

OTS Progress and Implications

Ontario Tobacco Research Unit

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PREFACE

Report three was prepared by Tom Stephens. It draws upon material in Numbers 1 and 2 in this volume, and uses analyses prepared especially for this report by Bo Zhang. The report benefits from comments on earlier drafts by Lise Anglin, Sue Bondy, Steve Brown, Joanna Cohen and John Garcia. Sonja Johnston provided production assistance.

The full *Monitoring and Evaluation Series* for 2004-2005 consists of:

Number 1: *The Tobacco Control Environment: Ontario and Beyond*—an environmental scan of policy initiatives across Canadian jurisdictions, which provides a context for what is happening in Ontario;

Number 2: *Indicators of OTS Progress*—a presentation of quantitative data from a variety of surveys and other sources measuring recent progress in tobacco control in Ontario; and

Number 3: *OTS Progress and Implications*—a discussion of the results and implications of the findings in the previous three reports.

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EXECUTIVE SUMMARY

The Ontario Tobacco Strategy (OTS): Progress and Strategic Considerations

- OTRU's monitoring of key indicators shows substantial progress in each of prevention, cessation and protection since 1994 and especially since 1999.
- A tripling of the OTS budget was announced in the latter part of 2004, putting Ontario back near a leadership role in Canada in terms of funding for tobacco control. For the five years starting in 1999, funding had fallen 18.5% in real per capita terms due to inflation and population growth. Future funding plans should ensure that the strength of the Strategy is not reduced due to inflationary and population growth pressures.
- In 2004-2005, protection and cessation were the major emphases (45% and 35% of province-wide OTS project funds, respectively). Prevention accounted for 20%.
- The most prominent strategy was public education, at 47% of project spending. Assistance to smokers accounted for 26% of funding; the balance was for developing infrastructure and multifaceted tobacco control approaches in specific communities.
- Despite the progress on all fronts, population-level effects directly attributable to the OTS projects are difficult to discern.
- Tobacco taxes have increased in Ontario in the last three years, but still remain the second lowest in Canada. Tax breaks remain in place for loose tobacco.
- There has been no progress in government litigation to recover health care costs or lost tobacco tax revenue, despite some good examples federally and in other provinces.

Increasing Prevention: Progress and Implications

- In 2004, the prevalence of smoking by Ontario students reached its lowest level since 1977. While smoking is more common in Ontario than California, the rate of progress in Ontario since at least 1998 is similar to, or even exceeds, that of California.
- In 2004, 22% of young Ontario adults (age 18-24) were smokers. This was somewhat more than in California (18%), but less than the rest of Canada (27%). Moreover, the rate in California is essentially unchanged since 1994, while it has declined significantly in Ontario.
- In 2004, 16% of retailers in Ontario were willing to sell cigarettes to youth aged 15 to 17. Gas stations had the highest rate of noncompliance (20%).
- Approximately \$1.5 million was devoted to prevention in 2004-2005. Lungs Are For Life was the principal prevention project during the year; TeenNet and the Media Network also reported a significant prevention component.
- Given the modest reach and as-yet-unknown efficacy of much of the youth-oriented program activity, complementary policy measures are critical. Raising tobacco taxes and banning smoking in public places can have nearly 100% reach and high efficacy—when they are implemented.
- Mandatory Health Programs and Services Guidelines (MHPSG) targets for youth smoking would be useful. There should be separate targets for 15-17 and 18-19 year olds due to differences in smoking rates within the age group 15-19 years.
- The OTS Logic Model identifies several projects needed for prevention: projects to reduce industry marketing to youth, and to increase the awareness of the public and policy-makers of the determinants of smoking initiation, particularly price and tobacco industry marketing.

