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]

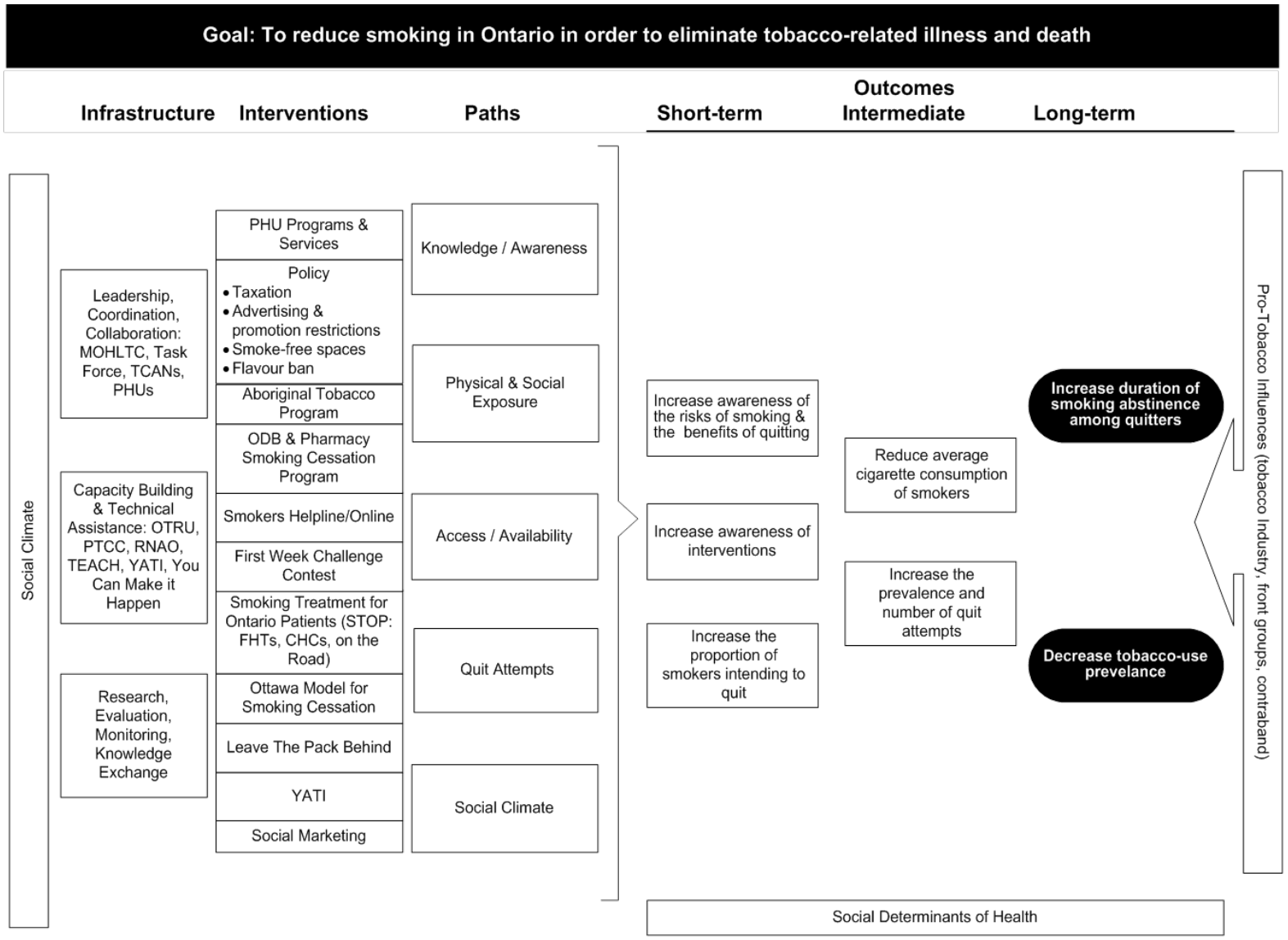
These pathways are expected to influence the social climate (or social norms) surrounding tobacco-use behaviour by reducing its social acceptability; this in itself is considered key to achieving and sustaining the desired cessation outcomes.[5,6] The cessation component of the Smoke-Free Ontario (SFO)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

