

Table of Contents

| List of Tables | 3 |
|--|----|
| List of Figures | 4 |
| Cessation: Smoke-Free Ontario Strategy Components | 5 |
| Cessation Infrastructure | 7 |
| Ontario Tobacco Research Unit | 7 |
| Ottawa Model for Smoking Cessation | 8 |
| Program Training and Consultation Centre | 9 |
| Public Health Units and Tobacco Control Area Networks | 10 |
| Registered Nurses' Association of Ontario | 10 |
| Training Enhancement in Applied Cessation Counselling and Health Project | 12 |
| You Can Make It Happen | 13 |
| Youth Advocacy Training Institute | 14 |
| Cessation Interventions | 15 |
| Interventions to Limit Physical and Social Exposure | 15 |
| Point-of-Sale Display Ban and Marketing Restrictions | 15 |
| Protection from Secondhand Smoke | 15 |
| Interventions to Limit Availability | 16 |
| Flavoured Tobacco Sales Ban | 16 |
| Tobacco Product Availability | 16 |
| Tobacco Taxation | |
| Interventions to Build Knowledge and Awareness | 17 |
| The Aboriginal Tobacco Program | |
| Leave The Pack Behind | 19 |
| Social Marketing Campaigns | |
| Clinical Cessation Interventions to Increase Quit Attempts | 21 |
| Leave The Pack Behind | 21 |
| Ontario Drug Benefit and Pharmacy Smoking Cessation Programs | 22 |
| Ottawa Model for Smoking Cessation | |
| Hospital and Specialty Care Sites | |
| Primary Care Organizations | 25 |
| Public Health Units | 26 |
| Smokers' Helpline (Phone Support) | |
| Smoking Cessation by Family Physicians | |
| The Smoking Treatment for Ontario Patients Program | |
| Other Cessation Interventions to Increase Quit Attempts | |
| First Week Challenge Contest | |
| Leave The Pack Behind | |
| Public Health Units | |
| Smokers' Helpline Online | |
| Smokers' Helpline Text Messaging | 37 |

Smoke-Free Ontario Strategy Monitoring Report | Smoking Cessation

| Youth Advocacy Training Institute N-O-T on Tobacco | 38 |
|--|----|
| Overall Reach of Ontario's Cessation Programs | 39 |
| Cessation Outcomes: Population-Level | 41 |
| Long-Term Outcomes | 41 |
| Former Smokers | 42 |
| Annualized (Recent) Quit Rate | 42 |
| Lifetime Quit Ratio | 42 |
| Quit Duration | 43 |
| Short and Intermediate-Term Outcomes | 43 |
| Advice, Awareness and Use of Quit Aids | 44 |
| Health Professional Advice | 44 |
| Awareness of Quit Programs | 45 |
| Use of Quit Aids | 46 |
| Quitting Behaviour | 47 |
| Intentions to Quit | 47 |
| Quit Attempts | 48 |
| MPOWER Comparison with Ontario: Cessation | 49 |
| Scientific Advisory Committee: Overview of Cessation Goals and Recommendations | 50 |
| 2010 Scientific Advisory Committee Recommendations | 50 |
| Chapter Summary | 54 |
| Visual Summary of Key Cessation Indicators | 56 |
| Appendix: Data Tables | 57 |
| References | 64 |

