear to be related to the expected prohibition of menthol cigarettes in 2017.

Figure 7-2: Next Menthol Redesign (Non-Menthol Alternatives), Rothmans, Benson & Hedges Inc.

Capsule/Filter Technology

After the announcement of a flavour ban, tobacco companies introduced several new brands that included a crushable capsule in the filter tip of the cigarette, which gave a menthol taste when squeezed (Figure 7-3, Figure 7-4, Figure 7-5). Green or blue colour (and sometimes both) characterized the accent colours of these packs, which is consistent with a menthol or cool interpretation. Several of these brands had imagery that asserted this technological introduction, as can be seen by the power switch icon in Figure 7-3, Figure 7-4 and Figure 7-5. Post-menthol ban, alternative packs were introduced (e.g., John Play Charge became John Player Choice), many of which introduced new filter technology including the flow filter and adjustable (twistable) filter (Figure 7-5 and Figure 7-6).

Figure 7-3: Pall Mall Menthol and Non-Menthol Alternatives, Imperial Tobacco Canada

Menthol Convertibles XL (Pre Ban)

Cellophane ad for Blue XL (Pre Ban)

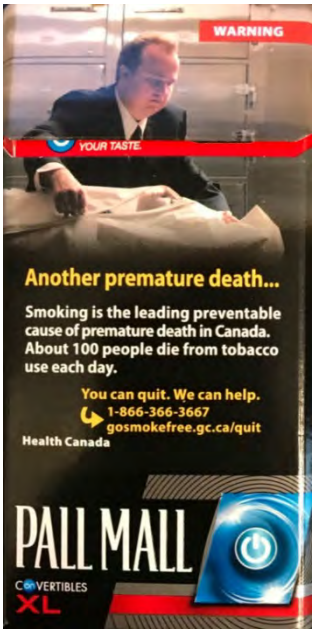
Blue XL(Post Ban)

Figure 7-4: John Player Capsule Redesign, Imperial Tobacco Canada

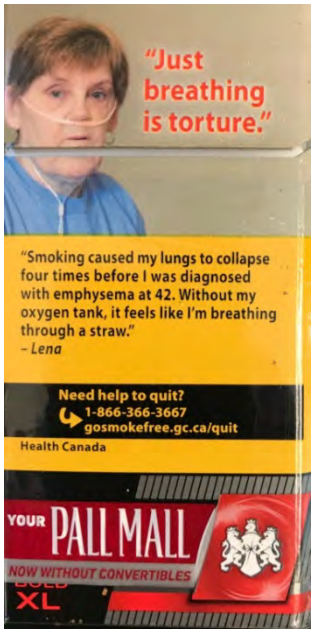
John Player Charge (Pre Ban)

John Player Choice (Post Ban)

Figure 7-5: Pall Mall Capsule Redesign, Imperial Tobacco Canada



Pall Mall Convertibles XL (Pre Ban)



Pall Mall Bold XL (Front) (Post Ban)

Pall Mall Bold XL (Back) Post Ban

Figure 7-6: Filter Technology, Pall Mall and John Player Choice

Pall Mall FlowFilter (Post Ban)

John Player Choice Twistable Filter (Post Ban)

Heated Tobacco Products

The Executive Steering Committee urged the government to regulate new inhaled substances and delivery devices.

One new product class recently introduced into the Ontario market is heated tobacco. These products heat tobacco to a lower temperature than cigarettes to produce aerosol with nicotine. Tobacco companies have promoted heated tobacco products as reduced-risk products, which cut the risk of tobacco-related disease,[37,38] a view rejected by a recent US Food and Drug Administration advisory panel in relation to Philip Morris International's IQOS product.[39]

From a regulatory perspective, heated tobacco products are considered tobacco products, which in Canada, are subject to marketing bans including point-of-sale display and promotion bans.

In Ontario, two heated tobacco products are being sold: IQOS by Rothmans, Benson and Hedges (an affiliate of Philip Morris International) and Ploom by Japan Tobacco International. Although not yet available in Ontario, i-glo is being sold by British American Tobacco (the parent company to Imperial Tobacco Canada) in a variety of test markets (e.g., Vancouver).

Vaping Products

The Executive Steering Committee recommended restricting the sale of e-cigarettes and vaping products to people who smoke.

In Ontario, as of January 1, 2016, it is illegal to sell or supply electronic cigarettes to anyone under the age of 19. All retailers must carry a provincial age restriction sign that indicates this age restriction as well as a sign indicating that government I.D. with a photo and birth date must be shown when requested.

Despite these restrictions, past year use of e-cigarettes is higher than cigarettes (17.5% vs. 12%) among Ontario students in grades 7 to 12 (Ontario Student Drug Use and Health Survey 2017). An

estimated 71,400 young Ontarians vaped in the past year but did not smoke (Ontario Student Drug Use and Health Survey 2017) and an estimated 208,400 Ontarians 18 years and older vaped in the past month but did not smoke (Centre for Addiction and Mental Health Monitor 2016). There is widespread agreement that e-cigarettes are not benign,[40] so not moving on the Executive Steering Committee recommendation to restrict sales to people who smoke presents risks to population health.

Plain and Standardized Packaging

The Scientific Advisory Committee suggested that plain and standardized packaging is a policy direction that has the potential to make a high contribution to tobacco control.

At the federal level, the government has introduced *Bill S-5* (An Act to amend the *Tobacco Act* and the *Non-smokers' Health Act* and to make consequential amendments to other Acts). This Bill lays the foundation for implementing plain and standardized packaging regulations for cigarettes. On January 30, 2018 the Bill passed second reading in the House of Commons and has been referred to Committee.

Among Ontario adults, agreement that cigarettes should be sold in plain white packages is high: 88% of never smokers, 80% of former smokers, and 70% of current smokers (CAMH Monitor 2016, data not shown).

Health Warning Labels

The Scientific Advisory Committee suggested that health-warning labels have made a 'moderate potential contribution' to tobacco control, with an assessment that this policy be intensified.

Federally, all tobacco packaging must display a health warning label on 75% of the front and back surface of cigarette and little cigar packages and on 50% of the front and back of packages

of most other tobacco products.[ii] New health-warning labels are expected to be brought into force with the development of future labelling regulations over the next few years (the current warnings are from 2012). The expected implementation of plain and standardized packaging may be one impetus for this change.

Advertising and Promotion

According the Federal *Tobacco Act*, "no person shall promote a tobacco product by means of an advertisement that depicts, in whole or in part, a tobacco product, its package or a brand element of one or that evokes a tobacco product or a brand element," with noted exceptions including "a publication that is provided by mail and addressed to an adult who is identified by name" or "signs in a place where young persons are not permitted by law."[41]

In Ontario, tobacco marketing can take many forms including business-to-business (e.g., trade magazine advertisements of tobacco products), traditional advertising to adult consumers, and more innovative online approaches, which can create positive imagery around products.

Price Signage

The Executive Steering Committee recommended a ban on all price signs in retail settings in part because these signs actively promote discount cigarettes and volume discounts.