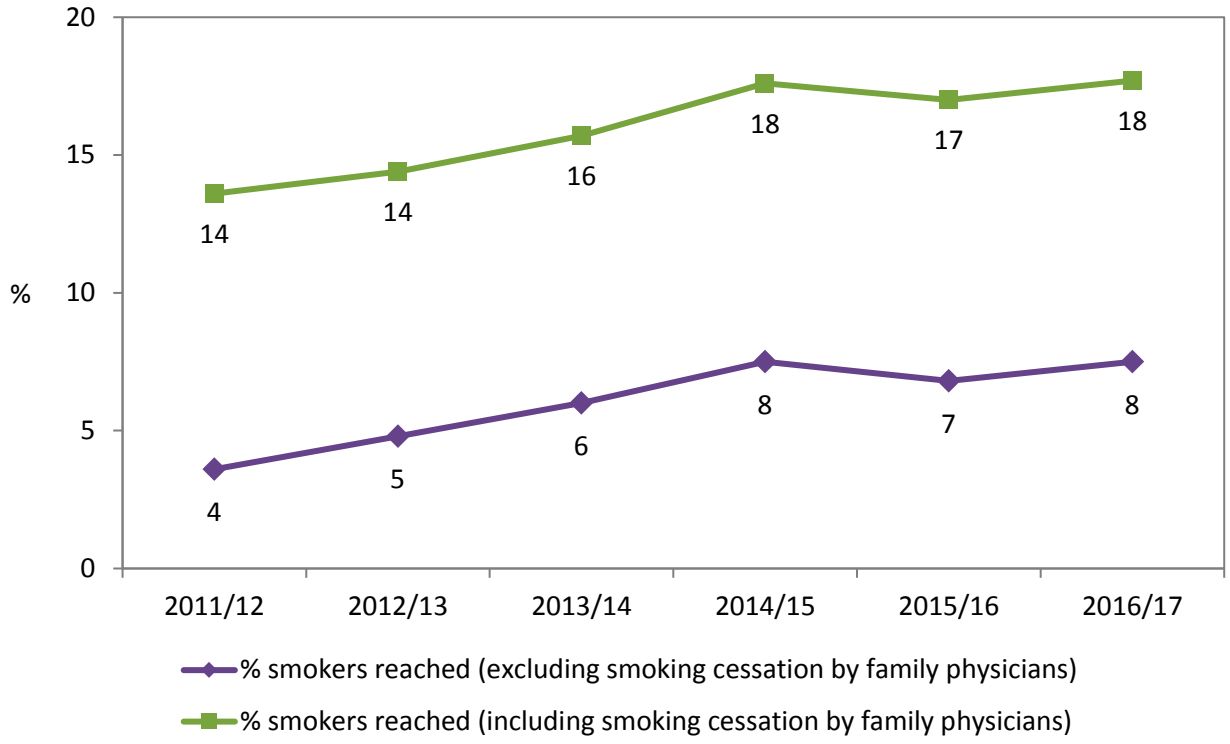
Note: Reach is calculated as total number of people in program. Only Smokers' Helpline is available to all Ontario smokers, with the other programs serving sub-populations. Comparisons among programs should not be made, as they provide varying services to different populations of smokers.

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.