List of Tables

| Table 4-1: | Leave The Pack Behind Participants by Clinical Program or Service, 2015/16 | 22 |
|-------------|--|----|
| Table 4-2: | Number of Smokers Reached by the Ontario Drug Benefit and Pharmacy Smoking | |
| | Cessation Programs, Ontario, 2011/12 to 2015/16 | 23 |
| Table 4-3: | Unique Ontario Public Drug Program Clients, by LHIN, 2015/16 | 24 |
| Table 4-4: | Number of Smokers Reached by the Ottawa Model for Smoking Cessation (Hospitals | |
| | and Specialty Care), Ontario, 2006/07 to 2015/16 | 25 |
| Table 4-5: | Number of Smokers Reached by the Ottawa Model for Smoking Cessation (Primary | |
| | Care), Ontario, 2010/11 to 2015/16 | 26 |
| Table 4-6: | Populations Targeted by Public Health Unit Tobacco Use Cessation Programs and | |
| | Services, 2016 | |
| Table 4-7: | Smokers' Helpline Reach, 2005/06 to 2015/16 | 28 |
| Table 4-8: | Smokers' Helpline 7-Month Follow-up Responder Quit Rates, 2006/07 to 2013/14 | 29 |
| Table 4-9: | Reach of Initial Cessation Counselling Compared to Number of Patients Who Visited a | |
| | Physician, Ages 15+, 2006/07 to 2015/16 | 31 |
| Table 4-10: | Reach of Follow-up Cessation Counselling Compared to Initial Counselling Estimates, | |
| | Ages 15+, 2007/08 to 2015/16 | |
| Table 4-11: | STOP Program Participants, by Select Characteristics, 2015/16 | 33 |
| Table 4-12: | STOP Program 7-Day Point Prevalence Responder Quit Rates, 2015/16 | 33 |
| Table 4-13: | Leave The Pack Behind Participants by Non-Clinical Program or Service, 2015/16 | 35 |
| Table 4-14: | Non-Clinical Tobacco Use Cessation Services Offered by Public Health Unit, 2016 | 36 |
| Table 4-15: | Smokers' Helpline Online Registration, 2005/06 to 2015/16 | 37 |
| Table 4-16: | Smokers' Helpline Text Service Registration, 2009/10 to 2015/16 | 38 |
| Table 4-17: | Smokers Enrolled in Ontario Smoking Cessation Interventions ^a in 2015/16 | 39 |
| Table 4-18: | Annualized (Recent) Quit Rate among Past-Year Smokers, by Duration of Quit, Ontario, | |
| | 2007 to 2014 | 42 |
| Table 4-19: | Assessing Smoking Cessation: MPOWER Indicators Applied to Ontario | 49 |
| Table 4A-1: | Proportion of Smokers Reached by Ontario Smoking Cessation Interventions, | |
| | 2011/12 to 2015/16 | 57 |
| Table 4A-2: | Quit Ratio (Former Smokers as a Proportion of Ever Smokers), by Age, Ontario, | |
| | 1994 to 2015 | 58 |
| Table 4A-3: | Health Professional Advice to Smokers, by Occupation, Ages 18+, Ontario, 2005 | |
| | to 2012 | |
| | Awareness of a 1-800 Quitline (Past 30 Days), Ages 18+, Ontario, 2000 to 2015 | 60 |
| Table 4A-5: | Awareness of a Quit Smoking Contest (Past 30 Days), Ages 18+, Ontario, 2000 | |
| | to 2015 | 60 |
| Table 4A-6: | Use of Smoking Cessation Aids (past year), Ages 18+, Ontario, 2007/08 and 2013/14 | 61 |
| | Intentions to Quit Smoking in the Next Six Months, Ages 18+, Ontario, 2002 to 2015 | |
| | Intentions to Quit Smoking in the Next 30 Days, Ages 18+, Ontario, 2002 to 2015 | 62 |
| Table 4A-9: | One or More Quit Attempts in the Past Year, Current Smokers, Ages 18+, Ontario, | |
| | 2000 to 2015 | 63 |

List of Figures

| Figure 4-1: | Cessation Path Logic Model | 6 |
|-------------|--|----|
| Figure 4-2: | Proportion of Smokers Reached by Ontario Smoking Cessation Interventions, | |
| | 2011/12 to 2015/16 | 40 |
| Figure 4-3: | Quit Ratio (Former Smokers as a Proportion of Ever Smokers), by Age, Ontario, 1994 | |
| | to 2015 | 43 |
| Figure 4-4: | Health Professional Advice to Smokers, by Occupation, Ages 18+, Ontario, 2005 | |
| | to 2012 | 44 |
| Figure 4-5: | Awareness of a 1-800 Quitline (Past 30 Days) and Awareness of a Quit Smoking | |
| | Contest (Past 30 Days), Ages 18+, Ontario, 2000 to 2015 | 45 |
| Figure 4-6: | Use of Smoking Cessation Aids (Past Year), Ages 18+, Ontario, 2007/08 and 2013/14 | 46 |
| Figure 4-7: | Intentions to Quit Smoking in the Next Six Months and Next 30 Days, Ages 18+, | |
| | Ontario, 2002 to 2015 | 47 |
| Figure 4-8: | One or More Quit Attempts in the Past Year, Current Smokers, Ages 18+, Ontario, | |
| _ | 2000 to 2015 | 48 |