Currently in Ontario, a maximum of 3 signs that refer to (non-branded) tobacco products or price are permitted at retail, as long as they are not visible from the outside of the retail establishment, use black and white text against a white background, and do not exceed 968 square centimetres (Figure 7-7). Bundled price deals are permissible, as are advertising tobacco product categories (e.g., cigarettes, heated tobacco, etc.).

[ii] Under the authority of the *Tobacco Act*, the *Tobacco Products Labelling Regulations (Cigarettes and Little Cigars)* and *Tobacco Products Information Regulations*).

Figure 7-7: Retail Tobacco Product Signage, Ontario

Cigarette Bundle Deal

Heated Tobacco Signage

Industry Incentives to Retailers

The Executive Steering Committee recommended banning all industry incentives offered to retailers.

Currently, there are no prohibitions on tobacco companies in Ontario from offering a range of direct and indirect incentives to retailers based on performance programs including monetary payments, free tickets to sporting and entertainment events, and vacations. In Quebec, as of November 2015, a manufacturer or distributor of tobacco products is prohibited from offering rebates, gratuities or any other benefits related to the sale of tobacco products to operators of tobacco retail outlets including their employees (e.g., sporting tickets, performance bonuses, etc.)[42]

Social Marketing

Tobacco companies in Ontario use several avenues to market their products including Internet web sites, tobacco product packaging (e.g., phone numbers, URLs, and QR codes on select packages directing consumers to other resources), trade shows, and street intercept (e.g., one of the authors was approached by a company representative outside a retail store and asked to complete a survey and invited into the store to view product). Below, several illustrative examples of these forms of marketing are presented.

IQOS (RBH)

A new heated tobacco product, IQOS has its own website (iqos.ca), which requires a login. Registered users are added to RBH's database, which facilitates sending them information such as product information, brand preference advertising and/or information regarding the regulation of tobacco products.[43] IQOS also runs a longitudinal survey with a panel of users, with the aim of better understanding how their adult customers use their products. The collected data focus on IQOS use, use of other products (cigarettes, vaping devices), recent exposure to IQOS marketing information and likes and dislikes about using the product (e.g., taste, smell, price, design, cleaning process, etc.).

MyPack (RBH)

This site (mynextpack.ca) is designed to let users "discover the latest scoop on music, trending articles, popular magazines, tobacco news, and more. All in one spot."[44] As with the IQOS website (also from RBH), registered users are added to RBH's database, which facilitates sending users information such as product information, brand preference advertising and/or information regarding the regulation of tobacco products.[45]

Zyne (Imperial Tobacco)

This web-based platform (zyne.ca) is designed for adult users and is made available through an online registration process. From the site's Terms & Conditions, the purpose of the website is "to have access to (i) electronic-magazine content; (ii) information about contests offered by third parties; (iii) information about local events and activities; (iv) tobacco advertising, namely product information and brand preference advertising regarding tobacco products; and (v) electronic communications as set out in the Notification section below."[46] Electronic communications focus on the above and also include "reminders, surveys, announcements, and birthday and holiday notifications."[46] The site currently has product information about i-glo—a new Imperial Tobacco heated tobacco product—and four other Imperial Tobacco brands: du Maurier, Players, John Players and Pall Mall.

Smoking in the Movies

The Scientific Advisory Committee suggested that restricting movies with tobacco imagery to adults (by assigning an 18A rating) could influence studio and director choice to have smoking in movies and that this has the potential to substantially decrease smoking initiation in Ontario.

The depiction of tobacco use in movies increases the social exposure of tobacco products and tobacco use. Such depiction helps to normalize smoking behaviours, particularly when celebrities are seen using tobacco products. Viewing on-screen smoking is correlated with both youth smoking uptake and becoming an established smoker.[47] Furthermore, a causal relationship has been established whereby exposure to on-screen smoking leads to subsequent smoking initiation among youth.[48]

In 2016, 38% of top-grossing movies (n=133) in Ontario had tobacco imagery including 11% of all movies rated G (General), 46% of all movies rated PG (Parental Guidance), and 48% of all movies rated 14A.[49] This corresponded to 2742 tobacco incidents.[iii] By playing these Ontario Film Review Board rated G/PG/14A films across Ontario theatres, 340.3 million tobacco impressions[iv] on movie goers were delivered, which is equivalent to 61.5% of all in-theatre tobacco impressions.[49] Based on 2015 data, an estimated 185,000 children and teens aged under 17 living in Ontario would be recruited to cigarette smoking by their exposure to onscreen smoking.[50]

Restricting movies with tobacco imagery to adults (by assigning an 18A rating) could influence studio and director choice to have smoking in movies and has the potential to substantially decrease smoking initiation in Ontario. This policy measure is recommended by the Scientific Advisory Committee and public health stakeholders and institutions provincially, nationally and internationally. Yet, Ontario has not taken steps to protect youth from exposure to smoking in movies.

[iii] A tobacco incident is one occurrence of the use or implied use of a tobacco product (almost exclusively smoking) by an actor in a movie. Each screen appearance of tobacco is counted as one tobacco incident; incidents appearing in different 'cuts' may mean a single movie scene has multiple incidents.

[iv] In-theatre tobacco impressions are an index of the total audience exposure to onscreen tobacco imagery. A single tobacco impression is counted as one person seeing one incident. Total tobacco impressions delivered by a movie are computed by multiplying the number of tobacco incidents in the movie by the paid admissions (tickets sold) to that movie.

Scientific Advisory Committee: Overview of Potential Contribution of Pro-Tobacco Influences

The updated Smoke-Free Ontario Scientific Advisory Committee report, *Evidence to Guide Action: Comprehensive Tobacco Control in Ontario (2016)*[1] outlined the potential contributions of 14 pro-tobacco influences interventions. Below is a summary of the 'high', 'innovative' and 'moderate' potential contributions for pro-tobacco influences including an assessment of their current status (Table 7-9).

Table 7-9: Scientific Advisory Committee Potential Contributions to Pro-Tobacco Influences

Contribution/Intervention	Current Status
High Potential Contribution – Intensify	
Price and Taxation	Limited – Despite an increase in 2017, Ontario continues to have the second lowest retail price ($102.40) and total tobacco tax ($66.29) for tobacco products compared to other Canadian provinces and territories.
Tobacco Advertising Promotion and Sponsorship Bans	Tobacco companies are severely restricted by the federal *Tobacco Act*. Notwithstanding, they have active initiatives in place that seek to reach customers including contest, customer lifestyle websites, and booths at festivals.
Anti-Contraband Measures	This is an active file within the RCMP's Ontario Division and the Ontario Ministry of Community Safety and Correctional Services have created a Contraband Tobacco Enforcement Team within the Ontario Provincial Police (OPP). Together, these organizations, along with the Ministry of Finance are actively working on this file. To curtail contraband, more substantial measures are needed, as evidenced by the Quebec experience.
Banning Flavours in Tobacco Products	All flavours have been prohibited in Ontario since January 1, 2017, with the exception of some cigars weighing more than 1.4 grams but less than 6 grams (a flavour or aroma of wine, port, whiskey or rum is permitted), cigars weighing 6 or more grams, and pipe tobacco.
High (Initiate)	
Plain and Standardized Packaging	Provincially, no policy action is occurring. Federally, *Bill S-5*, which has passed second reading and is in committee, lays the foundation for implementing this initiative.