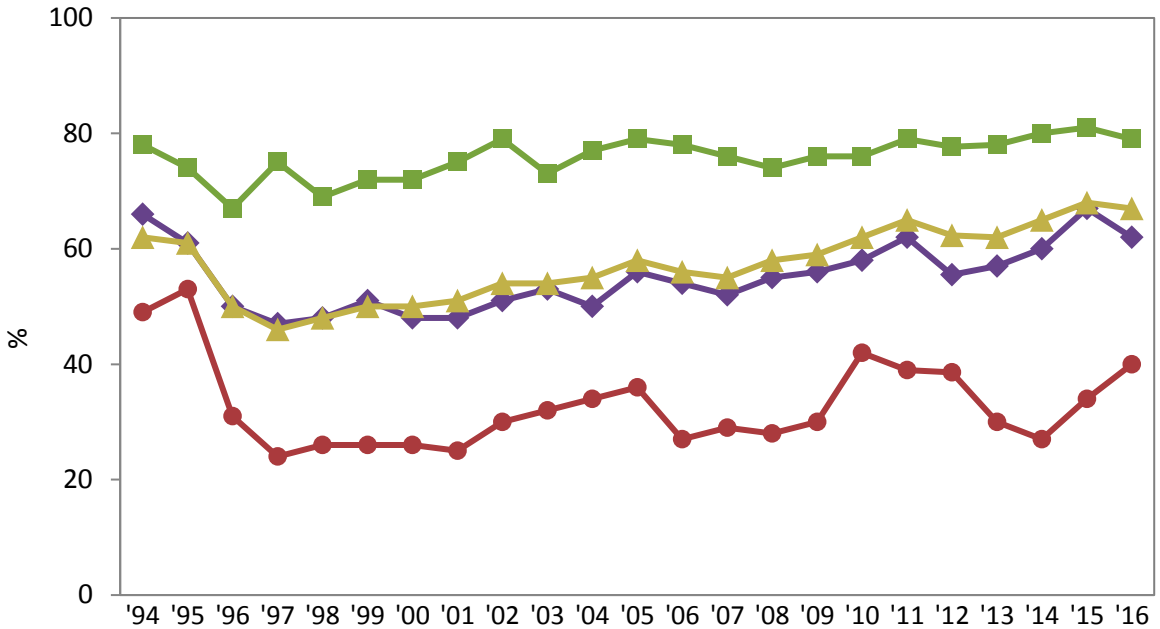
Lifetime Quit Ratio

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

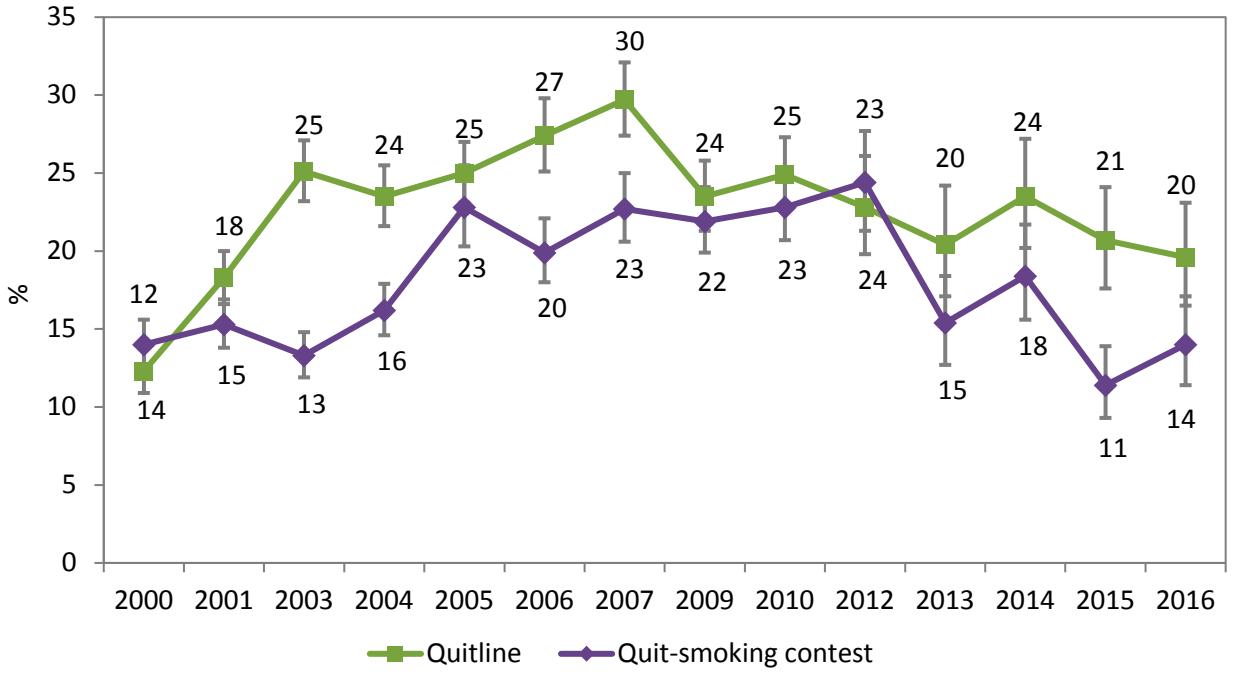
As suggested by the Cessation Path Logic Model (Figure 5-1), to reach desired cessation outcomes, the Strategy must increase the awareness and use of evidence-based cessation initiatives, decrease cigarette consumption, increase the proportion of smokers intending to quit and increase the prevalence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