Increasing Cessation: Progress and Implications

- There were 2.1 million current smokers in Ontario in 2004. Smoking continued to be concentrated among men, blue collar workers, and adults with only high school or less education.
- The prevalence of both current smoking (21%) and daily smoking (17%) in 2004 was down from 2003. This may mark the resumption of a downward trend that began in 1995 for both indicators, but appeared to stall in 2003. However, it appears unlikely that the MHPSG goal of 15% prevalence for daily smoking was reached by 2005.
- From 1999-2004, there was a 30% decline in per capita cigarette sales in Ontario. This decline is due mostly to reduced prevalence of smoking, as the average amount smoked by daily smokers has changed very little.
- The proportion of Ontario smokers intending to quit has not changed since 2001. Quit intentions in Ontario consistently rank among the least ambitious in Canada, and are substantially lower than among smokers in California.
- In 2004, public awareness of the Smokers' Helpline (24%) was unchanged from 2003, but higher than in 2002. Awareness of local quit programs also did not change from the year before.
- The Cessation Logic Model identifies several short-term outcomes that are either missing or not well promoted by the current Strategy:
 - Projects to increase public awareness of (a) the health benefits of quitting, (b) the adverse effects of smoking during pregnancy and child-rearing, and (c) deceptive tobacco industry marketing practices;
 - Projects to increase awareness among the public and policy-makers of policies that promote cessation;
 - Cessation initiatives aimed at low socioeconomic status (SES) and other high-risk populations.
- A comprehensive, evidence-based and accessible population cessation strategy will be essential to take full advantage of the incentive to quit that will result from implementation and enforcement of the new *Smoke-Free Ontario Act*.

Increasing Protection: Progress and Implications

- Overall, nonsmokers are fairly well protected in public places and workplaces: as of December 2005, 34% of the Ontario population was covered by smoke-free restaurant and bar bylaws without designated smoking rooms (DSRs).
- In 2004, 88% of Ontario workers reported total smoking bans in the workplace. Nevertheless, 30% of all workers reported some workplace exposure to secondhand smoke.
- Blue-collar workers and residents of smaller communities do not have the same level of protection as other citizens. This situation will be positively affected by the new province-wide legislation.
- In 2004, there was regular smoking inside 11% of Ontario households with children 0-14 years of age, meaning that 176,000 Ontario children were routinely exposed. Exposure varied widely among health units.
- In 2004, 57% of Ontario adults supported complete bans on smoking in restaurants, while 34% favoured a ban on smoking in bars. Almost nine in ten supported smoking bans at work, 75% agreed with a legal ban on smoking in a car while children are present, and 64% supported a legal ban on smoking inside a home where children live.
- Compliance with the new *Smoke-Free Ontario Act*—based on a mix of judicious enforcement and public understanding of the health hazards of secondhand smoke—will be critical to extending protection to all segments of Ontario society.

INTRODUCTION

This report is organized around the three objectives of the Ontario Tobacco Strategy (OTS) adopted by the OTS Steering Committee in 2003-2004.¹ Each of these objectives is intended to contribute to the overall goal of the Strategy, which is to eliminate tobacco-related illness and death in Ontario:

- Prevention: To prevent smoking initiation and habitual use among children, youth, and young adults
- Cessation: To reduce smoking in Ontario
- Protection: To eliminate Ontarians' exposure to environmental tobacco smoke

The report considers evidence presented in more detail elsewhere, particularly in Numbers 1 and 2 of Volume 11 of OTRU's annual *Monitoring and Evaluation Series*. A section of this report devoted to each objective uses key indicators to summarize the current status and highlight project activity. Progress is interpreted with reference to the targets of the Mandatory Health Programs and Services Guidelines (MHPSG), where applicable.² Although these guidelines will be revised, they are still a useful basis for gauging progress. There are also comparisons with progress in other provinces, and with California, whose tobacco control program is widely regarded as the gold standard in North America, if not the world.

In each section of this report dealing with a Strategy goal, we consider the public health impact of project achievements, with attention to the two factors that contribute to population level impact—project reach and efficacy.³ Each section concludes by considering the implications of the evidence for (a) programs and policy and (b) research and evaluation.

Tobacco Control Activity in Ontario, 2004-2005

In May 2005, the Ontario government committed \$50 million to tobacco control,⁴ up from \$30.1 million in 2003-2004⁵ and from \$10 million annually for 1999-2003.⁶ A series of new legislative and program initiatives was also announced over the course of the following months, and these will dramatically change the face of tobacco control in Ontario. However, this report is focused on activity during 2004-2005.

Table 3.1 summarizes the status of major tobacco control activities under the aegis of the Ontario Tobacco Strategy for the year ending March 2005. It covers all the province-wide projects and policy initiatives such as tobacco taxation and the *Smoke-Free Ontario Act*.

Also summarized in Table 3.1 are the principal components of the Strategy logic models for prevention, cessation and protection for which there were no projects or other significant activities in 2004-2005. These gaps are discussed further below.