Contribution/Intervention	Current Status
Innovative	
Zoning Restrictions to Create Tobacco Retail-free Areas	Tobacco continues to be sold seven days a week, 24 hours a day in some 10,000 outlets with almost no zoning restrictions.
Retail Licenses	A provincial retail tobacco licence with an annual fee has not been implemented. It is expected that this would help decrease retail density.
Government-Controlled Outlets	Not implemented
Imposing a Quota on Tobacco Product Availability (Sinking Lid)	Not implemented
Regulated Market Model	Not implemented
Non-Profit Enterprise with a Public Health Mandate	Not implemented
Performance-Based Regulation	Not implemented
Moderate Potential Contribution – Intensify	
Health Warning Labels	Federally, health-warning labels were last changed in 2012. It is anticipated that the federal government will renew labels sometime over the next few years.

Executive Steering Committee: Overview of Priority Actions for Pro-Tobacco Influences

The *Smoke-Free Ontario Modernization* report outlined a number of priority actions toward decreasing the prevalence of tobacco use to less than 5% by 2035.[5] Below is a summary of the priority actions for pro-tobacco influences including an assessment of how the current SFO initiatives address them (Table 7-10).

Table 7-10: Executive Steering Committee Priority Actions for Pro-Tobacco influences

Priority Actions	Current Status
1.1 Use Tax and Other Pricing Policies to Increase the Cost of Tobacco Products	
1.1.1 Immediately raise provincial taxes on all tobacco products, including roll-your-own tobacco, to at least the highest rate of all other provinces and territories. Continue to regularly increase taxes to at least double the price of tobacco products. Reinvest all new revenue generated from these taxes into tobacco control	Ontario continues to have the second lowest retail price ($102.40) and total tobacco tax ($66.29) for tobacco products compared to other Canadian provinces and territories.
1.1.2 Prevent the industry from circumventing tax-related price increases by: • Eliminating the price differential among different types and brands of cigarettes • Prohibiting manufacturers and retailers from offering volume discounts (i.e., lower per-pack price for buying more than one pack of cigarettes).	Not implemented
1.1.3 Ban price signs in retail settings	Not implemented
1.1.4 Ban all industry incentives offered to retailers	Not implemented
1.1.5 Work with the federal government to identify and eliminate tax deductions and any other fiscal advantages available to tobacco companies	Not implemented
1.2 Reduce the Availability of Tobacco in Retail Settings	
1.2.1 Use provincial and municipal legislation, zoning restrictions and licensing fees to reduce the number and density of retail tobacco vendors	Tobacco continues to be sold seven days a week, 24 hours a day in some 10,000 outlets with almost no zoning restrictions.
1.2.2 Expand the ban on the display of cigarettes to include all smoking, tobacco-related and vaping paraphernalia	Not implemented

Priority Actions	Current Status
1.3 Reduce the Supply of Tobacco Products in Ontario	
1.3.1 Reduce the annual quota of tobacco products in Ontario by implementing a "sinking lid" system that gradually reduces the amount of tobacco released to the market for sale	Not implemented
1.3.2 Significantly enhance enforcement efforts to combat unregulated tobacco	No recent enhancement. However, this is an active file within the RCMP's Ontario Division and the Ontario Ministry of Community Safety and Correctional Services have created a Contraband Tobacco Enforcement Team within the Ontario Provincial Police (OPP). Together, these organizations, along with the Ministry of Finance are actively working on this file.
1.4 Make Industry Practices More Transparent	
1.4.1 Prohibit industry involvement in any activities that could impact health policies	Not implemented
1.4.2 Make all government-industry contacts transparent	Not implemented
1.4.3 Require the tobacco industry to disclose information on its practices	Currently, tobacco companies have a degree of mandatory reporting to the federal government. No broad requirement exists provincially.
1.4.4 Vigorously pursue the health-care cost recovery litigation against the industry launched in 2009	Ongoing. The province has been working on this for many years. Status unknown.
1.4.5 Calculate and publish the full annual cost of tobacco use, including personal costs (deaths, loss of quality life years), health care costs, productivity costs, other social costs and environmental costs (littering, toxins from smoke and cigarette butts leaching into soil and water)	Not implemented
1.4.6 Impose an annual levy on tobacco companies to defray the health, social and environmental costs of their products not covered by tobacco excise taxes	Not implemented
1.4.7 Discourage all publicly funded organizations from investing in the tobacco industry	Not implemented
1.5 Regulate New Inhaled Substances and Delivery Devices	
1.5.1 Evaluate and regulate the marketing and use of all inhaled drug delivery devices and ultimately phase out the sale of all combustible delivery devices	Provincially, the *Smoke-Free Ontario Act* and the *Electronic Cigarette Act* provide a degree of regulation. New inhaled drug delivery

Priority Actions	Current Status
	devices (e.g., vaping and heated tobacco products) do not always have the same restrictions as more traditional forms of tobacco. This report provides key monitoring/evaluative data on select tobacco, vaping, and heated tobacco products. A phase out of combustible products has not been implemented.
1.5.2 Restrict the sale of e-cigarettes and vaping products to people who smoke	Not implemented
1.6 Eliminate All Tobacco Production in Ontario	
1.6.1 Establish a mandatory timeline (5 to 10 years) to phase out tobacco production on non-Indigenous lands	Not implemented
1.6.2 Work with tobacco producers to develop crop replacements	Not implemented

Chapter Summary

The Smoke-Free Ontario Strategy has curtailed pro-tobacco influences in many important ways including: widespread (but not total) marketing bans, total display bans at point-of-sale and flavour bans (now including menthol). Yet, the tobacco industry is still able to sell its deadly products cheaply (about 50 cents per cigarette) in close to 10,000 outlets, many of which are open 24 hours per day. Illicit activity makes tobacco available much more cheaply to a not negligible proportion of smokers.