Cessation: Smoke-Free Ontario Strategy Components

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

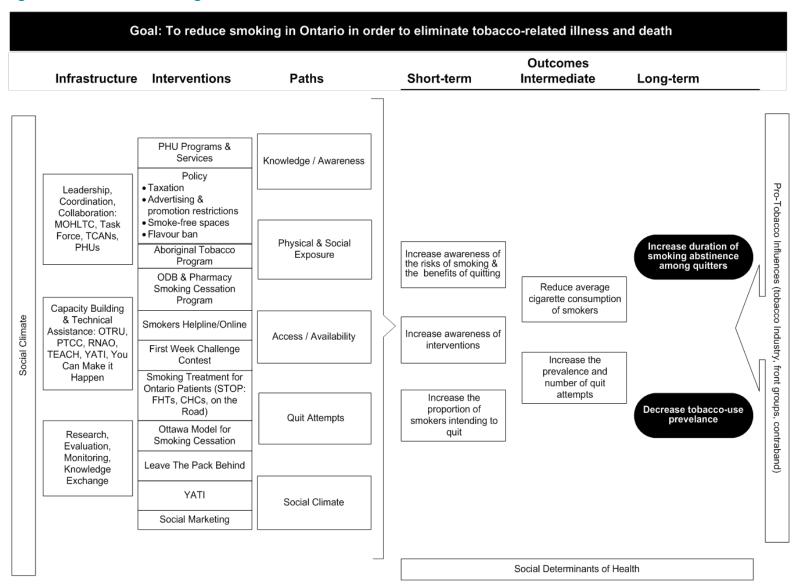
These cessation outcomes can be achieved through a number of evidence-based pathways such as:

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

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

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

Figure 4-1: Cessation Path Logic Model



Ontario Tobacco Research Unit Chapter 4-6

Cessation Infrastructure

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

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

Ontario Tobacco Research Unit

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

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

Ottawa Model for Smoking Cessation

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

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

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

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

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

Program Training and Consultation Centre

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

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

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

i

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

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

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

Public Health Units and Tobacco Control Area Networks

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

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

Registered Nurses' Association of Ontario

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

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

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

Key programmatic components of the strategy include:

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

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

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

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

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

Training Enhancement in Applied Cessation Counselling and Health Project

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

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

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

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

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

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

You Can Make It Happen

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

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

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

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

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

Youth Advocacy Training Institute

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

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

Cessation Interventions

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

Interventions to Limit Physical and Social Exposure

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

Point-of-Sale Display Ban and Marketing Restrictions

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

Protection from Secondhand Smoke

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

Interventions to Limit Availability

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

Flavoured Tobacco Sales Ban

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

Tobacco Product Availability

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

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

Tobacco Taxation

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

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

Interventions to Build Knowledge and Awareness

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

The Aboriginal Tobacco Program

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

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

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

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

i

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

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

Leave The Pack Behind

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

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

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

groups).

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

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

Social Marketing Campaigns

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

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

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

Clinical Cessation Interventions to Increase Quit Attempts

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

Leave The Pack Behind

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

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

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

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

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

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

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

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

Ontario Drug Benefit and Pharmacy Smoking Cessation Programs

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

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

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

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

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

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

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

Source: Ontario Ministry of Health and Long-Term Care

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

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

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

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

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

Source: Ministry of Health and Long-Term Care

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

Ottawa Model for Smoking Cessation

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

Hospital and Specialty Care Sites

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

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

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

Source: The Ottawa Model for Smoking Cessation

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

Primary Care Organizations

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

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

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

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

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

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

Source: Ottawa Model for Smoking Cessation

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

Public Health Units

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

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

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

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

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

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

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

Smokers' Helpline (Phone Support)

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

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

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

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

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

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

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

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

ix Measure of reach is based on the definition used by North American Quitline Consortium and reflects the number of new callers (not including repeat or proactive calls) contacting the Helpline divided by the total number of smokers aged 18 and over in Ontario.

^x Reactive callers represent new clients calling for themselves.

xi The number of reactive callers and referral contacts includes repeat contacts therefore the two numbers combined do not equal the total number of new callers.

xii Maria Rudie, Research Manager, North American Quitline Consortium. Personal communication, December 12, 2016.

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

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

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

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

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

PPA = Point prevalence abstinence

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

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

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

Smoking Cessation by Family Physicians

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

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

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

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

^a Source: Ontario Health Insurance Plan

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

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

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

^a Source: Ontario Health Insurance Plan

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

^b Estimates based on number of smokers (at present time) aged 15+ who visited a physician, using CCHS 2005 to 2014 data.

