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

Toward a Smoke-Free Ontario: Progress and Implications for Future Developments

Ontario Tobacco Research Unit

February 2009

Suggested Citation. Ontario Tobacco Research Unit. *Toward a Smoke-Free Ontario: Progress and Implications for Future Developments* [Special Reports: Monitoring and Evaluation Series (Volume 13, No. 3)]. Toronto, ON: Ontario Tobacco Research Unit, February 2009.

Preface

Report three was prepared by Robert Schwartz, Shawn O'Connor, Nadia Minian and Dorrie Fiissel. It draws upon material in the first two reports in this series and the work of OTRU's Evaluation and Monitoring team.

The full Volume 13 of the *Monitoring and Evaluation Series* consists of:

Number 1: ***The Tobacco Control Environment: Ontario and Beyond***—which is based on an environmental scan of policy initiatives across Canadian and international jurisdictions, with an emphasis on developments in the province of Ontario. Report Number 1 is formatted as a series of individual fact sheets in specific topic areas released as information becomes available.

Number 2: ***Indicators of Smoke-Free Ontario Strategy Progress***—which is a presentation of quantitative data from a variety of surveys and other sources measuring recent progress in tobacco control in Ontario; and

Number 3: ***Toward a Smoke-Free Ontario: Progress and Implications for Future Developments***

Acknowledgements

The interpretation and opinions expressed in this report are the responsibility of the Principal Investigators of the Ontario Tobacco Research Unit (OTRU):

Susan Bondy	University of Toronto
K. Stephen Brown	University of Waterloo
Joanna Cohen	University of Toronto, Centre for Addiction and Mental Health
Roberta Ferrence	Centre for Addiction and Mental Health, University of Toronto
John M. Garcia	Cancer Care Ontario, University of Waterloo
Paul McDonald	University of Waterloo
Robert Schwartz	University of Toronto
Peter Selby	Centre for Addiction and Mental Health, University of Toronto

Table of Contents

Preface iii
Acknowledgements iii
List of Tables vii
List of Figures vii
Executive Summary 1
Introduction 3
General Indicators of Progress 4
Changes in Smoke-Free Ontario Funding Commitments 4
Developments in Smoke-Free Ontario Programs and Policies 5
Protection 7
Major Protection-Related Findings 7
Exposure at Work 8
Exposure in Public Places 8
Exposure at Home and in Vehicles 9
Support 9
Compliance 9
Interventions 10
Discussion 11
Prevention 12
Major Prevention Related Findings 12
Information and Data on Interventions 13
Youth Action Alliances & YATI 13
High School Grants 14
Stupid.ca 15
Lungs are for Life (LAFL) 15
Youth Tobacco Vortal Project (YTVP) 16
Aboriginal Tobacco Strategy Youth Programming 16
Taxes 16
Youth Access Restrictions 17
Discussion 17
Cessation 19
Main Cessation Related Findings 19
Interventions 19
STOP Study 20
The Driven to Quit Challenge 20
Smokers' Helpline 21
Leave the Pack Behind 21
Ottawa Heart Institute (OHI) 22
Reducing Taxes on NRT 22

Capacity Building Programs 22
Discussion 23
Concluding Note to Report Three 25
References 27
Appendix 3.1: Major Tobacco Control Activities Funded under the Smoke-Free Ontario Strategy, by Ontario Ministry of Health Promotion Program Area, 2005-2007 31

List of Tables

Table 1: Broad Budget Allocations, by Ontario Ministry of Health Promotion Categories, 2004/05 to 2007/08 Fiscal Years 6
Table 2: Key Indicators of Progress in Protection (2003 – 2007) 7
Table 3: Key Indicators of Progress in Prevention (2003 – 2007) 12
Table 4: Key Indicators of Progress in Cessation (2003 – 2007) 19
Table 5: Reach of Interventions 20
Table 6: Comparison of Programs Available for Simcoe Muskoka-Smokers and those Suggested by the Cessation Task Group 24

List of Figures

Figure 1: Past Month Exposure to Secondhand Smoke at Restaurants and Bars, Ages 18+, Ontario, 1 Year Before and After the Implementation of the *Smoke-Free Ontario Act* 8

Executive Summary

The Smoke-Free Ontario Strategy (SFOS) is bearing fruit in decreasing Ontarians' exposure to secondhand smoke, preventing smoking initiation among youth and motivating intentions to quit.

However, general indicators of progress demonstrate little to no change in the prevalence of adult current smoking in recent years (21% in 2007), in the proportion of current smokers who smoke daily (79% in 2007), or in the mean number of cigarettes smoked per day by daily smokers (15.2 in 2007). Smoking rates among low socio-economic status (SES) sub-populations and in several public health unit (PHU) areas remain high.

Protection from indoor secondhand smoke exposure has improved significantly with the implementation of the *Smoke-Free Ontario Act.* Almost all Ontarians (96%) report total workplace bans. Five percent and 8% respectively report being exposed to secondhand smoke in restaurants and bars. Exposure to secondhand smoke on restaurant and bar patios is still high–48% of people who frequented restaurants and 74% who frequented bars in the past month were exposed to secondhand smoke on patios. There is strong support for further legislative protection in cars, patios and multi-unit dwellings.

Measures to prevent smoking initiation and use among youth appear to have resulted in significant decreases in past 30 day smoking and increases in lifetime abstinence among school-aged youth. Smoking rates are unchanged for young adults. In 2007, the prevalence of current smoking was 22% for 20-24 year olds – double the rate for youth aged 15-19. School-based prevention programming has declined substantially and there are considerable gaps in the reach and coordination of community and public education/mass media prevention efforts.

While the proportion of smokers with intentions to quit in 30 days has increased significantly (to 32% in 2007), there have not been corresponding increases in the proportion of smokers who make a serious quit attempt (44% in 2007) or to improvements in the quit ratio (the proportion of ever smokers who are former smokers: 55% in 2007). Current SFOS cessation programs reach no more than 4% of smokers and do not constitute a fully integrated continuum of services as outlined in guidelines adopted by the Ontario Ministry of Health Promotion.

While impressive progress has been made in implementing a comprehensive approach to tobacco control, the evaluative information in this report indicates a need for sustained, strengthened and enriched efforts on all fronts.

Introduction

The purpose of this report is to support learning that will enhance progress toward achievement of the goals of the Smoke-Free Ontario Strategy (SFOS). The report addresses progress to date in the implementation and results of Strategy components. Both accomplishments and challenges are highlighted with the intention of bringing evidence to bear on the continued development of the Smoke-Free Ontario Strategy. The report draws on information from population level surveys, program evaluations, performance reports and administrative data.

This report is organized around the three major goals of the Smoke-Free Ontario Strategy. These goals, which were supported by the Government of Ontario in 2003/04, were based on the strategic direction set forth by the Steering Committee of the Ontario Tobacco Strategy earlier in 2003. The ultimate objective of the Strategy is to eliminate tobacco-related illness and death in Ontario. The three goals are:

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

A variety of sources provide data and information for this report. As in past years, this report considers population level evidence that is presented in more detail elsewhere, particularly in Reports 1 and 2 of Volume 13 of the Ontario Tobacco Research Unit's annual *Monitoring and Evaluation Series*. Evaluative information about policy and program interventions is drawn from evaluation work conducted directly by the Ontario Tobacco Research Unit and by others on behalf of organizations that receive Smoke-Free Ontario Strategy funding. OTRU's Performance Indicators Monitoring System (PIMS) provides additional data on implementation and reach of SFOS programming. Further information has been gleaned from administrative documents.

The relationship between Smoke-Free Ontario Strategy interventions and changes in protection, prevention and cessation outcomes is complex. There is substantial evidence that tobacco control interventions affect these outcomes and there is an expectation for synergistic effects from a comprehensive approach. However, several forces confound these relationships: variations in fidelity, reach and dose of interventions; unknown lags between implementation and population level changes; and environmental variation, including tobacco industry activity, economic and social perturbations and immigration. Further, existing tools for measuring population level outcomes do not always offer sufficient precision for identifying small year-over-year changes. In light of these constraints, we are not able to directly attribute changes in population level outcomes to Smoke-Free Ontario Strategy expenditures and interventions. Instead, the report provides information about the

reach and effects of interventions, identifying accomplishments and challenges in making progress toward achieving prevention, protection and cessation goals. Work currently in progress will provide a more systematic analysis of the contributions of Smoke-Free Ontario Strategy interventions to key paths and to tobacco behaviour outcomes.

General Indicators of Progress

- During the period 2003 to 2007, there has been only a slight decrease in the prevalence of current smoking for Ontarians aged 12 years and older (22% vs. 21%). In 2007, 2.2 million people in this age group were current smokers.
- There has been no significant change in the prevalence of adult current smoking in recent years. In 2007, 19% of Ontario adults (aged 18 years and older) were current smokers.
- In 2007, current smoking rates (age 12+) continued to vary substantially among PHUs, ranging from a low of 15% (York) to a high of 31% (Oxford). Current smoking rates in 20 of Ontario's 36 PHUs were 25% or greater. Diverse smoking rates by region underscore the need for more concerted efforts.
- There has been a significant decline in current smoking rates of Ontario adults with a university degree over the period 2000 to 2007 (16% vs. 8%). However, there has been no significant change between 2000 and 2007 in the prevalence of smoking among Ontarians having a high-school diploma (30% vs. 27%) or among those with less than a high-school education (30% vs. 35%). Diverse smoking rates by level of education suggest the need for targeted tobacco control interventions.
- There has been no significant change in the prevalence of smoking among blue-collar workers between 2000 and 2007. In 2007, smoking prevalence ranged from a high of 30% for blue-collar workers to a low of 15% for professionals. Diverse smoking rates by occupation suggest the need for targeted tobacco control interventions.
- There has been no significant change in the proportion of current smokers who are daily smokers in recent years. In 2007, 79% of current smokers smoked daily.
- In 2007, the mean number of cigarettes smoked per day by daily smokers was 15.2, which is a significant decrease from that smoked in 2000 (17.6 cigarettes per day). Over the period 2003 to 2007 there has not been a significant change in the mean number of cigarettes smoked per day by daily smokers.