Table 3.2 describes the allocation of province-level project funds across the three Strategy objectives. For discussion purposes, we have classified the projects with the following guidelines:

- Projects that target the population or individuals in direct contact with the population (such as health care providers) are listed under one of Prevention, Protection, or Cessation, according to the main focus as reported by the project itself.
- Projects that develop relatively comprehensive tobacco control approaches within specific communities (such as Aboriginal Ontarians or on post-secondary campuses) are classified under Community Development.

- Projects that target other tobacco control agencies in order to support and enhance their (usually province-wide) tobacco control capacity are listed under Infrastructure Development.^a

This summary shows that the focus (i.e., 47% of total funding for province-level projects) was clearly on using public education. Most of this was an effort to change social norms about public smoking and tobacco control, i.e., the Mass Media Campaign. Services to smokers (primarily the Helpline and Clinical Tobacco Intervention) accounted for 26% of project expenditures. Relatively modest amounts were committed to community development projects (such as the Aboriginal Tobacco Strategy and Leave the Pack Behind) and to more general infrastructure projects such as the Media Network, Ontario Tobacco-free Network, and Best Practices Identification.

^a Some projects considered part of Infrastructure Development in past reports have, as a result of adopting this framework, been classified under one of Prevention, Protection, or Cessation. However, their essential nature has not changed (e.g., the Clinical Tobacco Intervention is considered part of Cessation, while the Mass Media Campaign appears under Protection, as building public support for clean-air legislation was its main intent during the period).

Table 3.1: Principal Tobacco Control Activities, Ontario, 2004-2005

Goal	In Place as of March 2005	Absent or Underdeveloped as of March 2005
Prevention		
To prevent smoking initiation and addiction among children, youth, and young adults	<ul style="list-style-type: none"> • Provincial tax rises \$1.25 per carton in January 2005 to an average purchase price of \$70.12 • Provincial Government commits to bringing cigarette taxes to national average • Lungs Are For Life revamped K-12 curriculum is disseminated widely • Not to Kids, focusing on social sources of cigarettes, is in 12 health units with a population of 7 million • Youth Vortal, TeenNet and Youth Initiatives reach out to youth, raise awareness, develop skills, share knowledge • <i>Smoke-Free Ontario Act</i> passed; will restrict retail displays starting June 2006 	<ul style="list-style-type: none"> • Efforts to increase the reach of youth-oriented prevention activities • Tobacco price is second lowest in Canada, taxes 71% of average in other provinces and territories • Increased enforcement of laws limiting youth access to tobacco • Projects directed at: <ul style="list-style-type: none"> ◦ Reducing industry marketing to youth ◦ Increasing awareness among children, youth, young adults, parents, and policy-makers of the determinants of smoking initiation, such as tobacco industry marketing, price, and social environments
Cessation		
To reduce smoking in Ontario	<ul style="list-style-type: none"> • Toll free telephone Smokers' Helpline is operating and supplemented by local small-group cessation programs • Youth-focused cessation initiatives exist on post-secondary campuses and through the internet • Clinical Tobacco Intervention and Aboriginal Tobacco Strategy develop needed infrastructure • Average price is \$70.12/carton of 200 cigarettes (July 2005); discount brands gaining in popularity 	<ul style="list-style-type: none"> • Projects to increase the proportion of smokers contemplating/preparing/attempts to quit • Cessation initiatives aimed at off-campus youth, low SES and other high-risk populations • Projects to increase awareness among the public and policy-makers of policies that promote cessation • Projects to increase public awareness of: <ul style="list-style-type: none"> ◦ The health benefits of quitting ◦ The adverse effects of smoking during pregnancy and child-rearing ◦ Deceptive tobacco industry marketing practices
Protection		
To eliminate involuntary exposure to environmental tobacco smoke	<ul style="list-style-type: none"> • Campaigns in 32 municipalities or counties to enact or strengthen clean-air bylaws; many are assisted by Media Network and Ontario Tobacco-free Network • Clean-air provisions on some college and university campuses stimulated by Leave the Pack Behind • Mass Media Campaign promotes support for clean-air legislation • <i>Smoke-Free Ontario Act</i> passed (June 2005); will prohibit smoking in most public places by June 2006 	<ul style="list-style-type: none"> • Projects to increase public knowledge of the health risks of secondhand smoke • Projects directed to reducing secondhand smoke in homes, vehicles, other private spaces, including projects to restrict smoking in homes and private vehicles • Projects to expose the tobacco industry's role in propagating myths regarding secondhand smoke

Note: Column 1 uses the goals from the logic models developed for the OTS Steering Committee in early 2004 (Vol. 11, No. 2, Appendix A). Column 3 reflects short- and medium-term activities in the logic models.