In order to contain pro-tobacco influences in these areas, the Executive Steering Committee recommends:

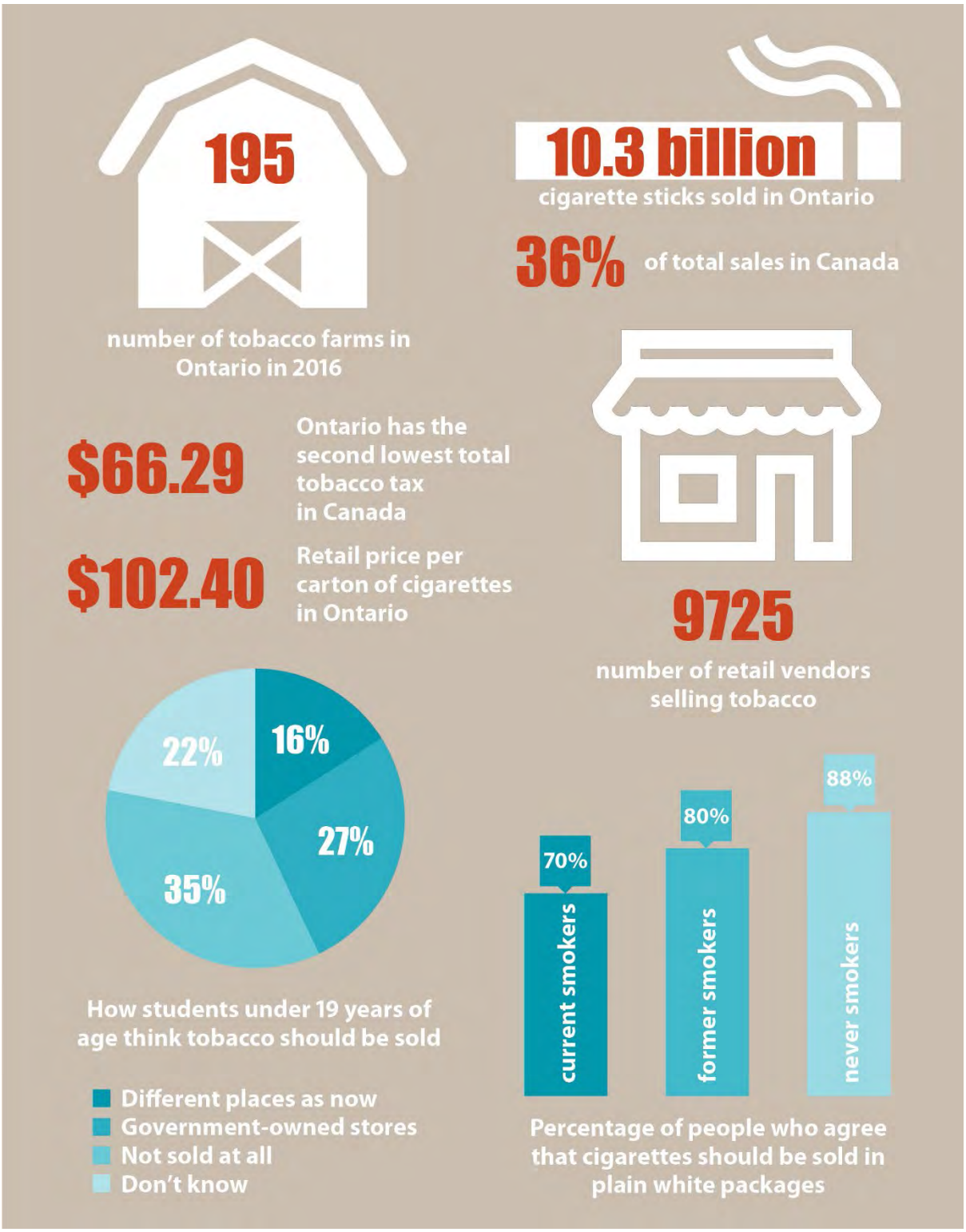
1. Immediately raising provincial taxes on all tobacco products to at least the highest rate of all other provinces and territories, followed by continued regular increases to at least double the price of tobacco products
2. Eliminating the price differential among different types and brands of cigarettes
3. Prohibiting manufacturers and retailers from offering volume discounts (i.e., lower per-pack price for buying more than one pack of cigarettes)
4. Using provincial and municipal legislation, zoning restrictions and licensing fees to reduce the number and density of retail tobacco vendors

Other pro-tobacco trends present new and continued concerns including:

- Production of tobacco in Ontario is increasing
- Launching of new products, particularly heated tobacco products, without pre-market approval and without information to consumers about their absolute and relative risks
- Introduction of new technologies (e.g., twistable and aqua filters) and slick new packaging for numerous brands
- Promotion occurring on Internet websites and with the launch of new heated tobacco products at retail
- Top-rated movies in Canadian theatres continue to have numerous tobacco scenes, which has led to 340.3 million tobacco impressions on movie goers

Seriously addressing these supply-side pro-tobacco influences is essential to achieving the cessation increases and initiation decreases needed to make Ontario the jurisdiction with Canada's lowest smoking rates and to achieving less than 5 by 2035.

Visual Summary of Key Pro-Tobacco Influence Indicators



Appendix: Data Table

Table 7A-1: Location of Last Purchase, Ages 18+, Ontario, 2010 to 2016

Sub-Indicator	Year	Population Estimate	Value (%)	LCL	UCL
First Nations reserve	2010		S		
Retail outlet	2010		82.9	74.5	88.9
First Nations reserve	2011		S		
Retail outlet	2011		81	73.3	86.9
First Nations reserve	2012	182,900	11.4 [M]	7.1	17.9
Retail outlet	2012	1,345,400	84.2	77.3	89.3
First Nations reserve	2013	271,300	19.3 [M]	11.9	29.7
Retail outlet	2013	1,085,000	77	66.6	84.9
First Nations reserve	2014	191,100	15.4 [M]	9.2	24.4
Retail outlet	2014	1,028,100	82.6	73.3	89.1
First Nations reserve	2015	179,600	12.4 [M]	7.1	20.7
Retail outlet	2015	1,159,800	80.1	68.3	88.3
First Nations reserve	2016	206,400	17.6 [M]	10.4	28.3
Retail outlet	2016	935,700	79.7	69	87.4

Note: S=Suppressed. Results too unreliable to be published due to (unweighted) sample size less than 30 or coefficient of variation greater than 33.3% (extreme sampling variability). M = Interpret with caution: subject to moderate sampling variability. Data table is for Figure 7-1.
Source: Centre for Addiction and Mental Health Monitor 2010-2016.

References

[1] U.S. Department of Health and Human Services. *The Health Consequences of Smoking: 50 Years of Progress. A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. Accessed on January 4, 2018.

[2] Centers for Disease Control. *Key Outcome Indicators for Evaluating Comprehensive Tobacco Control Programs. 2005*. Accessed on April 29, 2012.

[3] Cruz TB. Monitoring the tobacco use epidemic IV. The vector: Tobacco industry data sources and recommendations for research and evaluation. *Preventive Medicine* 2009;S24-S34.

[4] Smoke-Free Ontario. Scientific Advisory Committee, Ontario Agency for Health Protection and Promotion (Public Health Ontario). *Evidence to Guide Action: Comprehensive Tobacco Control in Ontario (2016).* Toronto, ON: Queen's Printer for Ontario, 2017. Accessed on December 18, 2017.

[5] Ontario Ministry of Health and Long-Term Care. *Smoke-Free Ontario Modernization: Report of the Executive Steering Committee.* Toronto, ON: Queen's Printer for Ontario, 2017. Accessed on November 30, 2017.

[6] Imperial Tobacco Canada. Illegal trade in Canada. Accessed on January 10, 2018:

[7] CBC News. Smokers pay more, but it's tobacco companies, not the government, cashing in: The price of cigarettes continues to increase, but it's not because of federal tobacco tax hikes. Accessed on January 12, 2018.

[8] Bader P, Boisclair D, Ferrence R. Effects of tobacco taxation and pricing on smoking behavior in high risk populations: A knowledge synthesis. *International Journal of Environmental Research and Public Health* 2011 Nov;8(11);4118-4139.