Changes in Smoke-Free Ontario Funding Commitments

Smoke-Free Ontario Strategy funding commitments have increased substantially since the last monitoring report for 2005/06. In 2006/07 Ontario committed $62.5 million to the Smoke-Free Ontario Strategy, up from $51 million in 2005/06, $30.1 million in 2004/05 and $10 million annually

for 1999-2003. In 2006/07 Ontario's per capita tobacco control funding commitments reached $4.76, the third highest of all Canadian provinces and territories. However, Ontario is still well below funding levels recommended by the US Institute of Medicine (2007) – $15 US to $20 US per capita for US states. In 2007-2008, Ontario tobacco tax revenues totaled $1.1 billion (compared to a tobacco control funding commitment of $61.5 million).

It should be noted that Ontario conducts some tobacco control activity outside of the Smoke-Free Ontario Strategy. For example, under the newly released Ontario Public Health Standards (formerly Chronic Disease Mandatory Health Programs and Services Guidelines) pursuant to the *Health Protection and Promotion Act*, local boards of health are required to implement comprehensive tobacco control. In addition, physicians are reimbursed for counseling patients to stop smoking, and various other programs promote nonsmoking as a key element of healthy living and chronic disease prevention and management initiatives (e.g., Community Health Centres, Centre for Addiction and Mental Health, Cancer Care Ontario, Family Health Teams, etc.). Furthermore, the Federal Tobacco Control Strategy invests in tobacco control in Ontario, although this is not a reliable, sustained, or coordinated aspect of tobacco control in the province.

In the spring of 2005, Ontario committed $50 million to a Tobacco Community Transition Fund, of which $35 million was allocated to assist tobacco growers wishing to exit the industry, and $15 million was set aside to encourage economic diversification and innovation in tobacco-growing communities. Over the period January 2006 to May 2007, the Community Transition Fund provided $14.8 million to seventy-six projects across Brant, Elgin, Norfolk, and Oxford Counties (OACFDC, 2007).

Developments in Smoke-Free Ontario Programs and Policies

Table 1 presents Smoke-Free Ontario Strategy budget allocations by Program Category for the past four fiscal years. A summary of major Smoke-Free Ontario Strategy activities is presented in Appendix 3.1. There are a number of noteworthy changes since the last monitoring report for 2005/06:

- Substantial new resources have been committed to **Protection/Enforcement** reflecting a focus on implementing the *Smoke-Free Ontario Act,* which instituted province-wide bans on indoor smoking, strengthened restrictions on youth access to purchasing tobacco products and banned point of sale tobacco promotion. Working through all of 36 Ontario public health units, the Ontario Ministry of Health Promotion has engaged in considerable educational, inspection and enforcement activities in advance and subsequent to implementation of the *Act*.

- Allocations to **Youth Prevention Programs** have increased considerably. Youth Action Alliance programs are now funded in all 36 PHUs, up from 18 PHUs in 2005/06. Continuing programs include: Lungs are for Life, High School Grants and the Youth Advocacy Training Institute.
- **Mass Media and Public Relations** programs have seen reduced budget allocations.
- Allocations to **Aboriginal Programs** have decreased substantially from their peak of $2,000,000 in 2005/06.
- Allocations to **Cessation Programs** have decreased substantially from their 2005/06 levels. The STOP study, which involves distribution of free nicotine replacement therapy, was expanded to include distribution through Public Health Agencies, Community Health Centres and Aboriginal Health Access Centres.
- A structured system for **Regional Action Planning** has enhanced the role of Tobacco Control Activity Networks (TCANS) and Tobacco Control Coordinators in developing and coordinating regional and local tobacco control programming.

Table 1: Broad Budget Allocations, by Ontario Ministry of Health Promotion Categories, 2004/05 to 2007/08 Fiscal Years

SFO Program Budget Category	2004/05 Allocation	2005/06 Allocation	2006/07 Allocation	2007/08 Allocation
Local Capacity Building (TCC and TCAN)	2,202,000	7,730,000	5,600,000	5,900,000
Protection/ Enforcement			13,500,000	13,000,000
Youth Prevention Programs	816,560	6,168,600	9,500,000*	9,900,000
Provincial Support Programs	3,438,475	3,664,520	4,500,000	5,000,000
Mass Media and Public Relations	13,606,519	13,556,519	12,700,000	11,200,000
Aboriginal Programs	400,000	2,000,000	1,100,000	1,300,000
Cessation Programs	5,367,000	13,238,400	9,800,000	7,700,000
Research Evaluation and Surveillance	3,592,971	4,000,000	4,000,000	4,000,000
Administration	615,481	645,481	1,800,000	3,500,000
Total	**30,039,006**	**51,003,520**	**62,500,000**	**61,500,000**

* excludes Leave the Pack Behind (0.8M), which in 2006/07 is located within the cessation envelope

Next, progress and implications of the SFOS over the period 2006/07 are discussed for the Strategy goals of protection, prevention, and cessation.

Protection

There is no safe level of exposure to secondhand smoke (US DHHS. 2006). Tobacco smoke pollution causes heart disease, cancer and premature death in nonsmoking adults; and it causes sudden infant death syndrome, asthma and ear infections in infants.

Provisions of the *Smoke-Free Ontario Act* (*SFOA*), effective as of May 31, 2006, aim to reduce exposure to secondhand smoke in enclosed workplaces and indoor public places including restaurants and bars. Prior to the *SFOA*, 9 out of 10 Ontarians were protected by local smoke-free restaurant and bar bylaws (91% and 87%, respectively; Ontario Tobacco Research Unit, 2004). However, just over half of restaurant and bar smoke-free bylaws (54%) allowed for designated smoking rooms or DSRs (Ontario Tobacco Research Unit, 2006). The *SFOA* extended indoor smoke-free protection to all Ontarians, including at the workplace, and banned DSRs. Although comparable to existing legislation passed by other Canadian provinces and territories, the Ontario law extends restrictions beyond traditional indoor sites to include a ban on smoking within 9 metres of entrances/exits to healthcare facilities, common areas of multi-unit dwellings, and partially covered restaurant and bar patios (Ontario Tobacco Research Unit, 2007). Substantial provincial resources have been devoted to enforcement of the *Act.*

Major Protection-Related Findings

Table 2: Key Indicators of Progress in Protection (2003 – 2007)

Indicators	2003 Status	2005 Status	2007 Status
Adults reporting a total workplace smoking ban*	81%	87%	96%
Adults reporting workplace exposure to SHS*	30%	29%	NA
Adults reporting indoor workplace exposure to SHS*	NA	NA	8%
Ontarians (15+) reporting exposure to secondhand smoke in restaurants†	NA	22%‡	9%§
Ontarians (15+) reporting exposure to secondhand smoke in bars†	NA	42%	14%
Ontarians (12+ years) reporting exposure to secondhand smoke in their homes‖	9%	7%	6%
Ontarians (12+ years) reporting exposure to secondhand smoke in private vehicles‖	10%	8%	8%

* Centre for Addiction and Mental Health Monitor (CAMH-M)
† Ontario Tobacco Survey (OTS)
‡ Period covers July 2005—June 2006
§ Period covers July 2006—June 2007
‖ Canadian Community Health Survey (CCHS)

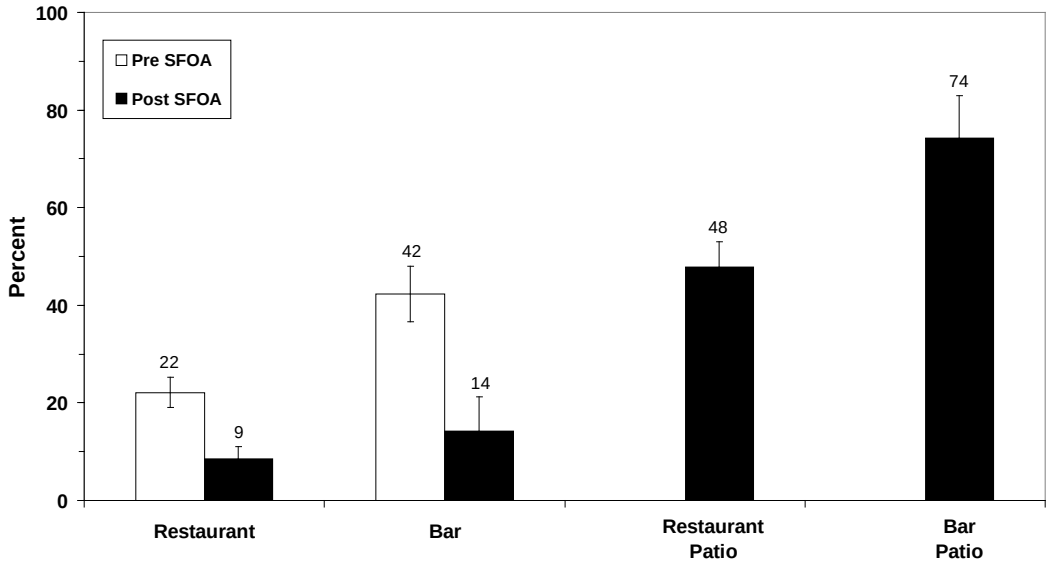
Exposure at Work

- The proportion of Ontario workers who reported that their workplace was covered by a total indoor smoking ban increased from 92% in 2006 (pre *SFOA*) to 96% in the first half of 2007 after implementation of the *SFOA* (Figure 1).
- Among blue-collar workers, 91% worked in settings with total indoor smoking bans (CAMH Monitor 2007, data not shown).
- In the first half of 2007 (following *SFOA* implementation), 8% of all Ontario workers were exposed to secondhand smoke while indoors at work. In 2006, 30% of Ontario workers were exposed to secondhand smoke while at work (including outdoor exposure – data not available for 2007).