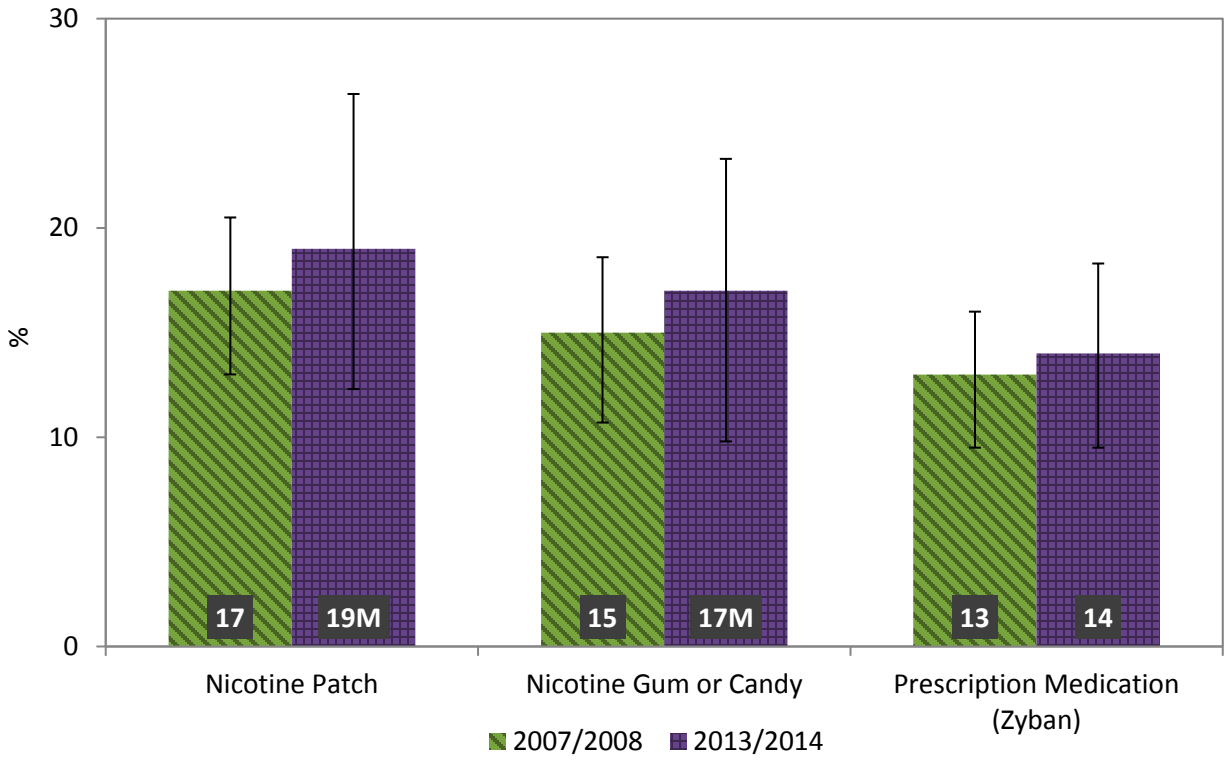


Note: Vertical lines represent 95% confidence intervals. Survey question not asked uniformly over reporting period. Full data table for this graph provided in the Appendix (Table 5A-3) and (Table 5A-4).
Source: Centre for Addiction and Mental Health Monitor 2000, 2001, 2003-2007, 2009, 2010, 2012-2016.

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.