[9] Chaloupka FJ, Cummings KM, Morley CP, Horan JK. Tax, price and cigarette smoking: Evidence from the tobacco documents and implications for tobacco company strategies. *Tobacco Control* 2002 Mar;11(Suppl 1):i62-i72.

[10] Chaloupka FJ, Grossman M. Price, tobacco control policies and smoking among young adults. *Journal of Health Economics* 1997 Jun;16(3):359-373.

[11] Gruber J, Sen A, Stabile M. Estimating price elasticities when there is smuggling: The sensitivity of smoking to price in Canada. *Journal of Health Economics* 2003 Sep;22(5):821-842.

[12] International Agency for Research on Cancer. *Effectiveness of Tax and Price Policies for Tobacco Control.* IARC Handbooks of Cancer Prevention, Volume 14. Lyon: IARC, 2011.

[13] Cavazos-Rehg PA, Krauss MJ, Spitznagel EL, Chaloupka FJ, Luke DA, Waterman B., et al. Differential effects of cigarette price changes on adult smoking behaviours. *Tobacco Control*, 2014 Mar;23(2):113-118.

[14] Chaloupka FJ, Pacula RL. The impact of price on youth tobacco use. In: National Cancer Institute. *Changing Adolescent Smoking Prevalence.* Smoking and Tobacco Control Monograph No. 14. Bethesda:

U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute, 2001:193-199.

[15] Tauras JA. Public policy and smoking cessation among young adults in the United States. *Health Policy*, 2004;68(3):321-332.

[16] United States. Dept. of Health and Human Services. *Reducing Tobacco Use: A Report of the Surgeon General.* Atlanta: U.S. Department of health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2000.

[17] Schwartz R, Zhang B. Debunking the taxation-contraband tobacco myth. *Canadian Medical Association Journal* 2016, Apr;188(6):401-402.

[18] Ontario Ministry of Finance. Tobacco Tax. Accessed on January 20, 2018.

[19] World Health Organization. *WHO Report on the Global Tobacco Epidemic, 2008: The MPOWER Package*. Geneva, SZ: WHO, 2008. Accessed on February 15, 2018.

[20] Sweeting J, Johnson T, Schwartz R. *Anti-Contraband Policy Measures: Evidence for Better Practice*. Toronto, ON: The Ontario Tobacco Research Unit, Special Report Series. June 2009. Accessed on February 15, 2018.

[21] Royal Canadian Mounted Police, Federal Policing Special Services (FPSS). *Federal Tobacco Control Strategy (FTCS): 2016 Annual Report*. Her Majesty the Queen in Right of Canada, 2017.

[22] Ontario Ministry of Finance. About Raw Leaf Tobacco. Accessed on February 15, 2018.

[23] Washington MD, Barnes RL, Glantz SA. Chipping Away at Tobacco Traditions in Tobacco Country: Tobacco Industry Political Influence and Tobacco Policy Making in North Carolina 1969-2011. School of Medicine University of California, San Francisco, 2011. Accessed on February 6, 2018.

[24] Ontario Ministry of Finance. About raw leaf tobacco: What is the current annual registered grower data in Ontario on flue-cured and non flue-cured raw leaf tobacco? Accessed on February 8, 2018.

[25] Ontario Ministry of Agriculture, Food and Rural Affairs. Number of Ontario Census Farms Classified by Industry (North American Industry Classification System), 2001, 2006, 2011 and 2016. Accessed on November 20, 2017.

[26] Ontario Ministry of Agriculture, Food and Rural Affairs. Field Crops: Area and Production Estimates by County. Accessed on February 8, 2018.

[27] Euromonitor International. Cigarettes in Canada. Euromonitor International Ltd, July 2017.

[28] Government of Canada. National and provincial/territorial tobacco sales data 2016. Accessed on November 20, 2017.

[29] Ontario Ministry of the Attorney General. Cannabis Legalization. Accessed on February 8, 2018.

[30] Cohen JE, Anglin L. Outlet density: A new frontier for tobacco control. *Addiction* 2008;104(1): 2-3.

[31] Leatherdale S, Strath JM. Tobacco retailer density surrounding schools and cigarette access behaviors among underage smoking students. *Annals of Behavioral Medicine* 2007; 33:105–11.

[32] Ontario Ministry of Health and Long Term Care. *Tobacco Inspection System*. Toronto, ON: Ontario Ministry of Health and Long Term Care, 2018.

[33] City of Los Angeles. Tobacco Retailer's Permit. Accessed on February 8, 2018.

[34] Ontario Ministry of Finance. Basic Rules for Tobacco Retail Dealers. Accessed on February 16, 2018.

[35] Non-Smokers Rights Association/Smoking & Health Action Foundation. Ontario Municipalities with Tobacco Retailer Licence Fees. March 2017. Accessed on January 7, 2018.

[36] Health Canada. Flavoured Tobacco Products in Canada: Key Trends for Menthol Cigarettes, Cigars and Smokeless Tobacco. Business Intelligence Division, Office of Research and Surveillance, Tobacco Control Directorate September 2017. Presented at the Program Training and Consultation Centre Webinar, September 19, 2017.

[37] PMI Science (Philip Morris International). Heat-Not-Burn. Accessed on February 15, 2018.

[38] PMI Science (Philip Morris International). What is heat-not-burn? Accessed on February 15, 2018.

[39] Tobacco Products Scientific Advisory Committee, Food and Drug Administration. Modified Risk Tobacco Product Applications (MRTPAs) MR0000059-MR0000061, Philip Morris Products S.A. January 24-25, 2018. Accessed on February 15, 2018.

[40] National Academies of Sciences, Engineering, and Medicine. *Public health consequences of e-cigarettes*. Washington, D.C. The National Academies Press, 2018. Accessed on February 10, 2018.

[41] Government of Canada. *Tobacco Act*. Accessed on February 10, 2018.

[42] Québec Official Publisher (National Assembly). *Bill 44*: An Act to bolster tobacco control. Accessed on February 10, 2018.

[43] Rothmans, Benson & Hedges Inc. Publication Viewing Component Terms and Conditions of Use (IQOS.CA). Accessed on February 10, 2018.

[44] My Pack (Rothmans, Benson & Hedges). www.mynextpack.ca welcomes you to MyPack. Accessed on February 10, 2018.

[45] My Pack (Rothmans, Benson & Hedges). Terms and Conditions. Accessed on February 10, 2018.

[46] Zyne (Imperial Tobacco Canada). Zyne: Terms & Conditions. Accessed on February 10, 2018.

[47] Sargent JD, Stoolmiller M, Worth KA, Dal Cin S, Wills TA, Gibbons FX, et al. Exposure to smoking depictions in movies: Its association with established adolescent smoking. *Archives of Pediatrics & Adolescent Medicine* 2007;161(9):849-856.