Exposure in Public Places

- One year before the implementation of the *SFOA*, 22% of Ontario adults who were inside a restaurant in the past month reported people smoking around them, whereas only 9% reported exposure in the year following implementation of the *Act* (Figure 1).
- Secondhand smoke exposure in bars among adults visiting these establishments in the past 30 days was 42% prior to the *Act* and 14% in the 12 months following implementation (Figure 2).
- After implementation of the *Act*, exposure to secondhand smoke on patios among people who frequented restaurants and bars in the past month was 48% and 74%, respectively (Figure 1).

Figure 1: Past Month Exposure to Secondhand Smoke at Restaurants and Bars, Ages 18+, Ontario, 1 Year Before and After the Implementation of the *Smoke-Free Ontario Act*



Note: Vertical lines represent 95% confidence intervals. The *Smoke-Free Ontario Act* (SFOA) was implemented May 31, 2006.
Source: Ontario Tobacco Survey 2005–2007.

Exposure at Home and in Vehicles

- In 2007, 487,600 Ontarians 12 years and older (6%) were exposed every day or almost every day to secondhand smoke at home (one-person households with a smoker were not asked the survey question).
- In 2007, about 8% of nonsmoking Ontarians (12 years and older) were exposed to secondhand smoke while in vehicles (688,900). Exposure among 12 to 19 year olds was 18% (222,304).

Support

- Despite strong legislative protection from secondhand smoke and high compliance with the *SFOA*, in 2007 many Ontario adults supported further restrictions:

    - 84% agreed that smoking should not be allowed inside a car with children present[1] (compared to 73% in 2003)
    - 61% agreed that smoking should be banned from restaurant and bar patios (compared to 50% in 2005)
    - 79% agreed smoking should not be allowed indoors in multi-unit dwellings (compared to 63% in 2003)
    - 78% agreed parents should not be allowed to smoke at home if children are living there (compared to 68% in 2005)
    - 48% agreed smoking should not be allowed in parks; and 41% agreed smoking should not be allowed on sidewalks (CAMH Monitor, 2003-2007).

Compliance

- In the spring of 2006 (prior to the *SFOA* implementation), 2% of restaurants and 16% bars in Ontario were observed to have people smoking indoors (including those with designated smoking rooms). One year after implementation, virtually all restaurants and bars were observed to be in full compliance with prohibiting indoor smoking (99%) (Dubray J, Schwartz R et al. 2007).
- A recent survey found that approximately 30% of the province's outdoor restaurant and bar patios fell under smoke-free provisions of the SFOA (that is, these patios were covered). Among these patios, 43% were in use, and 27% of these were observed to have people smoking on them.

[1] Legislation prohibiting smoking inside a car with children under the age of 16 present came into force in Ontario on January 21, 2009.

Interventions

***Smoke-Free Ontario Act* (SFOA)**

This *Act* aimed to reduce exposure to secondhand smoke in enclosed workplaces and indoor public places including restaurant and bars. It came into force on May 31, 2006 and was a major accomplishment of the Smoke-Free Ontario Strategy in 2006-07.

Smoke-Free Bylaw Provisions

Numerous Ontario municipalities have bylaws in place that extend protection from secondhand smoke beyond that covered by the *SFOA*. Areas covered include restaurant and bar patios (e.g., Brighton, Burpee & Mills, Kingston, Tehkummak, and Thunder Bay); doorways, windows and air intakes beyond hospital settings (e.g., Haldimand County, Kenora, Ottawa, Peterborough, Sault Ste. Maria, Thunder Bay); and playgrounds, parks and other outdoor settings (e.g., Belleville, Collingwood, New Tecumseth, Ottawa, Peterborough; Non-Smokers' Rights Association/Smoking and Health Action Foundation, March 2008)

Education and Enforcement

Prior to the implementation of the *SFOA*, the province's 36 local PHUs held educational sessions, mailed out educational materials and conducted individual premise visits to educate affected workplaces and public places about their responsibilities under the *SFOA*. Following the implementation of the *SFOA*, education was provided during routine inspections.

Under Scopes of Services agreements with the Ontario Ministry of Health Promotion, the province's local public health units were required to carry out inspections and investigate complaints of non-compliance with the smoke-free provisions of the *Act*, using standardized protocols and inspection forms. Compliance with the public place provisions of the *Act* following implementation approached 100%, as noted above under major findings.

Leave the Pack Behind

Leave the Pack Behind (LTPB) provides post-secondary campus administrators with background materials to inform the development of progressive smoke-free policies. LTPB student teams on campuses across Ontario also disseminate resources to other students on campus on a host of topics including issues related to SHS exposure.

Ontario Tobacco-free Network

The Ontario Tobacco-free Network (OTN) was a coalition of the Canadian Cancer Society, Ontario Division; the Heart and Stroke Foundation of Ontario; and The Lung Association, active during the reporting period (OTN closed its operations in 2008). In 2006/07, the OTN supported a network of local tobacco-free councils, coordinated by public health staff and community volunteers. Their work focused on efforts to reduce the harmful effects of tobacco use in Ontario including supporting

the passage of the *SFOA*, and campaigns directed at smoke-free housing (including multi-unit dwellings) and smoke-free sports and recreation.

Discussion

A milestone in protecting Ontarians from the harmful effects of secondhand smoke was reached in 2006-07, with the implementation of the smoke-free provisions of the *SFOA*. Education and enforcement efforts have helped to bring about near 100% compliance with restrictions on smoking in restaurants and bars as measured by inspection visits.

Despite these substantial accomplishments, some Ontarians continue to be exposed to indoor secondhand smoke in public places and workplaces. Eight percent of workers report being exposed to smoke while indoors at work. Nine percent of people visiting restaurants and 14% of people visiting bars report exposure to secondhand smoke inside these establishments. Continued efforts are called for to reduce indoor exposure in public places and workplaces to zero.

Ontarians continue to be exposed to secondhand smoke in several unregulated (or partially regulated) settings including entrances to buildings, restaurant and bar patios, public sidewalks, children's parks, and multi-unit dwellings. Workplace exposure has not yet been eliminated. Close to half of people visiting restaurants in past month (48%) and three-quarter of people visiting bars in past month (74%) report exposure on outdoor patios of these establishments. Local initiatives to restrict smoking in some places are gaining momentum and several Tobacco Control Area Networks are making progress in tobacco-free sports and recreation initiatives. There is considerable public support for smoking restrictions on restaurant and bar patios (81%), in parks (48%) and on sidewalks (41%).

Recently adopted legislation prohibiting smoking in cars with children under the age of 16 is a positive sign of continued progress in protecting Ontarians from the dangers of secondhand smoke. However, several Canadian jurisdictions have extended smoke-free vehicle protection to older teens (e.g., Nova Scotia, Yukon Territory). Support for smoke-free spaces continues to grow. New ground for regulating tobacco smoke pollution is emerging as many local municipalities are leading the way by extended protection to many areas including outdoor public spaces—such as parks and recreational facilities—entranceways, and restaurant and bar patios (Non-Smokers' Rights Association/Smoking and Health Action Foundation, March 2008). This activity underscores that provincial effort is still needed to extend protection to all Ontarians.

Prevention

In accordance with its comprehensive tobacco control approach, the Smoke-Free Ontario Strategy includes a combination of program, policy and mass media / public education interventions aimed at preventing tobacco use among youth and young adults.

Major Prevention Related Findings

Table 3: Key Indicators of Progress in Prevention (2003–2007)

Indicators	2003 Status	2005 Status	2007 Status
Grade 7 students reporting lifetime abstinence from smoking*	80%	90%	93%
Grade 12 students reporting lifetime abstinence from smoking*	41%	49%	55%
Grade 7 students reporting past-year smoking*	4%	2%	3%
Grade 12 students reporting past-year smoking*	30%	23%	19%
Grade 7 and 8 students reporting past 30-day smoking*	1%	1%	1%
Grade 12 students reporting past 30-day smoking*	16%	13%	8%
Youth (aged 15-19) who were current smokers (past 30 days) †	11%	12%	11%
Young adults (aged 20-24) who were current smokers (past 30 days)†	27%	20%	22%
Retailers willing to sell to minors‡	24%	23%	11%
Youth who purchased cigarettes from a store*	NA	16%	11%
Youth who received cigarettes from a non-family member*	NA	47%	50%
Youth who think there is great risk in smoking one or two cigarettes a day*	24%	28%	31%

* Ontario Student Drug Use and Health Survey (OSDUHS)
† Canadian Tobacco Use Monitoring Survey (CTUMS)
‡ Health Canada

- Between 2003 and 2007 there was a significant increase in lifetime abstinence from smoking across all grades. During this period, lifetime abstinence for grade 7 students increased from 80% to 93% and for grade 12 students from 41% to 55%.
- Past-year smoking has continued to remain low among grade 7 students (4%, 2% and 3% for 2003, 2005, and 2007, respectively). Among grade 12 students, significant declines have been observed in past-year smoking over the period 2003 and 2007 (30% vs. 19%), but recent data suggest that the rate of decline may be slowing (23% in 2005 and 19% in 2007).