Table 3.2: Allocation of Project Budgets,* by Strategy Goals† and Project Strategy,‡ 2004-2005 (Province-Wide Projects Only)

Main Project Strategy	Ontario Tobacco Strategy Goals			
	Prevention \$000	Protection \$000	Cessation \$000	All Goals \$000
Education/Communication	845.3	2,616.3	158.3	3,620.0 (47%)
Services to Smokers	-	-	2,017.0	2,017.0 (26%)
Community Development	280.0	430.0	390.0	1,100.0 (14%)
Infrastructure Development	403.8	442.5	158.8	1,005.0 (13%)
All Strategies	1,529.1 (20%)	3,488.8 (45%)	2,724.1 (35%)	7,742.0 (100%)

* Based on project budgets for 2004-2005, excluding amounts received from other sources.

† Based on percentage distribution of effort across Strategy goals, as reported to OTRU by the projects.

‡ Based on the principal approach used by each project, as inferred by OTRU from the project descriptions.

Target populations and project reach are described in Table 3.3. This table is confined to ongoing province-wide projects and shows their cumulative reach to date.

Reported reach varies widely when expressed as a percentage of the target group, but this should not be taken as a straightforward measure of success. By its nature, “reach” has very different meanings for different projects, ranging from an estimate of the number of people potentially exposed to a message or service (e.g., the Mass Media Campaign’s broadcast audiences or the distribution of Lungs Are For Life materials), to a firm count of the number of persons enrolling in a service or program (e.g., Smokers’ Helpline). At the same time, the size and nature of the target groups vary enormously, for instance, from a small number of precisely defined health intermediaries to the entire Ontario adult population. In most cases, however, growth is apparent since the prior year.

Table 3.3: Target Populations and Reach of Ongoing Province-Wide Projects as of March 2005*

	Intended Target Population	Estimated Size	Proportion Reached to March 2005
Aboriginal Tobacco Strategy	Aboriginal people	440,000	unknown
Clinical Tobacco Intervention	Physicians, pharmacists and dentists and their staff	35,000	22%
Lungs Are For Life	Public health professionals and K-10 teachers	36 public health units, 8358 schools, 82,489 teachers	100% PHUs, 50% schools in Ontario, 24% teachers
Leave The Pack Behind	College and university students who smoke or are at risk of smoking	350,290	63% exposed 31% direct interaction
Mass Media Campaign	Adults 16 to 49 years old, especially those resistant to tobacco control	5,800,000	83% exposed 50% - 63% recall
Media Network	Coalitions, health units and other health organizations involved in tobacco control	600	65%
Ontario Tobacco-free Network	Coalitions, health units and other health organizations involved in tobacco control	75 coalitions, 36 health units, 100 affiliated organization offices	100%
PTCC Better Practices	Coalitions, health units and other health organizations involved in tobacco control	75 coalitions, 36 health units, others undetermined	unknown
PTCC Special Populations Outreach	Tobacco control practitioners working with Francophone populations and/or with residents of Northern Ontario	4 health units	100%
Smokers' Helpline	Adult smokers	2,103,000	2%
TeenNet	Youth 12-19 years old	1,207,800	10%
Youth Initiatives	Youth 12-19 years old	1,207,800	unknown
Youth Tobacco Vortal	Youth 10-19 years old and public health intermediaries	1,510,00 young people, 36 health units	1% of young people, 64% of health units

* Cumulative reach was reported to OTRU by the projects.

PROGRESS IN TOBACCO CONTROL, 1999-2005

Table 3.4 describes the key indicators of tobacco control for the year ending March 2005, and summarizes progress since 1999, when an expert panel reported to an earlier Minister of Health and Long-Term Care.⁷

There has been considerable progress over this period, notably:

- almost one-third decline in overall consumption of cigarettes, from 2046 to 1441 per person age 15+
- one-third drop in daily smoking by young adults age 18-24, from 33% to 22%
- two-thirds decline in smoking in homes with young children, from 22% of homes in 1999 to 8% in 2004
- one-fifth increase in workers reporting smoke-free workplaces, from 70% to 86%
- declines of two-fifths to two-thirds in smoking by high school students, depending on the grade.