The Smoking Treatment for Ontario Patients Program

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

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

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

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

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

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

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

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

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

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

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

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

Other Cessation Interventions to Increase Quit Attempts

First Week Challenge Contest

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

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

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

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

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

Leave The Pack Behind

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

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

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

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

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

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

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

Public Health Units

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

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

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

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

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

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

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

Smokers' Helpline Online

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

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

Challenge was not run in 2015/16.xvi

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

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

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

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

Smokers' Helpline Text Messaging

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

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

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

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

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

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

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

Youth Advocacy Training Institute N-O-T on Tobacco

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

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

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

Overall Reach of Ontario's Cessation Programs

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

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

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

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

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

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

20 18 17 15 16 14 14 % 10 8 7 5 6 5 4 0 2011/12 2012/13 2013/14 2014/15 2015/16

% smokers reached (excluding smoking cessation by family physicians)% smokers reached (including smoking cessation by family physicians)

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

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

Cessation Outcomes: Population-Level

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

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

Long-Term Outcomes

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

Former Smokers

Annualized (Recent) Quit Rate

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

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

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

Source: Canadian Community Health Survey 2007- 2014.

Lifetime Quit Ratio

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

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

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

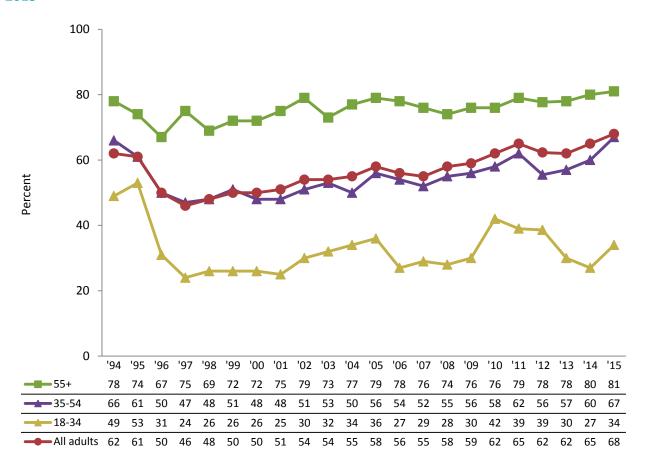


Figure 4-3: Quit Ratio (Former Smokers as a Proportion of Ever Smokers), by Age, Ontario, 1994 to 2015

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

Quit Duration

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

Short and Intermediate-Term Outcomes

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

Advice, Awareness and Use of Quit Aids

Health Professional Advice

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

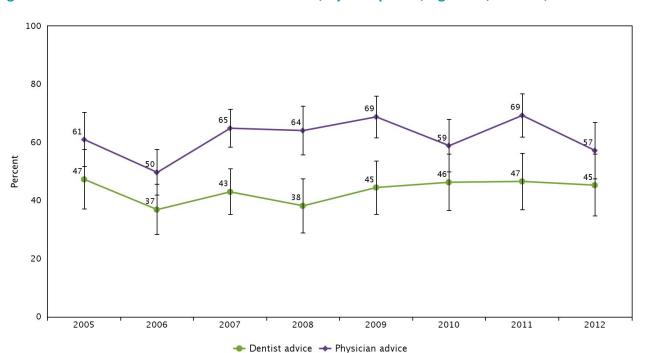


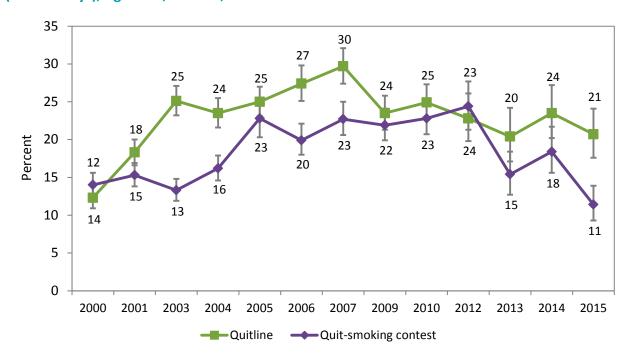
Figure 4-4: Health Professional Advice to Smokers, by Occupation, Ages 18+, Ontario, 2005 to 2012

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

Awareness of Quit Programs

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

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



Note: Vertical lines represent 95% confidence intervals. Survey question not asked uniformly over reporting period. Full data table for this graph provided in the Appendix (Table 4A-4) and (Table 4A-5).