- According to OSDUHS, the prevalence of past-30 day smoking among students in grades 7 and 8 remains low (1%). Among students in grade 12, current smoking has declined in recent years from 16% in 2003 to 8% in 2007. According to CTUMS,[2] however, rates of smoking among youth aged 15 to 19 appear flat in recent years, at about 11%. Continued monitoring of youth smoking rates is warranted, which will help clarify the direction of observed trends.
- Rates of smoking for young adults remain considerably higher than rates for youth. In 2007, the prevalence of current smoking was 22% for 20-24 year olds – double the rate for youth aged 15-19.
- In 2007, total use of all forms of tobacco (including cigarettes, cigarillo/cigars, smokeless tobacco, and pipes) was 22% among 15 to 24 year olds, unchanged from 2003 (23.5%). However, cigarette use as a proportion of all tobacco use was 80% in 2003 and 74% in 2007, suggesting not only that other forms of tobacco are increasing in popularity, but also that rates of cigarette use underestimate the true burden of tobacco on this age group.
- While compliance rates with youth access restrictions remain high, youth are able to access cigarettes from social sources. In 2007, 11% of youth obtained their last cigarette by buying it from a store, and 50% obtained their last cigarette from a non-family member.
- There has been a significant decline in the number of youth who believe it is easy to access cigarettes from 57% in 2005 to 49% in 2007.
- Perceptions of harm in smoking one or two cigarettes a day have increased significantly among youth, from 24% in 2003 to 28% in 2005 to 31% in 2007.

Information and Data on Interventions

Prevention interventions implemented under the Smoke-Free Ontario Strategy are designed to provide integrated action on tobacco use among youth. Evaluative information about prevention interventions between 2005 and 2007 is described next.

Youth Action Alliances & YATI

The Youth Action Alliance program, begun in the 2005-2006 year, forms a large component of the current prevention interventions funded under the Smoke-Free Ontario Strategy. This program engages high school aged youth in a youth development program intended to enable them to undertake tobacco control activities and events for their peers, younger youth and the community. Youth Action Alliances employ over 400 peer leaders across Ontario who organize tobacco control

[2] Difference in reported 30-day smoking rates from the Ontario Student Drug Use and Health Survey (OSDUHS) and the Canadian Tobacco Use Monitoring Survey (CTUMS) are likely due to several factors including differing methods and samples of the two surveys. For instance, OSDUHS data are collected from students in grades 7 to 12 in the spring of the year, whereas CTUMS uses monthly data collection across the year and includes youth ages 15 to 19 (who may or may not be in school). Both surveys provide useful information.

activities in their communities and are trained with the help and support of the Youth Advocacy Training Institute (YATI). There are two Aboriginal YAAs which are dedicated to the reduction of commercial tobacco use in Aboriginal and First Nation youth.

Awareness of the program is reasonably high, with over 40% of youth surveyed in the 2007 OSDUHS having heard of youth groups conducting tobacco control activities in their town or city.

PIMS data from 2007-2008 suggest that the Youth Action Alliance program is quite active. For example, 84,900 educational materials were distributed and 2,100 educational presentations were conducted with an estimated 83,100 participants attending such presentations. Furthermore, there were 463 promotional events, with 109,000 promotional items being distributed and an estimated 261,650 participants reached by these promotional events. Additionally, 1370 advocacy activities, 166 community improvement events, and 160 entertainment and social events were conducted by the Youth Action Alliance groups across the province. The program's activities and efforts resulted in 4890 earned media mentions from print, radio, TV and internet media.

Evaluation findings suggest that Youth Action Alliances are likely having some impact on the attitudes and behaviours of youth in their communities, particularly those in younger grades, and are providing personal benefits to those involved with the groups (Fiissel, Schwartz et al. 2008). This formative evaluation indicates that youth gain valuable personal, professional, and social skills, which are further promoted by the presence of positive group and organizational factors. More specifically, feeling like a valuable member of the organization, identifying with the group to a greater extent, and stronger beliefs in the group's ability to create change within the community were related to greater individual mobilization, leadership skills, and empowerment.

High School Grants

The High School Grants program allocates grants of $1000 to high schools to enable youth-led tobacco control work. High School Grants were awarded to 598 schools in 2006-2007, though not all of these grants were subsequently used. Nearly half of the grantees (47%) reported that the High School Grant program was the only tobacco control activity in their school, demonstrating the importance of this program to the prevention component of the SFOS (Fiissel, Watson et al. 2007). Across all schools who reported on their high school grant projects in 2006-2007, 180,376 students were estimated to have been reached by project activities that included presentations, the production of media, the creation of anti-tobacco promotional items, street marketing activities, and cessation programming.

There is varied success in project activities, though most schools perceive they are having some impact on the youth involved in planning and implementing events and in the wider population of youth targeted by the activities. For example, 81% reported changes in awareness and knowledge

related to the specific information that was delivered via the grant projects. Furthermore, over one-third reported a perceived influence on tobacco use, including students talking more about quitting smoking, increased quit attempts, and fewer students being seen in the smoking areas around schools. A majority (68%) also described improvements in skills (such as leadership, communication, organizational, time management and problem-solving skills) in those involved in the planning and implementation of the projects.

Stupid.ca

Stupid.ca is a provincial media campaign with online, television, and billboard components. OSDUHS data suggest that 85% of youth are familiar with the campaign, though no evaluative information exists to judge the impact that the campaign might be having on the prevalence of smoking among youth. Media campaigns are an integral component of a tobacco control strategy; the Florida Truth campaign attributes much of their reduction in youth smoking rates to their successful media program (Sly, Trapido et al. 2002). Media campaigns have the potential to create positive changes in knowledge and social climate and to foster empowerment in youth (Zucker, Hopkins et al. 2000; Farrelly, Healton et al. 2002; Wakefield, Flay et al. 2003; Goldman and Glantz 1998; Healton 2002; Sly, Heald et al. 2001). Unfortunately, we are aware of no evaluation that has assessed the effects of stupid.ca on knowledge, social climate, empowerment, or tobacco use behaviours. OTRU has expressed interest in supporting evaluation of Ontario's mass media/public education campaigns.

Lungs are for Life (LAFL)

Lungs are for Life (LAFL) provides school-based tobacco education curriculum for kindergarten to grade 12. LAFL modules include lesson plans, assessment and evaluation tools, and teachers' notes. The uptake of LAFL has decreased dramatically in recent years. It is estimated that 3,140 (65%) of Ontario schools used LAFL modules between 2002-2006 (Filsinger, Ahmed et al. 2006). Over the past two years, LAFL reports that only 438 (10%) of Ontario's schools used LAFL modules.

An evaluation of LAFL found that Grade 7 students from schools who participated in the program were slightly less likely to become susceptible to smoking than those from schools who did not participate (Filsinger, Ahmed et al. 2006). However, overall results of the evaluation found that there were no significant differences in smoking rates between Grades 7 and 8 students in schools who received LAFL and students in schools who did not receive the program. Despite mixed findings on school-based curricula, the consensus is that school-based programming is a necessary component of a comprehensive approach to tobacco control and that school programs should be combined with community-based initiatives to produce a substantial reduction in smoking (Centers for Disease Control and Prevention 2007; US Department of Health and Human Services 2000).

The lack of tobacco control programming in many Ontario schools is concerning. There is a need to consider designing an evidence-based program to maximize reach and effectiveness of tobacco control education for Ontario's student population.

Youth Tobacco Vortal Project (YTVP)

Support to the various SFOS prevention programs is provided by the Youth Vortal Smoke.FX website. This website provides links to online components of Youth Action Alliances, Leave the Pack Behind, Stupid.ca, and information on tobacco control events. The website received 16,491 hits in the 2007/2008 year. According to 2007/2008 PIMS data, there were 35 visitors to the Vortal site who linked through the stupid.ca website, and 20 visitors who went to stupid.ca from the Vortal site. Providing support to its affiliates is one of the goals of the project; in 2007/2008 (PIMS), 23 affiliates (49%) used the template, server and IT support provided by the Vortal and 3 affiliates used the webpage template provided by the Vortal (6%).

Aboriginal Tobacco Strategy Youth Programming

The Aboriginal Tobacco Strategy Community Capacity Building Projects aim to build capacity for addressing commercial tobacco issues in Aboriginal communities. Eleven funded projects included education about traditional tobacco, classroom instruction, art projects, supports for cessation, and media literacy, creation and campaigns. Although project activities engage multiple audiences, they focus on children or teens. All projects were delivered in partnership with other organizations (e.g. partnerships with local schools, libraries, etc.).