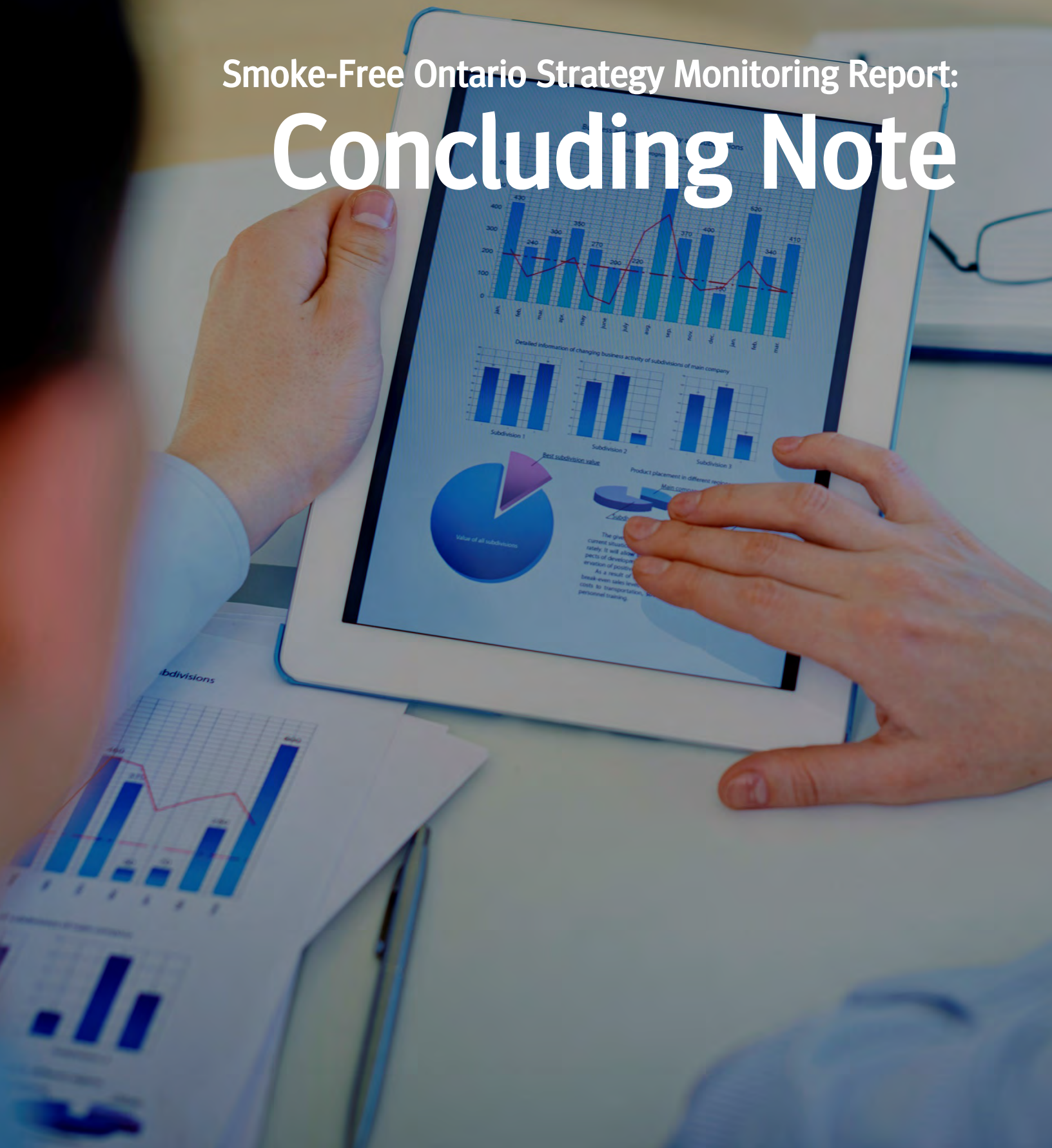
[48] National Cancer Institute. Monograph 19: The Role of the Media in Promoting and Reducing Tobacco Use, June 2008. Accessed March 7, 2018.

[49] Luk R, Schwartz R. *Youth Exposure to Tobacco in Movies in Ontario, Canada: 2004-2016*. OTRU Special Report. Toronto, ON: Ontario Tobacco Research Unit, July 2017. Accessed on February 27, 2018.

[50] Luk R, Schwartz R. *Youth Exposure to Tobacco in Movies in Ontario, Canada: 2004-2014*. OTRU Special Report. Toronto, ON: Ontario Tobacco Research Unit, August 2015. Accessed on February 27, 2018.

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:

Concluding Note

Table of Contents

Concluding Note

Ontario aspires to become the Canadian jurisdiction with the lowest smoking rate. The Government of Canada has articulated a tobacco endgame goal of less than 5% tobacco use prevalence by the year 2035. The Executive Steering Committee, appointed by the Minister of Health and Long Term Care to develop a modernized tobacco control strategy, has specified a plan for achieving 11% by 2023 and less than 5% by 2035.[1] The Province continues to work diligently toward decreasing tobacco use, 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.

At the same time, the industry continues its push to maintaining and growing tobacco use in Ontario through product innovation, discounting the price of cigarettes and incentives to vendors. While the ban on menthol cigarettes shows promise, the tobacco industry has now introduced two types of heated tobacco, and the e-cigarette market now includes many tens of thousands of regular vapers, many of whom are not current or former smokers.

Tobacco control efforts resulted in a 2.6 percentage point (statistically not significant) decrease in the prevalence of smoking over the five-year period, 2011 to 2015 (from 18% to 16.4%). At this rate, and with overall tobacco use at over 20%, Ontario will not reach the goal of less than 5% by 2035. This rate of decline also falls short of the five-percentage point decrease over five years called for in 2010 by the Tobacco Strategy Advisory Group.[2] The gap between Ontario and British Columbia—the Canadian jurisdiction with the lowest cigarette smoking rate—is still a significant three percentage points.

Looking back, tobacco control in Ontario has contributed to reducing tobacco use rates from well over 30% in the 1980s to 20% in 2015. This success leaves some people with the impression that ‘tobacco is done’, especially when few if any people in their social circles are tobacco users. Given what is known about tobacco-caused morbidity and mortality, this rate of decline is viewed

by many as unsatisfactory. In some occupations, one in every three people still smokes cigarettes. And university educated people are 2 to 3 times less likely to smoke cigarettes than people with no post-secondary education. With one in every five adult Ontarians currently using tobacco, it is clear that tobacco is far from done.

While cigarette smoking continues to be the main focus of tobacco control, there is a need to pay attention to the uptake of other tobacco products—such as waterpipe, cigars, smokeless tobacco and heated tobacco—as well as alternative products including e-cigarettes and cannabis.

Over the period 2005 to 2017, the prevalence of past 30-day smoking was cut by about 80% for students in grades 9 to 10 (combined) and 60% for students in grades 11 to 12 (combined). However, from the five-year benchmark year of 2013 to 2017, there has not been a significant change in the prevalence of current smoking in these grades. It is encouraging to see a possible decrease in young adult smokers aged 20-24 years old (albeit nonsignificant) from 21% (in 2011) to 17% (in 2015). At the same time, the continued high rate among older, young adults (25-29 years old) at 20% is a continuing concern.