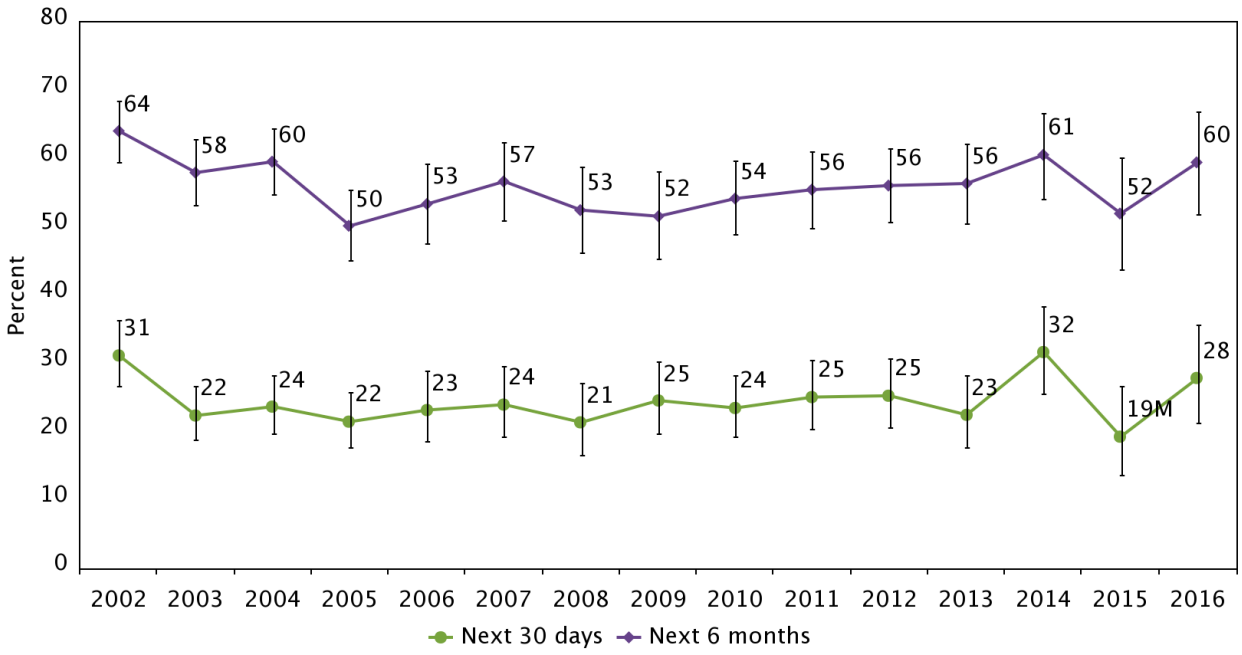
[xx] The combined 2015/16 Canadian Community Health Survey data was not available when this report was prepared.

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

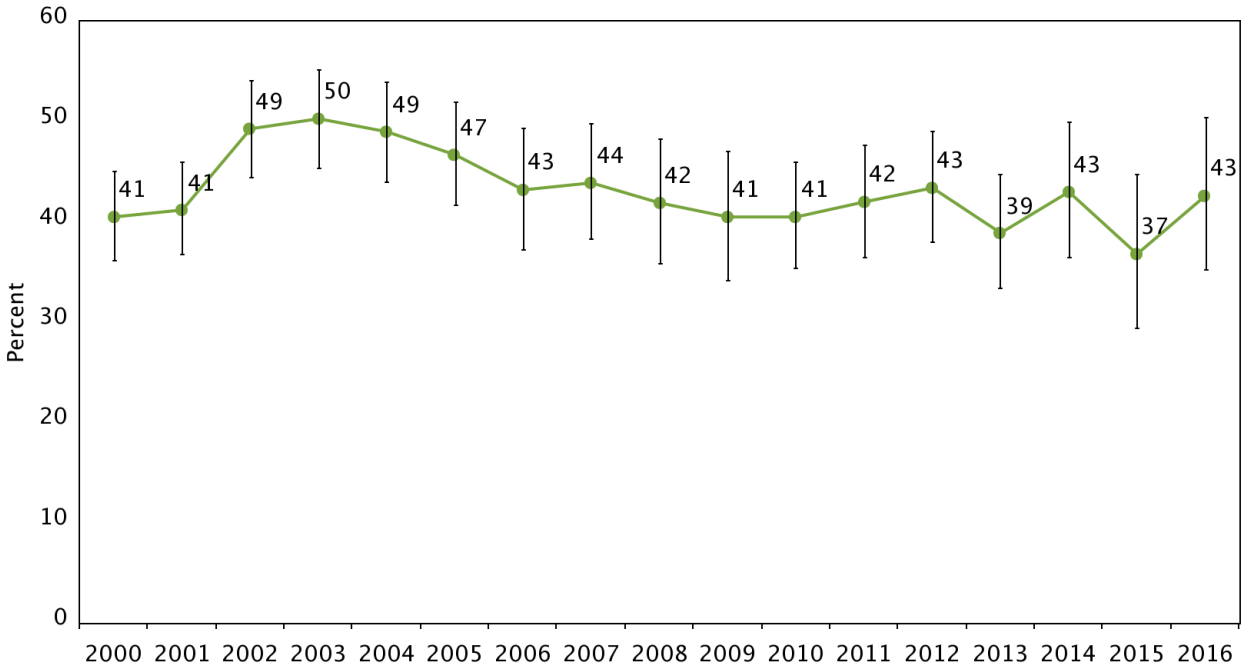


Note: M = Interpret with caution: subject to moderate sampling variability. Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 5A-6) and (Table 5A-7).
Source: Centre for Addiction and Mental Health Monitor 2002–2016.