A recent evaluation of the Community Capacity Building Projects identified a number of benefits (Sattler, Skinkle 2008), including skill development for youth, fulfillment of community service hours for high school graduation, and exposure of youth to new experiences. The evaluators concluded that the Community Capacity Building Projects "improved the level of community readiness to participate in future smoking cessation programs, increased the stock of community tobacco education resources, and helped to identify local and other tobacco-related issues to assist in community-based planning" (p. 42).

Taxes

Although the Ontario Government previously committed to raise tobacco taxes to the national average, Ontario still has the second lowest level of taxation of all provinces. Taxes in Ontario have not changed significantly during this reporting period. In 2006, taxes were raised by 0.6 cents per cigarette. There is a need to address Ontario tax levels to make them comparable with other Canadian provinces, especially given the evidence that increases in tax rates can result in decreases in

smoking initiation (Lantz, Jacobson et al. 2000), and decreases in the quantity of cigarettes consumed (Hopkins, Briss et al. 2001; Ross and Chaloupka 2004; Forster, Widome et al. 2007).

Youth Access Restrictions

In May 2006, under the *Smoke-Free Ontario Act*, it became mandatory for retailers to request identification from anyone purchasing tobacco products who looked under the age of 25 years. Furthermore, restrictions were placed on tobacco point–of-sale promotions, with a total ban coming into effect in May 2008. Increased exposure to point-of-sale marketing has been shown to relate to increased smoking susceptibility, ever smoking, and to the progression from experimental to regular smoking (Feighery, Henriksen et al. 2006; Henriksen, Feighry et al. 2004; Slater, Chaloupka et al. 2007). Evaluation findings indicate that 90% of vendors comply with restrictions on selling tobacco to youth and 88% with point-of-sale promotions restrictions.

Discussion

Significantly higher rates of lifetime abstinence from tobacco use can be seen across all grades between 2003 and 2007, a trend that has continued since 1999. Positive changes in attitudes and knowledge about the risks of smoking, and declining access to cigarettes from commercial sources were also evident between 2005 and 2007. While we are unable to attribute this change to any specific intervention, it is positive to see a general trend toward declining initiation and tobacco use, especially among younger youth.

Differing trends in results presented by CTUMS and OSDUHS make it initially difficult to get a clear picture of current youth smoking trends. Variation in survey outcomes demonstrates the necessity of looking closely at prevention programming and patterns of youth tobacco use behaviour.

Despite youth tobacco use trends that suggest generally positive outcomes for public health, there remain areas of concern. Social sources of tobacco use remain high, though there is evidence of high compliance with restrictions on commercial sales and an increase in the number of youth who find it difficult to purchase tobacco products. This demonstrates the importance of continuing with demand side tobacco control interventions for youth—which will help create a more negative social climate for tobacco use—in addition to expanding the regulation of supply and price. As stated in the 2006 Monitoring Report, tobacco taxation remains an under-used solution to the availability of cigarettes to youth in Ontario. There is a need to improve the understanding of high school youth about the risks of tobacco industry product use. While young people may know that smoking one or two cigarettes is generally not good for you, results from OSDUHS suggests that a high proportion may not know the extent of harm associated with smoking a small number of cigarettes.

There is a need to ensure that interventions reach youth at higher risk of tobacco use, including males, youth who identify as Aboriginal, and older youth who are not attending a post-secondary educational institution. Differences seen in rates of smoking between young men and women suggest that there is a need to ensure that interventions are able to reach and appeal to young men. High rates of tobacco industry product use among Aboriginal youth demonstrate a need to continue to develop partnerships and provide support that recognizes the self-determination of Aboriginal peoples and common interests in addressing health and wellbeing.

There is much still to be learned about prevention interventions and their effects, including:

- the role of earned media in the YAA program in youth tobacco use and the larger long-term impact of these groups;
- the impact of Stupid.ca, particularly in the areas of knowledge, social climate, and tobacco use, as well as the synergistic effects this media campaign may have with other prevention programming;
- the most effective approach and audience for a school-based curriculum;
- the contribution of youth access restrictions to the prevention of tobacco use; and
- The potential of other interventions (e.g. plain packaging and possession restrictions).

Cessation

In recent years, the Smoke-Free Ontario Strategy has focused resources on programs and policies that are particularly geared toward prevention and protection efforts (e.g., Stupid.ca, Youth Action Alliances, and the *Smoke-Free Ontario Act*). Although Ontario supports an array of cessation activity, it does not yet have a fully developed and integrated cessation system.

Main Cessation Related Findings

Table 4: Key Indicators of Progress in Cessation (2003 – 2007)

Indicators	2003	2005	2007
Intention to quit in the next 30 days*	22%	22%	32%
Current smokers who made a serious attempt to quit smoking at least once over the last 12 months†	50%	47%	44%
Percentage of ever smokers who are former smokers (quit ratio) †	54%	58%	55%
Percentage of daily smokers who have high dependence‖	NA	12%	12%
Number of cigarettes smoked per day (daily smokers) †	16.4	16.3	15.2
Percentage of women (20–44) and pregnant in the past 5 years who smoked during most recent pregnancy§	12%	10%	NA

* CTUMS
† CAMH-M
‖ OTS
§ CCHS

- In 2007, 32% of Ontario smokers indicated a serious intention to quit within 30 days, up from 22% in 2003.
- Between 2003 and 2007, there has been no significant change in the proportion of current smokers who made a serious quit attempt in the past 12 months (50% vs. 44%).
- In 2007, 55% of Ontarians who had ever smoked had quit for at least one year, which is not significantly different than that reported in 2003 and 2005.
- In 2007, 12% of daily smokers had high dependence on cigarettes, unchanged from 2005 (Ontario Tobacco Survey, 2006).

Interventions

Cessation interventions implemented under the Smoke-Free Ontario Strategy are designed to provide integrated action on tobacco use among adult smokers. Ontario has the basic infrastructure and with some added investments (which are outlined in a paper developed by the Cessation Task

Group, *An Integrated Smoking Cessation System for Ontario: Policies & Programs*) could soon have an integrated system that would encourage smokers to quit and help them remain smoke-free. Table 5 shows the direct reach of the interventions already in place to help smokers quit. Note that the actual reach of related media is much greater than the direct reach to smokers.

Table 5: Reach of Interventions

Intervention	Number of smokers reached (2007)
Stop Study	29,500
The Driven to Quit Challenge	26,600
Smokers' Helpline (including Online)	13,300
Leave the Pack Behind (used self help booklets)	8,100
Ottawa Heart Institute	5,600

Table 5 shows that, at most, the smoking cessation system is directly engaging fewer than 83,000 smokers, or 4% of Ontarian smokers (assuming all clients are smokers, and that they only use one of the services). This does not include cessation services provided by health professionals outside of SFOS programming.

STOP Study

The STOP study examines the most effective way to distribute free nicotine replacement therapy (NRT) products to Ontario smokers. The overall goal of the STOP study is to evaluate the methods and effectiveness of providing NRT to Ontario smokers. There are 3 distribution methods being evaluated: 1) distribution through institutions - the Centre for Addiction and Mental Health, University of Ottawa, and Thunder Bay Regional Health Clinic; 2) distribution through a call centre -a five week supply of NRT available by calling a toll free number; 3) distribution through 10 public health departments in Ontario, 11 Community Health Centers, and 2 Aboriginal Health Access Centers.

In 2006 over 14,000 smokers received free NRT though the STOP study. On average, the self-reported quit rates across the phases of the STOP study ranged from 13% to 26% of participants (Selby, Zawertailo et al. 2008).

The Driven to Quit Challenge

The main objectives of the Driven to Quit (DTQ) Challenge are to encourage quit attempts, to increase awareness of cessation resources and to encourage smokers to seek help through the Canadian Cancer Society's Smokers' Helpline/Online. The Challenge is open to all Ontario residents over the age of 19 who have used tobacco on a daily basis for at least one year. Participants register

for the challenge online, by fax, telephone or mail with a 'buddy" who supports his/her pledge to remain smoke free during the "quit month" in order to be eligible for one of several prizes. In 2006 and in 2008 approximately, 1% of all Ontario smokers (26,000) enrolled in the Challenge (Alder Group, 2006, 2008a, 2008b). Evaluation of the DTQ Challenge shows that demand for both the telephone and on-line version of the Smokers' Helpline increased significantly over the course of the Challenge. In 2008, 5% reported using the Smokers' Helpline, and 8% reported using the Smokers' Helpline online (Alder Group, 2008b). Although the increase in demand for the other interventions cannot be attributed solely to the promotional activities of the Challenge, it does appear that the Challenge did play a substantive role in increasing demand for these supports. Further, during the period April 2007 to March 2008, the most common sources for how regular, first-time callers heard about the service was the Driven to Quit Challenge (23.5%) (PIMS Reporting, 2008).

Smokers' Helpline

The Canadian Cancer Society's Smokers' Helpline (SHL) is a free, confidential telephone and web-based interactive service for smokers. SHL supports smokers who: (a) want to quit, (b) are thinking about quitting, (c) have quit but want support, and (d) continue smoking and do not want to quit.