Source: Centre for Addiction and Mental Health Monitor 2000, 2001, 2003-2007, 2009, 2010, 2012-2015.

xix Interpret with caution: Subject to moderate sampling variability.

Use of Quit Aids

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

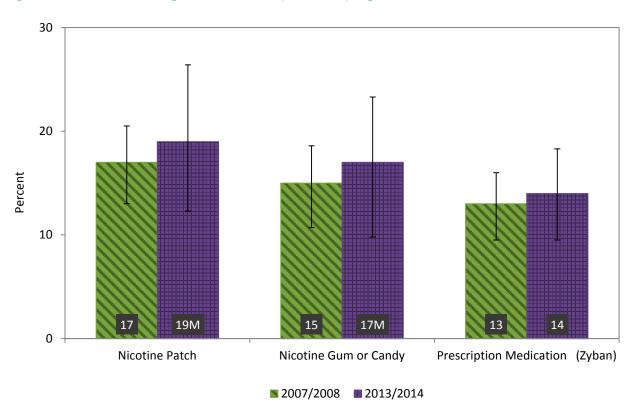


Figure 4-6: Use of Smoking Cessation Aids (Past Year), Ages 18+, Ontario, 2007/08 and 2013/14

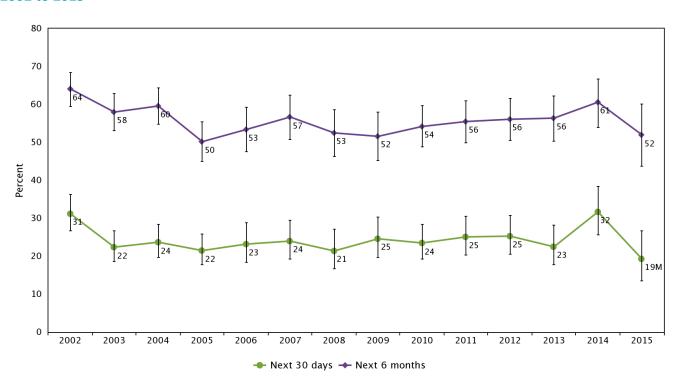
Note: M = Interpret with caution: subject to moderate sampling variability. Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 4A-6). Source: Canadian Community Health Survey 2007, 2008, 2013, 2014.

Quitting Behaviour

Intentions to Quit

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

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



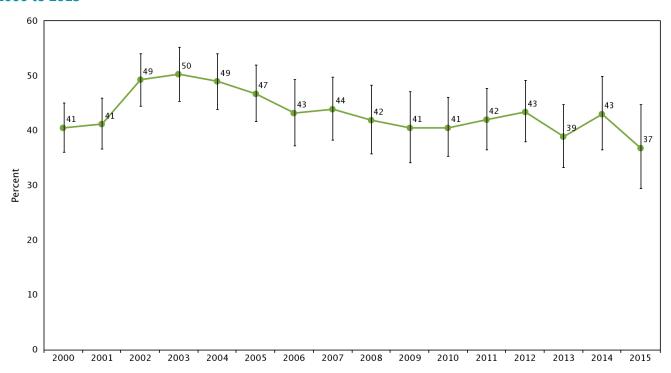
Note: M = Interpret with caution: subject to moderate sampling variability. Vertical lines represent 95% confidence intervals. Full data table for this graph provided in the Appendix (Table 4A-7) and (Table 4A-8).

Source: Centre for Addiction and Mental Health Monitor 2002–2015.

Quit Attempts

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

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



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

MPOWER Comparison with Ontario: Cessation

Eight MPOWER indicators⁶⁸ relate to Cessation: Monitoring, Smoking Prevalence, Cessation Programs, Health Warning Labels, Mass Media Campaigns, Tobacco Advertising Bans, Compliance with Advertising Ban and Taxation (Table 4-19).

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

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

Scientific Advisory Committee: Overview of Cessation Goals and Recommendations

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

2010 Scientific Advisory Committee Recommendations

Media Campaign

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

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

Tobacco-User Support System

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

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

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

Direct Support

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

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

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

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

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

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

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

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

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

Cessation in Other Settings

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

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

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

Current Status: This recommendation has been under discussion.