While past 30-day current smoking among 15 to 17 year olds is at 5% in 2015, rates rise dramatically to 14% for 18-19 year olds, 17% for 20-24 year olds and 20% for 25-29 year olds.

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 2017 Executive Steering Committee[1] and to use evidence of the impact of these interventions, as assessed in the Scientific Advisory Committee 2016 report.[3]

Prevention

Ontario falls short on several of the Executive Steering Committee Report recommendations for preventing tobacco use.[1] Substantial progress requires population-level policy measures to increase cost and to decrease availability and access (consult the Pro-Tobacco Influences chapter). Specific to prevention is the recommendation to raise the legal age to purchase tobacco products to 21—an intervention that the 2016 Scientific Advisory Committee report

assessed as innovative and a promising direction if implemented in Ontario.[3] In addition, 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 changed in recent years. Moreover, it is unclear whether sufficient effort is being directed to targeting youth and young adults who are most at risk of becoming established tobacco users.

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

Cessation

There are close to two million smokers in Ontario. The proportion of Ontario's smokers who successfully quit each year (defined here as 12-month abstinence) is estimated to be 1.4%. In order to achieve a five percentage-point decrease in the prevalence of smoking over five years (with past 30-day prevalence currently at 16%), the proportion of smokers who successfully quit needs to at least double.

Evidence indicates that population-level policy interventions can be highly effective in achieving cessation outcomes. Price is one of the most effective policy tools to promote cessation. Despite a tobacco tax increase in 2017, tobacco taxes in Ontario remain among the lowest in Canada. Restricting smoking in public and workplaces is also an effective policy tool for promoting quitting. Increased compliance with indoor and recent outdoor bans will undoubtedly positively impact some smokers in these settings to become nonsmokers.

The Smoke-Free Ontario Strategy did fund interventions that address a couple of the Executive

Steering Committee's priority actions for cessation such as: ensuring providers have the core skills and competencies to provide high quality evidence-based cessation services and providing targeted population-based cessation services. Nevertheless, despite considerable investment in capacity building and in funding of clinical cessation services, Ontario falls short on seven cessation system policies recommended by the Executive Steering Committee:

1. Organize all cessation services into a network that people who smoke can access easily
2. Require all healthcare settings to embed smoking cessation best practices
3. Shift to an opt-out approach to smoking cessation in healthcare settings
4. Maintain and enhance robust clinical standards for smoking cessation
5. Explore the potential of non-combustible nicotine delivery systems (e.g., electronic cigarettes) to reduce harm for people who are unable to unwilling to quit smoking
6. Provide cost-free pharmacotherapy based on clinical standards and individual needs
7. Use population-based behavioural technologies to reach more tobacco users

Ongoing, comprehensive social marketing campaigns are a vital ingredient for promoting quit intentions and quit attempts.[4] Future province-wide campaigns should be sustained over longer periods to maximize the impact of quit attempts among smokers in the Ontario population.

The Executive Steering Committee report makes clear that to achieve substantial gains in the proportion of smokers who quit for good, it is essential to adopt population level policies that considerably increase the cost of tobacco to consumers, decrease access and availability to places where tobacco can be purchased and further limit places where smoking is permitted.[1]

Protection

While the Smoke-Free Ontario Strategy offers considerable protection from involuntary exposure to secondhand smoke, the current *SFOA* smoking restrictions do not meet the scope of smoke-free policies assessed by the 2016 Scientific Advisory Committee and the policy priority actions recommended by the Executive Steering Committee.[3,1] Ontarians continue to be exposed to secondhand smoke in a variety of public, workplace and private settings.

The 2016 Scientific Advisory Committee[3] identified interventions to offer further protection for Ontarians including:

- Integrating e-cigarettes into smoke-free policies
- Protection from tobacco smoke in outdoor settings, home environments, workplace environments, institutional settings and hospitality settings
- Protection from waterpipe smoke

Recent legislative amendments and regulatory changes implemented by the Government of Ontario have closed many of the gaps in regulating outdoor smoking and integrating e-cigarettes into the *SFOA*, while a growing number of municipalities have closed other gaps in outdoor smoking and waterpipe use in regulated areas. Further policy implementation is needed at the provincial level to protect all Ontarians from the remaining exposures to tobacco smoke.

Pro-Tobacco Influences

The Smoke-Free Ontario Strategy has curtailed pro-tobacco influences in many important ways including: widespread (but not total) marketing bans, total display bans at point-of-sale and flavour bans (now including menthol). Yet, the tobacco industry is still able to sell its deadly products cheaply (about 50 cents per cigarette) in close to 10,000 outlets, many of which are open 24 hours per day. Illicit activity makes tobacco available much more cheaply to a not negligible proportion of smokers.

In order to contain pro-tobacco influences in these areas, the Executive Steering Committee recommends:

1. Immediately raising provincial taxes on all tobacco products to at least the highest rate of all other provinces and territories, followed by continued regular increases to at least double the price of tobacco products
2. Eliminating the price differential among different types and brands of cigarettes
3. Prohibiting manufacturers and retailers from offering volume discounts (i.e., lower per-pack price for buying more than one pack of cigarettes)
4. Using provincial and municipal legislation, zoning restrictions and licensing fees to reduce the number and density of retail tobacco vendors

Other pro-tobacco trends present new and continued concerns including:

- Production of tobacco in Ontario is increasing
- Launching of new products, particularly heated tobacco products, without pre-market approval and without information to consumers about their absolute and relative risks
- Introduction of new technologies (e.g., twistable and aqua filters) and slick new packaging for numerous brands
- Promotion occurring on Internet websites and with the launch of new heated tobacco products at retail
- Top-rated movies in Canadian theatres continue to have numerous tobacco scenes, which has led to 340.3 million tobacco impressions on movie goers

Seriously addressing these supply-side pro-tobacco influences is essential to achieving the cessation increases and initiation decreases needed to make Ontario the jurisdiction with Canada's lowest smoking rates and to achieving less than 5% by 2035.

References

[1] Ontario Ministry of Health and Long-Term Care. *Smoke-Free Ontario Modernization: Report of the Executive Steering Committee.* Toronto, ON: Queen's Printer for Ontario, 2017. Accessed on November 30, 2017.

[2] Tobacco Strategy Advisory Group (TSAG). *Building on our gains, taking action now: Ontario's tobacco control strategy for 2011-2016*. Toronto, ON: The Ontario Tobacco Research Unit; 2010. Assessed on March 1, 2018.

[3] Smoke-Free Ontario. Scientific Advisory Committee, Ontario Agency for Health Protection and Promotion (Public Health Ontario). *Evidence to Guide Action: Comprehensive Tobacco Control in Ontario (2016).* Toronto, ON: Queen's Printer for Ontario, 2017. Accessed on December 18, 2017.

[4] Durkin S, Brennan E, Wakefield M. Mass media campaigns to promote smoking cessation among adults: An integrative review. *Tobacco Control* 2012 Mar;21(2):127-138.