Overall, SHL reached 0.25% of smokers in Ontario (Czukar & Luciano, 2006). This is lower than the reach of smoker helplines in other jurisdictions, which have reported between 3% to 4% reach (for example, 3.6% of adult Australian smokers and 4.1% of adult English smokers called quitlines). After having used SHL and being surveyed at the 6-month follow-up, 90% of participants had taken some action toward quitting. Quit rates were as follows: 7-day point prevalence 15%, 30 day point prevalence 13% and 6 months prolonged abstinence 5%. (PIMS Reporting, 2008)

Leave the Pack Behind

Leave the Pack Behind (LTPB) is a tobacco control program targeted at college and university aged students. Health professionals and student teams located on campuses across Ontario advocate for smoke-free places, engage in tobacco industry denormalisation and seek to increase knowledge on the risks of tobacco use. Support for smoking cessation is a major component of the program and includes training of health professionals on campus. Using a peer-to-peer approach, Leave the Pack Behind assists occasional and regular student smokers to quit smoking; protects nonsmokers from secondhand smoke; and prevents students from starting to smoke.

In 2007, LTPB was on 38 post-secondary campuses: all of Ontario's 19 universities and 19 of its 24 colleges. LTPB's tobacco control programming was available to a total of 450,000 students – including approximately 116,600 smokers. Overall, LTPB operated at 86% of Ontario's post-

secondary institutions, and was available to 91% of Ontario's total post-secondary student population. (PIMS Reporting, 2008).
Based on 2007/2008 PIMS data, LTPB conducted 1089 outreach events, displayed 17,800 promotional and educational materials and disseminated 123,200 promotional and educational materials to students. PIMS data from 2007/2008 indicated that 11,300 smokers used either the print or web-based version of LTPB's self-help program (Smoke|Quit), 2225 clinical cessation packages were disseminated by campus health professionals, and 94,380 students were reached by LTPB via face-to-face interactions.

Research conducted by LTPB suggests that 10% to 15% of smokers using the LTPB resources will quit, defined as 30-day continuous abstinence at 3-month follow-up (LTPB Annual Report, 2006) and a randomized controlled trial evaluating LTPB's Smoke|Quit self-help smoking cessation intervention determined that 12% of smokers using the resource were completely abstinent at 3-month follow-up (Travis and Lawrance, 2009).

Ottawa Heart Institute (OHI)

The Ottawa Heart Institute has developed a network of hospital-based smoking cessation programs in the Champlain Local Health Integration Network (LHIN). The 'Ottawa model' is currently operating in 21 hospitals across Ontario and is in the process of being implemented in an additional 9 hospitals. The program is also being evaluated in 5 hospitals in New Brunswick and 5 in British Columbia. Around 5,600 smokers were reached in Ontario by the Ottawa Model in 2007 (PIMS data), an increase from 3,800 in 2006. (personal communication, 2009). An average of 44% of smokers who receive an intervention to help them quit smoking following the OHI guidelines are reportedly smoke free at their six month follow up (Reid, Pipe, Quinlan, 2006; personal communication, 2009).

Reducing Taxes on NRT

In August 2007, the provincial sale tax was removed from the sale of all nicotine replacement therapies (NRT) making it cheaper for smokers to use NRT in their quit attempt. For instance, the price for a 2 weeks supply of nicotine patches went from $67.80 to $60.00; the savings for two three-day treatments of nicotine gum (30 pieces) was $1.89. The effects of removing the provincial sales tax on NRT has not been assessed.

Capacity Building Programs

Apart from having services directed to smokers, the Ontario Ministry of Health Promotion also funded two programs to provide tobacco cessation training to health care professionals: the Training Enhancement and Applied Cessation Counselling and Health (TEACH) and the Clinical Tobacco

Intervention (CTI). In the 2007-2008 fiscal year, the TEACH program trained 530 unique participants, including individuals from diverse healthcare disciplines and all seven tobacco control area networks. The CTI continuing education program had 852 attendees during the 2007-2008 year, and a total of 7712 practitioners have been trained since 2000. The Program Training and Consultation Centre (PTCC) also conducts cessation workshops.

In addition to these two projects, the Ontario Ministry of Health Promotion funded the Registered Nurses' Association of Ontario to conduct a pilot project to increase capacity in nursing for the implementation and integration of Smoking Cessation Best Practices into daily practice.

Discussion

It is of concern that since 2001, there have been no changes in smoking rates among Ontario adults, the proportion of current smokers who are daily smokers and the proportion of current smokers who made a serious attempt to quit smoking at least once in the past 12 months.

In 2007, the Cessation Task Group (CTG) formed within the Ontario Ministry of Health Promotion's Community Action Working Group, proposed an evidence-based approach for developing a system of cessation that would substantially improve the quit rates in Ontario. This system is outlined in a paper entitled *An Integrated Smoking Cessation System for Ontario: Policies & Programs*. This document now serves as a guideline for what interventions and investments are needed for the cessation system: to have a population level effect, and to help populations that carry a heavier burden of tobacco related diseases. The current offering of cessation services does not meet with these recommendations. The Ontario Ministry of Health Promotion has reviewed this report in considering its priorities.

In 2007, OTRU developed a method for assessing gaps in cessation systems and implemented a pilot study in the Simcoe-Muskoka Public Health Unit. Results indicated that in this PHU the current system lacked integration as well as a variety of services including a smokers' registry, a program to subsidize or provide free pharmacotherapy, counselling services (both group and face to face), worksite and tailored programs. The current cessation strategy has very few interventions that specifically target populations which carry a heavier burden of tobacco disease such as the Aboriginal communities, young male adults, blue-collar workers, and those living in certain geographical pockets of the province. Increased efforts to engage and support these smokers in becoming and staying smoke free are warranted. Further, the study shows that the current system is inadequate to motivate smokers to quit smoking and to use the available services. The study also shows that the current system is reaching 3% of Simcoe Muskoka smokers per year, while 15% of smokers' report that they want to quit in the next month.

Table 6: Comparison of Programs Available for Simcoe Muskoka-Smokers and those Suggested by the Cessation Task Group

Local Program/Policies	Available in Simcoe-Muskoka?	Names of Programs/Notes
Self-help materials	Yes	Distributed mainly by PHU year around services
Telephone helplines/online	Yes	SHL/SHO/Telehealth; year round services
Counselling from health care providers	Yes	
Group/Individual counselling	Partially	Private/STOP study
Counselling for hospitalized patients	Partially	Sporadic; not standardized
Worksite projects	Partially	Very few; not offered consistently
Smoking restrictions	Partially	Through SFOA (more are needed)
Advertisements with smoking cessation services	Partially	
Campaigns to motivate smokers to quit/reduce smoking	Partially	Driven to Quit campaign is the main one
Reimbursement for pharmacotherapy	Partially	Private companies, insurance companies /STOP study
Innovative projects	No	
Tailored programs for smokers who carry a heavy burden of tobacco disease	No	
Specialized nicotine dependence clinic	No	
Registry/ integration of services	No	
Increase prices though tobacco taxes	No	
Increase availability and accessibility of pharmacotherapy and natural health products	No	

The Ontario Ministry of Health Promotion should consider further developing its working relationships with partners in the Strategy to build a fully integrated system of cessation—a system where there are many points of entry; referrals among services provide for continuous care; services are accessible to those who need them; the system actively engages and supports smokers in their efforts to become and stay smoke-free; and it builds on recent developments and is continuously improving in quality and impact.

As *Smoke-Free Ontario Act* stipulations restrict places where people can smoke and as the social climate for smoking becomes less favourable, there has been a significant increase in the proportion of smokers intending to quit within the next 30 days. The existing cessation system has yet to capitalize on this opportunity for providing cessation services which would increase serious quit attempts and successful quits. There is a need both to increase the reach of existing cessation programs and to develop a truly integrated continuum of services.

Concluding Note to Report Three

Ontario's investment in the Smoke-Free Ontario Strategy is bearing fruit (see Appendix 3.1 for a listing of major tobacco control activities funded under the SFOS). The *Smoke-Free Ontario Act* protects most Ontarians most of the time from exposure to secondhand smoke in indoor public places. Smoking bans, public education, restrictions on promotion and youth programs are changing the social climate of tobacco use, leading to declines in smoking rates among youth. There is a continuing trend of decreased prevalence of adult smoking rates among particular sub-population groups—people with post secondary education, professional workers and in some public health unit areas.

Alongside these positive developments are several worrisome trends. The rate of decline in current smoking among older teens and young adults appears to be flattening. There has been no significant decrease in: adult current smoking since 2004, the proportion of current smokers who are daily smokers since 2001, and the mean number of cigarettes smoked per day by daily smokers since 2003. Smoking rates among low SES sub-populations and in several PHUs are not noticeably decreasing. Recent data suggest that gains in reduced youth cigarette smoking rates are partially offset by increases in the uptake of other forms of tobacco use.

To date, the Smoke-Free Ontario Strategy has not made substantial progress in achieving its cessation objectives of motivating and successfully supporting quit attempts. While the proportion of smokers with intentions to quit within 30 days has increased significantly (to 32%), there is no parallel increase in the proportion of smokers who make a serious quit attempt, and the quit ratio (% of ever smokers who are former smokers) has remained constant. Recognizing the need to advance cessation objectives, the Ontario Ministry of Health Promotion has adopted guidelines developed by the Cessation Task Group of its Community Action Working Group.

The Smoke-Free Ontario Strategy is supporting positive changes in the physical and social climates for tobacco use, creating environments conducive to decreased initiation and increased cessation. Yet, review of the scope and reach of tobacco control interventions indicates several gaps which hinder progress in achieving Smoke-Free Ontario Strategy goals. In order to reap the fruits of SFOS efforts and to further reinforce them, there is an urgent need to address intervention gaps noted in this report.