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

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

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

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

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

Cessation Training

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

Current Status: Continuing

Pharmaceutical Companies

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

Current Status: Unknown

Innovative Approaches

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

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

Chapter Summary

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

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

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

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

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

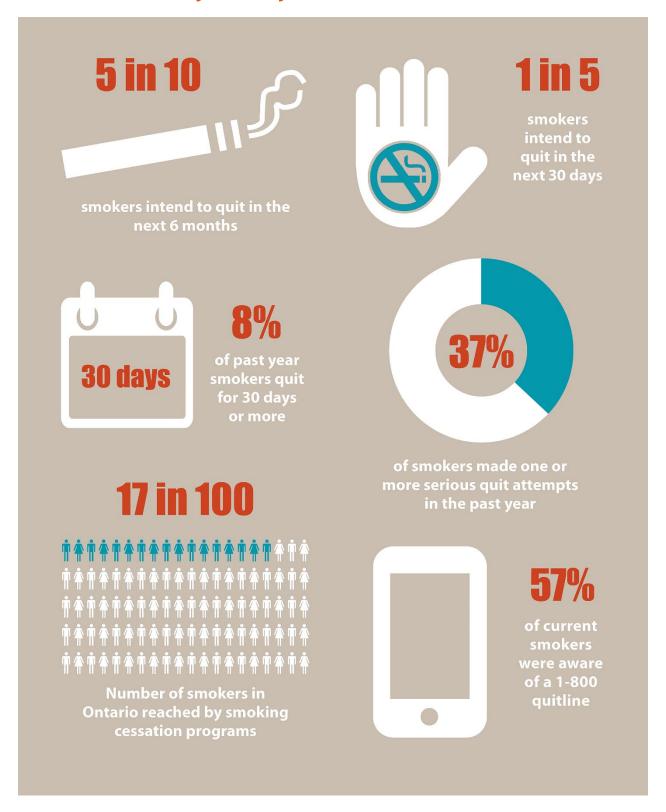
- 3. Creation of a Tobacco-User Support System to operationalize the concept that there is "no wrong door" for access to cessation support services.
- 4. Enhancement of systems of telephone, text messaging and Internet-based cessation support services that would entail: a) integration with the overall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

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

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

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

Visual Summary of Key Cessation Indicators



Appendix: Data Tables

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

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

Note: Data table is for Figure 4-2.

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

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

Source: Centre for Addiction and Mental Health Monitor 1994-2015.

Note: Data table is for Figure 4-3.

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

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

Source: Canadian Tobacco Use Monitoring Survey 2005–2012.

Note: Data table is for Figure 4-4.

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

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

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

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

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

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

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

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

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

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

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

 $Source: Centre \ for \ Addiction \ and \ Mental \ Health \ Monitor \ 2000, \ 2001, \ 2003-2007, \ 2009, \ 2010, \ 2012-2015$

Note: Data table is for Figure 4-7.

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

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

Source: Centre for Addiction and Mental Health Monitor 2000, 2001, 2003-2007, 2009, 2010, 2012-2015.

Note: Data table is for Figure 4-7.

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

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

Source: Centre for Addiction and Mental Health Monitor 2000-2015.

Note: Data table is for Figure 4-8.

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.
- 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.
- 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.
- Chaiton M, Diemert L, Zhang B, Bondy S. Busting Myths About Smoking Cessation: A Synthesis of Population-Level Findings from the Ontario Tobacco Survey. Toronto: OTRU, April 2016. Accessed December 2016.
- Ontario Tobacco Research Unit. *Is it a Quit Attempt if it Doesn't Last a Day? Predictors of Serious Quit Attempts of at Least 24 Hours Duration.* OTRU Update. Toronto: OTRU, September 2015. Accessed on December 17, 2015.
- Ontario Tobacco Research Unit. Smoking Cessation Behaviours Among Older Adult Smokers in Ontario. Project News. Toronto: OTRU, February 2016. Accessed December 2, 2016.
- Ontario Tobacco Research Unit. Neighbourhoods in Ontario: The Association with Attempts to Quit Smoking. Project News. Toronto: OTRU, February 2016. Accessed December 2, 2016.
- Ontario Tobacco Research Unit. *Assisted and Unassisted Quitting: Do Immigrant Neighbourhoods Quit Differently?* Project News. Toronto: OTRU, March 2016. Accessed December 2, 2016.
- Ontario Tobacco Research Unit. The Effects of Tobacco Control Mass Media Campaigns on the Cessation Behaviours of Ontario Smokers. Project News. Toronto: OTRU, March 2016. Accessed December 2, 2016.
- Ontario Tobacco Research Unit. *OTRU Knowledge and Evaluation Support Team Newsletter*, Volume 9, Issue 1. Toronto: OTRU, June 2015. Accessed on December 2, 2016.
- Ontario Tobacco Research Unit. OTRU Knowledge and Evaluation Support Team Newsletter. Toronto: OTRU, September 2015. Accessed on December 2, 2016.