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:

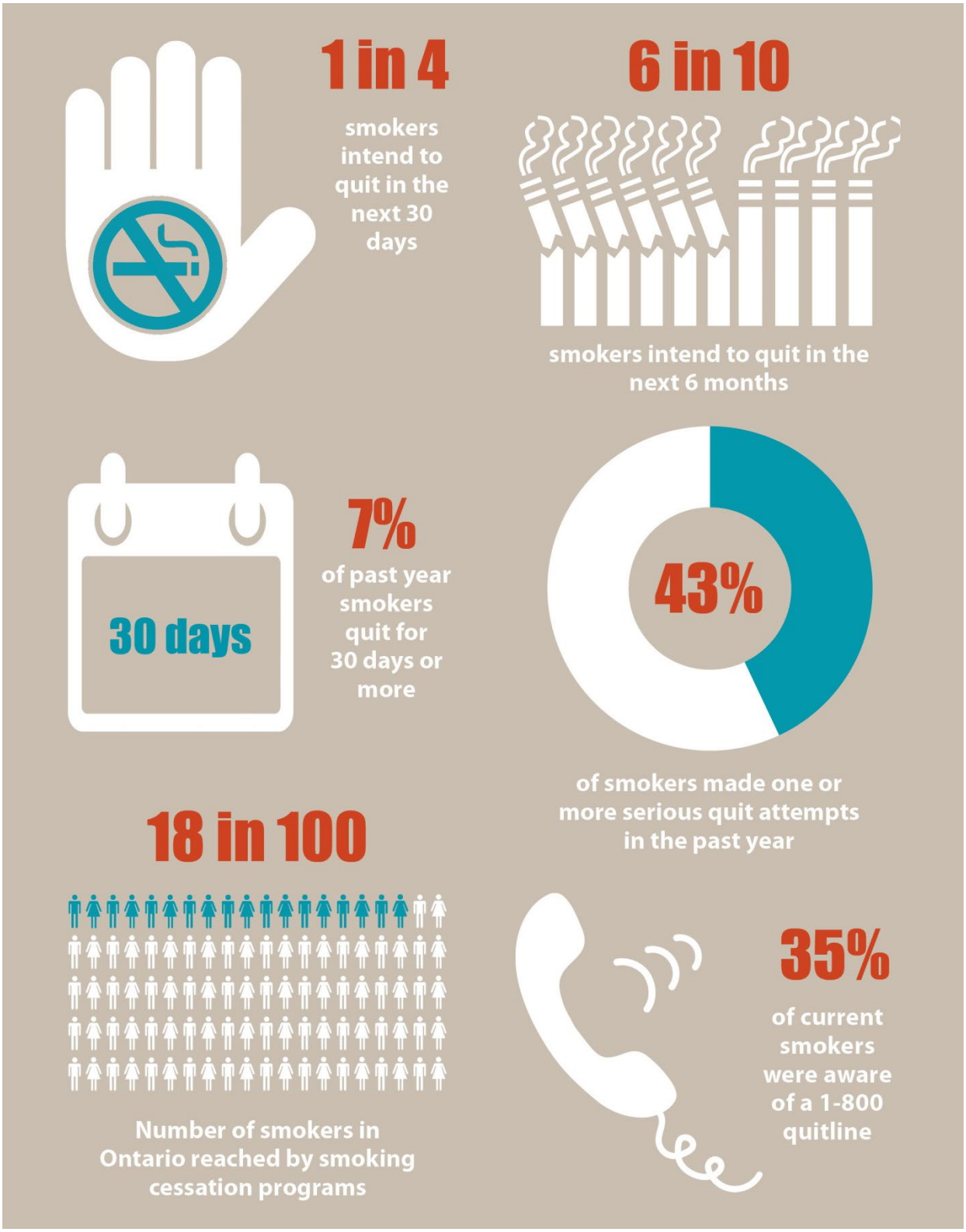
1. Organize all cessation services into a network that people who smoke can access easily
2. Require all health-care settings to embed smoking cessation best practices
3. Shift to an opt-out approach to smoking cessation in health-care settings
4. Maintain and enhance robust clinical standards for smoking 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.