Of particular concern are: gaps in the cessation system; declining budgets for mass media and public education; decreased allocations to aboriginal programs; paucity of interventions tailored to the needs of sub-populations with lower levels of education and who are employed in blue-collar, sales and service occupations. While evidence suggests that increasing taxes on tobacco products is highly effective in reducing smoking rates, Ontario has the second lowest provincial tax on a carton of

cigarettes ($24.70) among all provinces and territories. This is $12.73 below the average of all provinces and territories excluding Ontario ($37.43).
To further advance the goals of the Smoke-Free Ontario Strategy, there is a need for even further protection from secondhand smoke. Twenty-nine percent of the working population is still exposed to secondhand smoke while at work, 48% of people who frequented restaurants and 74% who frequented bars in the past month are exposed to secondhand smoke on patios.

There is a need to address forces that work to counter the accomplishments of the Smoke-Free Ontario Strategy and other tobacco control efforts. Widespread availability and use of contraband cigarettes presents a significant risk to Ontario's accomplishments and likely accounts for part of the failure to substantially decrease consumption and prevalence of cigarette use. Signs of resurgent tobacco advertising suggest a developing risk. And the increasing availability, marketing and popularity of alternative tobacco forms may pose new challenges to the tobacco control community.

The Smoke-Free Ontario Strategy has made impressive inroads in implementing a comprehensive approach to achieving its vital tobacco control goals. Yet, the evaluative information presented in this report makes it clear that these laudable efforts must be sustained, strengthened and enriched in order to achieve the results that Ontario needs and deserves.

References

Alder Group, The. . *2006 Driven to Quit Challenge Evaluation*. Prepared for Canadian Cancer Society, Ontario Division. Toronto, ON, 2007.

Alder Group. *2008 Driven to Quit Challenge Evaluation Part I (Process Evaluation)*, Prepared for the Canadian Cancer Society, Ontario Division. Toronto, ON, 2008a.

Alder Group. *2008 Driven to Quit Challenge Evaluation Part II (Outcome Evaluation, Participant and Support Buddy Survey Results)*. Prepared for the Canadian Cancer Society, Ontario Division. Toronto, ON, 2008b.

Centre for Behavioural Research and Program Evaluation. *Ontario Smokers' Helpline Evaluation Annual Report. April 2005 – March 2006*. Waterloo, ON: Centre for Behavioural Research and Program Evaluation, University of Waterloo, 2006.

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

Czukar D, Luciano G. *Smokers' Helpline: Final report submitted to the Government of Ontario by the Canadian Cancer Society Ontario Division*. Hamilton, ON: Canadian Cancer Society, 2006.

Dubray J, Schwartz R, Garcia J, Bondy S, Victor JC. *Formative Evaluation of the Smoke-Free Ontario Act: Comparison of Baseline and Two Post-SFOA Measurements*. Toronto, ON: Ontario Tobacco Research Unit, Special Report Series. November 2007.

Farrelly MC, Healton CG, Davis KC, Messeri P, Hersey JC, Haviland ML. Getting to the truth: evaluating national tobacco countermarketing campaigns. *American Journal of Public Health* 2002 Jun:92(6): 901-907.

Feighery EC, Henriksen L, Wang Y, Schleicher NC, Fortmann SP. An evaluation of four measures of adolescents' exposure to cigarette marketing in stores. *Nicotine & Tobacco Research*. 2006 Dec;8(6):751-759.

Fiissel D, Watson T, Schwartz R. *A Descriptive Report on the 2006-2007 High School Grants Program*. Toronto, ON: Ontario Tobacco Research Unit, 2007.

Fiissel D, Schwartz R, Schnoll J, Garcia J. *Formative Evaluation of the Youth Action Alliance Program*. Toronto, ON: Ontario Tobacco Research Unit, 2008.

Filsinger S, Ahmed R. *Lungs Are For Life Evaluation Final Report*. Toronto, ON: Population Health Research Group, 2006.

Forster JL, Widome R, Bernat DH. Policy interventions and surveillance as strategies to prevent tobacco use in adolescents and young adults. *American Journal of Preventive Medicine* 2007 July;33(6, Supplement 1): S335-S339.

Goldman LK, Glantz SA. Evaluation of antismoking advertising campaigns. *Journal of the American Medical Association*. 1998 Mar;279(10): 772-777.

Healton C. Speaking truth to youth: How the American legacy foundation is helping teens reject tobacco. *North Carolina Medical Journal* 2002 May;63(3): 3.

Henriksen L, Feighery EC, Wang, Y, Fortmann, SP. Association of retail tobacco marketing with adolescent smoking. *American Journal of Public Health* 2004 Dec;94(12):2081-2083.

Hopkins D, Briss PA, Ricard CJ, Husten CG, Carande-Kulis VG, Fielding JE. Reviews of evidence regarding interventions to reduce tobacco use and exposure to environmental tobacco smoke. *American Journal of Preventive Medicine* 2001 Feb;20(2, Supplement 1): 16-66.

Lantz PM, Jacobson PD, Warner K, Wasserman J, Pollack HA, Berson J. Investing in youth tobacco control: a review of smoking prevention and control strategies. *Tobacco Control* 2000 Mar;9(1): 47-63.

Leave The Pack Behind. *Leave the Pack Behind Final Evaluation Report*. Toronto, ON, 2008.

Mullen, Kerri-Anne. Email communication. January 2009.

Non-Smokers' Rights Association/Smoking and Health Action Foundation. *Smoke-free bylaw provisions in Canada exceeding provincial/territorial legislation*. Toronto, ON, 2008.

OACFDC (Ontario Association of Community Futures Development Corporations). *Community Transition Program: Process evaluation*. Toronto, ON: Harry Cummings and Associates Inc., 2007.

Ontario Tobacco Research Unit. *Indicators of OTS Progress*. Special Reports: Monitoring and Evaluation Series, 2003-2004. 10(3). Toronto, ON: Ontario Tobacco Research Unit., 2004.

Ontario Tobacco Research Unit. *Indicators of OTS Progress*. [Special Reports: Monitoring and Evaluation Series, 2004-2005 11(2). Toronto, ON: Ontario Tobacco Research Unit, March 2006.

Ontario Tobacco Research Unit. *The Tobacco Control Environment: Ontario and Beyond*. (Special Reports: Monitoring and Evaluation Series, 2006-2007 13(1). Fact Sheet 1.6: Protection from Secondhand Smoke. Toronto, ON: Ontario Tobacco Research Unit, 2007.

Performance Indicator Monitoring System (PIMS), data extracted January 9, 2009.

Reid R, Pipe A, Quinlan B. Promoting Cessation during hospitalization for coronary artery disease. *Canadian Journal of Cardiology* 2006 Jul;22(9): 775-780.

Ross H, Chaloupka FJ. The effect of public policies and prices on youth smoking. *Southern Economic Journal* 2004 Apr;70(4): 796-815.

Sattler P, Skinkle R. *Aboriginal Tobacco Strategy: Community Capacity Building Projects 2007-2008, Evaluation Report*. Toronto, ON: Aboriginal Cancer Care Unit, Cancer Care Ontario, 2008.

Selby P (chair), Cessation Task Group of the Community Action Working Group. *An Integrated Smoking Cessation System for Ontario: Policies and Programs*. Toronto, ON, 2007.

Selby P, Zawertailo L, Dragonetti R. *The Stop Study, Eighth Interim Progress Report to the Ministry of Health Promotion*. Toronto, ON: CAMH, 2008

Slater SJ, Chaloupka FJ, Wakefield M, Johnston LD, O'Malley PM. The impact of retail cigarette marketing practices on youth smoking uptake. *Archives of Pediatrics & Adolescent Medicine* 2007 May;161(5):440-445.

Sly DF, Heald GR, Ray S. The Florida "truth" anti-tobacco media evaluation: design, first year results, and implications for planning future state media evaluations. *Tobacco Control* 2001 Mar;10(1): 9-15.

Sly DF, Trapido E, Ray S. Evidence of the dose effects of an antitobacco counteradvertising campaign. *Preventive Medicine* 2002 Nov;35(5): 511-518.

Travis, HE, Lawrance, KG. Randomized controlled trial examining the effectiveness of a tailored self-help smoking-cessation intervention for post-secondary smokers. *Journal of American College Health*, 2009 57(4): 437-44.

Wakefield M, Flay B, Nichter M, Giovino G. Effects of anti-smoking advertising on youth smoking: A review. *Journal of Health Communication* 2003 May;8(3): 229-247.

US Department of Health and Human Services. *Reducing Tobacco Use: A Report of the Surgeon General*. Atlanta, GA: US Department of Health and Human Services, Centres for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2000.

US Department of Health and Human Services. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*. Atlanta, GA: US 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, 2006. [http://www.surgeongeneral.gov/library/secondhandsmoke]

US Institute of Medicine. *Ending the Tobacco Problem: A Blueprint for the Nation*. Washington, DC: National Academy Press, 2007. [Executive summary available at: http://www.nap.edu/catalog/11795.html]

Zucker D, Hopkins RS, Sly DF, Urich J, Kershaw JM, Solari S. Florida's "truth" campaign: a counter-marketing, anti-tobacco media campaign. *Journal of Public Health Management and Practice* 2000 May;6(3): 1-6.