- Ontario Tobacco Research Unit. OTRU Knowledge and Evaluation Support Team Newsletter. Toronto: OTRU, December 2015. Accessed on December 2, 2016.
- Honsberger NJ, Kernoghan A, Lambraki I, Doxy J, Garcia J. *Documentation of Practice: Building Local Capacity for Smoking Cessation Support*. Toronto: PTCC and the Propel Centre for Population Health Impact, University of Waterloo, April 2016. Accessed December 2, 2016.
- Hyndman B, Honsberger NJ, Lambraki I, Kernoghan A, Garcia J. *Documentation of Practice: Reaching Priority Populations with Barriers to Smoking Cessation Supports*. Toronto: PTCC and the Propel Centre for Population Health Impact, University of Waterloo, June 2016. Accessed December 2, 2016.
- Ontario Ministry of Health and Long-Term Care. *Ontario Public Health Standards 2008*. Toronto: Queen's Printer for Ontario, 2008 [revised May 2016]. Accessed November 17, 2016.
- ¹⁹ Registered Nurses' Association of Ontario (RNAO). *The Registered Nurses' Association of Ontario Tobacco Intervention Initiative: Evaluation Summary 2008-2016*. Toronto: RNAO, November 2016.
- ²⁰ Babayan A, Srikandarajah A, Di Sante E, Schwartz R. *Evaluation of the 2009-2010 RNAO Nursing Best Practice Smoking Cessation Initiative*. Toronto: OTRU, May 10, 2010.
- ²¹ Babayan A, Krynen-Hill M, Schwartz R. *Evaluation of the 2010-2011 RNAO Nursing Best Practice Smoking Cessation Initiative*. Toronto: OTRU, November, 2011.
- ²² Babayan A, Malas M, Schwartz R. *Evaluation of the 2011-2012 Registered Nurses' Association of Ontario Nursing Best Practice Smoking Cessation Provincial Initiative*. Toronto: OTRU, January 2013.
- ²³ Babayan A, Lillico H, Haji F, Schwartz R. *Evaluation of the 2013-2015 Registered Nurses' Association of Ontario Nursing Best practice Smoking Cessation Provincial Initiative: Progress Report (2013-2014).* Toronto: OTRU, March 2014.
- Dubray J, Babayan A, Lillico H, Haji F, O'Connor S, Schwartz R. Evaluation of the 2013-2015 Registered Nurses' Association of Ontario Nursing Best Practice Smoking Cessation Provincial Initiative. Toronto: OTRU, January 2016.
- ²⁵ Training Enhancement in Applied Cessation Counselling and Health (TEACH). *TEACH Project Year-End Evaluation Report, FY 2015-16.* Toronto: Centre for Addiction and Mental Health, May 2016.
- Youth Advocacy Training Institute. Youth Advocacy Training Institute (YATI) 2015-2016 Final Activity Report.
- ²⁷ 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.
- ²⁸ Institute of Medicine. *Ending the Tobacco Problem: A Blueprint for the Nation*. Washington: National Academies Press, 2007.