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:

Appendix

Table of Contents

List of Tables

Appendix: Technical Information about Population Surveys

Data Sources

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 2016, estimates were based on telephone interviews with 3,042 adults (38% of eligible respondents) representing 10,157,960 Ontarians aged 18 or older, conducted between January and December. All survey estimates were weighted, and variance estimates and statistical tests were corrected for the sampling design.

Ontario Student Drug Use and Health Survey (OSDUHS)

The Centre for Addiction and Mental Health's Ontario Student Drug Use and Health Survey (OSDUHS) is a province-wide survey, first implemented in 1977 and conducted every two years (in the spring) by the Institute for Social Research at York University. The survey uses a two-stage (school, class) cluster sample design and samples classes in elementary and secondary school grades (i.e., grades 7 to 12). Students enrolled in private schools, special education classes, those institutionalized for correctional or health reasons, those on Indian reserves and Canadian Forces bases, and those in the far northern regions of Ontario were not included in the target population. These exclusions comprise approximately 8% of Ontario students. In 2017, 11,435 students participated in the survey, with a student participation rate of 61% (the participation rate was influenced by 12% of students who were absent and 27% 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.

In 2015, the CCHS underwent changes in survey design – both in sampling and content. The samples for the youth population (aged 12 to 17) and the adult population (aged 18+) are now treated differently. Youth participants were selected directly from the Canadian Child Tax Benefit files. Whereas adult participants were selected using 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. Approximately 70% of the survey content was modified in 2015, ranging from minor tweaks or major changes to concepts, vocabulary or response categories. For this reason, caution should be taken when interpreting trends. In total, 52,699 Canadians aged 12 or older participated in the 2015 survey (including 15,834 Ontarians). All survey estimates were weighted, and variance estimates were calculated using bootstrap weights.

Data Analysis

Characteristics Associated with Smoking Status

Youth

A segmentation analysis of students in grades 9 to 12 was conducted, with a focus on current smoker and nonsmoker sub-populations defined by risky behaviours (e.g., drinking, drug use) and social determinants of health (e.g., social cohesion, work for pay, housing), as defined in

Table A-1). The analysis was conducted using the 2015 Ontario Student Drug Use and Health Survey (OSDUHS). Data were weighted to represent students in Ontario. All analyses took into account the complex sampling design of the survey.

Table A-1: Indicators of Chronic Disease Risk Factors and Social Determinants of Health Among Current Smokers[a] and Nonsmokers, OSDUHS

Indicator	Definition
Drug Use Problem	Reporting experiencing at least 2 of the 5 items (used drugs to relax or fit in, used drug alone, forgotten things while using drugs, gotten into trouble while on drugs, had family say cut down on drugs) on the CRAFFT screener, which measures a drug use problem that may require treatment (in the past 12 months)
Hazardous or harmful drinking	Scoring at least 8 out of 40 (Likert scoring) on the World Health Organization's Alcohol Use Disorders Identification Test (AUDIT) screen, which measures heavy drinking and alcohol-related problems during the past 12 months
Work for Pay	Students reported working for pay outside the home during the school year
Gambling Activity	Reporting gambling money on 1 or more of 9 gambling activities during the past 12 months: cards, bingo, sports pools, sports lottery, other lottery (i.e. scratch cards, Lotto 6-49), video gambling/slot machines, casino, internet game, dice, any other activities. This is not a measure of problem gambling
Health Professional Visit for Mental Health Problems	Reported at least one visit to a doctor, nurse, or counsellor for emotional or mental health reason in the last 12 months
Delinquent Behaviour	Reporting at least 3 of the following 9 delinquent behaviours in the 12 months before the survey: vandalized property, theft of goods worth less than $50, theft of goods worth $50 or more, stole a car/joyriding, break and entering, sold cannabis, ran away from home, assaulted someone (not a sibling), carried a weapon
No Social Cohesion at School	Students who did not "feel close to people at school" or did not feel like they are "part of the school"
Self-Rated Poor Health	Rating one's physical health as either "fair" or "poor"
Live in >1 Home	Reported dividing time between two or more homes
Parents with ≤high school education	Parents (both for two parents families and one for single families) have high school education or less

[a] Current smoker is someone who has smoked at least 100 cigarettes in his or her life and smoked within the last 30 days

Adults

A segmentation analysis of young adult (aged 18 to 29 years) and adult (18+ years) current smoker and nonsmoker subpopulations was conducted using health indicators such as chronic disease risk factors (e.g., physical inactivity, overweight) and social determinants of health (e.g., food security, education), as defined in Table A-2. The analysis was conducted using the 2015 Canadian Community Health Survey (CCHS) Master file. All survey estimates were weighted, and variance estimates were calculated using bootstrap weights.

Table A-2: Indicators of Chronic Disease Risk Factors and Social Determinants of Health Among Current Smokers[a] and Nonsmokers, CCHS

Indicator	Definition
Identifies as being White	Respondent reported that his/her cultural / racial background is White
Born in Canada	Respondent is not an immigrant
Unhealthy eating habits	Respondent eats less than 5 servings of fruits and vegetables per day
Male	Respondent is male
Inactive	Respondent is "inactive" in their leisure time if they did not reported any physical activity minutes during the interview
Overweight	Respondents whose self-reported body mass index (BMI) exceeds a value of 25.
Excess of low risk drinking[b]	Women who had more than 10 drinks in the previous week, had more than 2 drinks on a single day in the previous week, consumed alcohol on 6-7 days in the previous week, and/or had 5+ drinks in one occasion at least once per month for the past 12 months. Excludes women who were pregnant or breastfeeding. Men who had more than 15 drinks in the previous week, had more than 3 drinks on a single day in the previous week, consumed alcohol on 6-7 days in the previous week, and/or had 5+ drinks in one occasion at least once per month for the past 12 months
Renting current dwelling	Respondent's dwelling is rented.
Working in sales & services occupations	Respondents work in sales and service occupations (e.g., retail, hospitality, and child care)
Working in trades, transportation & equipment operation occupation	Respondents work in trades, transportation and equipment operation occupation (e.g., construction and taxi drivers)
Low education	Respondent's household's highest level of education is less than high school completion
Not having a family doctor	Respondent does not have a regular health care provider
Mood disorder	Respondent reported having a mood disorder, such as depression, bipolar disorder, mania or dysthymia.
Illicit drug use	Respondent reported using an illicit drug in the past 12 months.

[a] Current smoker is someone who has smoked at least 100 cigarettes in his or her life and smoked within the last 30 days

[b] Calculated using the Canadian Centre on Substance Abuse's 'Canada's Low-Risk Alcohol Drinking Guidelines.[1]

Strengths and Weaknesses of Surveys

Each of the surveys described has its own particular strengths, and we draw on these throughout the report. For instance, because of the lengthy period over which the CAMH surveys have been conducted—since 1977 for OSDUHS and since 1991 for the CAMH Monitor—trend data on provincial smoking behaviour are unsurpassed. 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.

References

[1] Butt P, Beirness D, Gliksman L, Paradis C, Stockwell, T. *Alcohol and health in Canada: A summary of evidence and guidelines for low risk drinking*. Ottawa, ON: Canadian Centre on Substance Abuse, 2011.