Appendix 3.1: Major Tobacco Control Activities Funded under the Smoke-Free Ontario Strategy, by Ontario Ministry of Health Promotion Program Area, 2005-2007

Program Area / Program	Description	Strategic Component	Organizations Involved
Protection/Enforcement Programs			
Local capacity building for prevention and protection	Ensuring compliance with local bylaws and the *Smoke-Free Ontario Act* through educational and enforcement activities directed at secondhand smoke control, limiting retailing of tobacco products, and reducing youth access to tobacco products	Capacity building and infrastructure development; Program intervention; Public education; Policy and action.	Local boards of health and local public health agencies
Tobacco Control Area Networks (TCAN)	Alliances of 1 to 9 public health agencies, non-governmental organizations, and others to address local and regional tobacco control issues; Coordinated via a single public health agency; Communication, coordination and planning; Training of TCAN and local staff and volunteers; Coordinated public relations plans, and other relevant area and local tobacco control initiatives	Leadership, coordination and collaboration; Capacity building and infrastructure development; Public education; Tobacco industry denormalization; Policy and action	Public health agencies and non-governmental organizations
Youth/Prevention Programs			
Youth Action Alliances	Promote middle and high school tobacco control action in communities through training, youth development, peer leadership, adult role models, advocacy and youth mobilization activities directed at community norm change	Leadership, coordination and collaboration; Capacity building and infrastructure development; Public education; Tobacco industry denormalization; Policy and action	Local boards of health and local public health agencies
Youth Advocacy Training Institute	Mandatory training; Support to TCAN youth specialists; Positive youth development addressing social influences, social interaction and community activity	Capacity building and infrastructure development; Program interventions; Tobacco industry denormalization	The Lung Association
Lungs Are For Life	School-based tobacco education curriculum for kindergarten to grade 12; Increase understanding of the determinants of tobacco use, health consequences, resisting social influences; Composed of lesson plans, assessment and evaluation tools, and teachers' notes	Capacity building and infrastructure development; Public education	The Lung Association and Ontario Physical and Health Education Association, teachers, schools
High School Grants for School and Community Initiatives	Motivation and support for student-initiated and -coordinated tobacco control projects aimed at increasing	Leadership, coordination and collaboration; program interventions; public education;	Local public health agencies, High schools

Program Area / Program	Description	Strategic Component	Organizations Involved
	awareness of tobacco control issues for high school, elementary and community audiences province-wide	advocacy; tobacco industry denormalization	
Leave The Pack Behind	Multi-faceted college- and university-based program using peer-to-peer approach to denormalize the tobacco industry, help smokers quit or reduce amount smoked, prevent smoking uptake, and protect non-smokers from secondhand smoke	Leadership, coordination, and collaboration; Capacity building and infrastructure development; Program interventions; Public education; Tobacco industry denormalization; Policy and action	Brock University (lead), community colleges and universities
Youth Vortal (Smoke.FX)	Website designed to co-ordinate online components of SFOS interventions for prevention.	Public education; coordination and collaboration between SFO partners	
Stupid.ca	Multi-media campaign designed to educate youth and the public about harm caused by tobacco use, denormalise the tobacco industry and to promote the engagement of youth in other SFOS prevention interventions.	Public education; tobacco industry denormalisation; collaboration and support to other programs;	Ontario Ministry of Health Promotion
Aboriginal Tobacco Programs			
Aboriginal Tobacco Control Strategy	Capacity building, knowledge exchange, smoking prevention and cessation activities, public education, and leadership engagement	Leadership, coordination, collaboration; Capacity building and infrastructure development; Program interventions; Public education; Tobacco industry denormalization; Policy and action	Aboriginal communities, Cancer Care Ontario
Aboriginal Tobacco Control Projects	To increase the capacity of Aboriginal communities to implement culturally competent tobacco control initiatives and create "tobacco-wise communities"; training, support network, awareness, development of policy; youth initiatives	Leadership, coordination, collaboration; Capacity building and infrastructure development; Public education; Tobacco industry denormalization; Policy and action	Aboriginal communities, Aboriginal Health Centres
Cessation Programs			
Cessation Services Developments	Training for intensive smoking cessation counselling; Innovative protocol development for smoking cessation through nicotine replacement therapy distribution mechanisms; Hospital-based innovation in smoking cessation	Public education; Program interventions; Policy and action; Monitoring, evaluation and research	Local health agencies; Centre for Addiction and Mental Health; Canadian Cancer Society, Champlain Hospital-based Cessation Network and University of Ottawa Heart Institute
Innovative Smoking Intervention Programs	Grants to independent cessation interventions developed and tailored for delivery in public health units; Targeted to populations at higher-than-average smoking prevalence and/or for whom cessation services are less accessible	Leadership, coordination and collaboration; Program interventions; Monitoring, evaluation and research	Local public health agencies, community partners; Priority populations

Program Area / Program	Description	Strategic Component	Organizations Involved
Worksite Innovation Programs	Grants to local health agencies to assist employers to adopt smoke-free policies and help employees stop smoking, in some instances integrated with other chronic disease prevention initiatives	Leadership, coordination and collaboration; Monitoring, evaluation and research; Program interventions, Public education; Policy and action	Local public health agencies, employers, staff
Clinical Tobacco Intervention	Training and technical assistance for health professionals (doctors, dentists and pharmacists) and other staff in their practice settings to intervene to motivate and support smokers to quit smoking through brief interventions	Capacity building and infrastructure development; Program interventions	Ontario Medical Association, Ontario Dental Association, Ontario Pharmacists Association, health professionals
Training Enhancement in Applied Cessation Counselling and Health (TEACH)	Accredited certificate program to train and certify health professionals working in primary care and community settings in areas of moderate to intensive interventions	Capacity building and infrastructure development; Program interventions	Centre for Addiction and Mental Health, health professionals
Smokers' Helpline and Multimedia Self-Help	Confidential, free, personalized telephone services to support smokers to quit and remain smoke-free; Augmented by web-based component including online support groups, email support, instant messenger service, personalized feedback, etc.	Leadership, coordination, and collaboration; Program interventions; Public education	Canadian Cancer Society, health professionals, smokers in the process of quitting and staying smoke-free
Province-wide Programs			
Consulting, Training and Best Practices Review	Capacity building for effective, comprehensive interventions through training for skill building, telephone and onsite consultation, tobacco-specific resource cataloguing, and program reviews; Coordination of efforts among members of the Training and Technical Assistance Task Group	Leadership, coordination and collaboration; Capacity Building and Leadership Development; Program Interventions	Program Training and Consultation Centre, partnership of City of Ottawa Public Health, Region of Waterloo Public Health, and Health Promotion Consulting Inc., Training and Technical Assistance Task Group
Provincial Clearinghouse	Clearinghouse accessible 24/7 free-of-charge to Ontario health professionals and volunteers—includes directory, listserv, newsgroup, links to tobacco control organizations and events, references to scientific literature, dissemination of educational resources, and French language services	Capacity building and infrastructure development	Canadian Council for Tobacco Control
Ontario Tobacco-Free Network	Building on the traditional historic role that the major health charities have played in advancing tobacco control, the network supports public education through community mobilization, earned media, and	Leadership, coordination, and collaboration; Capacity building and infrastructure development; Public education; Policy and action	Canadian Cancer Society, Heart and Stroke Foundation of Ontario, Ontario Campaign for Action on Tobacco, and The

Program Area / Program	Description	Strategic Component	Organizations Involved
	other innovative approaches		Lung Association
Media Network	Network to support media advocacy and media relations through training and technical assistance to partners in the Smoke-Free Ontario Strategy; Media tracking database; Linkages to other provinces and jurisdictions	Leadership, coordination and collaboration; Capacity building and infrastructure development; Public education; Tobacco industry denormalization; Policy and action	Cancer Care Ontario, non-governmental organizations, tobacco control staff and volunteers
Youth Tobacco Websites	Designed to reach youth up to 24 years of age with tobacco control messages and news on local activities; Interactive websites on educational, community organization, and policy initiatives.	Capacity building and infrastructure development	Ontario Government (stupid.ca), University of Toronto, local action alliances and youth
Public Education			
Government mass media and public relations	Social marketing strategy, directed and coordinated by Government, on prevention, cessation, and protection	Leadership, coordination, and collaboration; Public education	Ontario Ministry of Health Promotion
Province-wide Mass Media Campaign	Mass media public education campaigns directed by non-government partners	Leadership, coordination, and collaboration; Public education	Heart and Stroke Foundation of Ontario, Canadian Cancer Society
Research, Evaluation and Surveillance			
Monitoring, evaluation and research projects	Performance monitoring, quality improvement, formative evaluations, logic models, applied research (e.g. health professionals), scientific consulting to government and SFO partners, international linkages, knowledge exchange, strategy evaluation	Leadership, coordination and collaboration; Capacity building and infrastructure development; Monitoring, evaluation and research	Ontario Tobacco Research Unit and its sponsors—Centre for Addiction and Mental Health, University of Toronto, University of Waterloo, Cancer Care Ontario
Research, analysis and education	Policy-related research, analysis and education; Source of networking referrals, training, and information/knowledge exchange	Leadership, coordination and collaboration; Capacity building and infrastructure development; Monitoring, evaluation and research; Public education; Tobacco industry denormalization; Policy and action	Ontario Tobacco Research Unit; Smoking and Health Action Foundation