- ²⁹ 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.
- ³⁰ 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 5, 2017.
- ³¹ Brownson RC, Hopkins DP, Wakefield MA. Effects of smoking restrictions in the workplace. *Annual Review of Public Health* 2002;23:333-348.
- 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.
- ³³ Shields M. Smoking bans: Influence on smoking prevalence. *Health Reports* 2007;18(3):9-24.
- ³⁴ Chaiton M, Diemert L, Zhang B, Kennedy RD, Cohen JE, Bondy SJ, Ferrence R. Exposure to smoking on patios and quitting: a population representative longitudinal cohort study. *Tobacco Control*. 2016 Jan 1;25(1):83-8.
- Anderson SJ. Menthol cigarettes and smoking cessation behaviour: a review of tobacco industry documents. *Tobacco Control* 2011;20:ii49-ii56.
- ³⁶ Courtemanche CJ, Palmer MK, Pesko MF. Influence of the flavored cigarette ban on adolescent tobacco use. *American Journal of Preventive Medicine*. In press.
- Delnevo CD, Gundersen DA, Hrywna M, Echeverria SE, Steinberg MB. Smoking-cessation prevalence among U.S. smokers of menthol versus non-menthol cigarettes. *American Journal of Preventive Medicine* 2011Oct;41(4):357-365.
- ³⁸ Trinidad DR, Pérez-Stable EJ, Messer K, White MM, Pierce JP. Menthol cigarettes and smoking cessation among racial/ethnic groups in the United States. *Addiction* 2010 Dec;105 Suppl1:84-94.
- ³⁹ Smith SS, Fiore MC, Baker TB. Smoking cessation in smokers who smoke menthol and non-menthol cigarettes. *Addiction* 2014 Dec;109(12):2107-2117.
- ⁴⁰ Cohen JE, Anglin L. Outlet density: A new frontier for tobacco control. *Addiction* 2009 Jan;104(1):2-3.
- Ontario Ministry of Health and Long Term Care. *Tobacco Inspection System.* Toronto: Ontario Ministry of Health and Long Term Care, 2015.
- ⁴² 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.
- ⁴³ 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.

- 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.
- ⁴⁵ Chaloupka FJ, Grossman M. Price, tobacco control policies and smoking among young adults. *Journal of Health Economics* 1997 Jun;16(3):359-373.
- ⁴⁶ 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.
- ⁴⁷ 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.
- ⁴⁸ Cavazos-Rehg PA, Krauss MJ, Spitznagel EL, Chaloupka FJ, Luke DA, Waterman B., et al. Differential effects of cigarette price changes on adult smoking behaviours. *Tobacco Control* 2014 Mar;23(2):113-118.
- 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:pp.193-199.
- ⁵⁰ Tauras JA. Public policy and smoking cessation among young adults in the United States. *Health Policy* 2004;68(3):321-332.
- 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.
- ⁵² Schwartz R, Zhang B. Debunking the taxation—contraband tobacco myth. *Canadian Medical Association Journal* 2016 April; 188(6):401-402.
- Ontario Ministry of Finance. *Tobacco Tax Rate Increases*. Ottawa: Queen's Printer for Ontario, February 2016. Accessed December 8, 2016.
- Leave the Pack Behind. Leave the Pack Behind Final Report: April 1st, 2015 March 31st, 2016, Program and Activity. St. Catharines: Brock University.
- North American Quitline Consortium (NAQC). *Measuring Quit Rates. Quality Improvement Initiative.* NAQC Issue Paper. Phoenix: NAQC, 2009. Accessed on February 10, 2017.
- 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.

- ⁵⁷ 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.
- Ontario. Ministry of Health and Long-Term Care. *Ontario Public Drug Programs* [Unpublished data], December 9,2016.
- 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.
- ⁶⁰ University of Ottawa Heart Institute. *Ottawa Model for Smoking Cessation in Primary Care: 2015-16 Annual Report.*
- Propel Centre for Population Health Impact. Ontario Smokers' Helpline Annual Report, April 2015 to March 2016. Waterloo, Ontario: Propel Centre for Population Health Impact, University of Waterloo, June 2016.
- ⁶² North American Quitline Consortium. *Quitline Map*. Accessed on December 13, 2016.
- ⁶³ Health Canada, Tobacco Control Directorate. *Evaluation of the Pan-Canadian Toll-Free Quitline Initiative Ontario Findings.* February 2016.
- North American Quitline Consortium. Results from the FY2015 NAQC Annual Survey of Quitlines. February 2016. Accessed February 8, 2017.
- ⁶⁵ Taylor L, Lawrance K. *Outcome Evaluation of a Campus-Based Quit and Win Contest.* (Master's Thesis). St. Catharines: Brock University, 2013.
- ⁶⁶ Taylor L, Lawrance K, Kirkwood A. *Quit and Win Contests Is Quitting the Only Option?* Poster presentation at the Society for Research on Nicotine and Tobacco Conference. Boston: March 2013.
- ⁶⁷ 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.
- World Health Organization. WHO Report on the Global Tobacco Epidemic, 2008: The MPOWER Package. Geneva: WHO, 2008.
- ⁶⁹ Smoke-Free Ontario. Scientific Advisory Committee. Evidence to Guide Action: Comprehensive Tobacco Control in Ontario. Toronto: Ontario Agency for Health Protection and Promotion, 2010.
- 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.
- 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.