Table 3.4: Indicators of Progress on Tobacco Control

Strategy Objective*	Status at the Start of the OTS Renewal (1999-2000) [†]	Status in 2004-2005 [‡] (change relative to 1999-2000)
Prevention		
<ul style="list-style-type: none"> To reduce initiation and addiction among children, youth, and young adults To eliminate tobacco industry marketing that targets children and youth To reduce tobacco industry marketing that targets young adults (age 18-24) 	<ul style="list-style-type: none"> 7% of students in grade 7 and 28% in grade 9 had smoked in the past 12 months[§] 19% of 15-19 year-olds are daily smokers 27% of 20-24 year-olds are daily smokers 21% of retailers are willing to sell to minors[¶] 83% of underage smokers are asked for ID[¶] 	<ul style="list-style-type: none"> 2% of students in grade 7 and 13% in grade 9 had smoked in the past 12 months (-71% and -54%, respectively)[§] 10% of 15-19 year-olds are daily smokers (-47%) 17% of 20-24 year-olds are daily smokers (-37%) 16% of retailers are willing to sell to minors (-24%)[¶] 81% of underage smokers are asked for ID (-2%)[¶]
Cessation		
<ul style="list-style-type: none"> To increase the number of quit attempts among smokers To reduce the average cigarette consumption of smokers To increase the reach of cessation initiatives, especially to low SES and other high-risk populations To increase policy incentives to quit 	<ul style="list-style-type: none"> 28% of men and 23% of women aged 18+ are current smokers[#] 17.6 cigarettes are smoked per day, on average (daily smokers)[#] A carton of 200 cigarettes cost \$31.68, the lowest in Canada and 74% of the average of the price in the other provinces[†] 	<ul style="list-style-type: none"> 25% of men and 18% of women aged 18+ are current smokers (-11% and -22%, respectively)[#] 15.4 cigarettes are smoked per day by daily smokers, on average (-13%)[#] The median number of quit attempts in the previous 12 months among daily smokers was 0; among occasional smokers it was 1[#] A carton of 200 cigarettes cost \$66.63, the second lowest in Canada and 85% of the average of the price in other provinces^{**}
Protection		
<ul style="list-style-type: none"> To eliminate secondhand smoke exposure in public places and workplaces including bars, restaurants, casinos, bingo halls To reduce secondhand smoke exposure in homes To reduce secondhand smoke exposure in vehicles 	<ul style="list-style-type: none"> 70% of those working outside the home report complete restrictions on smoking at work[#] Some municipalities have effective restrictions on smoking in public places[†] Regular smoking occurs in 23% of homes with children under 12 Most schools are smoke-free[†] 	<ul style="list-style-type: none"> 88% of those working outside the home report complete restrictions on smoking at work (+26%)[#] Municipalities accounting for 30% of the provincial population have effective restrictions on smoking in public places, including restaurants^{††} Regular smoking occurs in 8% of homes with children under 12 (-65%) Most schools are smoke-free; some smoking occurs on or near school grounds

* The long-term Strategy objectives adopted by the OTS Steering Committee in early 2004. Not all objectives have relevant indicator data at both time points.

[†] Adapted from the report of the Expert Panel (Ashley et al., 1999) and the 6th Monitoring Report of the Ontario Tobacco Research Unit (OTRU, 2000). Specific sources as noted.

[‡] Based largely on data in OTRU's Monitoring and Evaluation Series Volume 11, Number 2. Specific sources as noted.

[§] Centre for Addiction and Mental Health, *Ontario Student Drug Use Survey* (OSDUS).

^{||} Health Canada, *Canadian Tobacco Use Monitoring Survey* (CTUMS).

[¶] *Retailer Compliance Study*: AC Nielsen through 2003 and Corporate Research Group, 2004 -.

[#] Centre for Addiction and Mental Health, *CAMH Monitor*.

^{**} Vol. 11, No. 1, Fig. 1.2.

^{††} Vol. 11, No. 1, Fig. 1.1.

PROGRESS TOWARD PREVENTION GOAL

Smoking by young Ontarians continues to decline, although the majority of Strategy activity has not been directed at prevention or youth. This decline reflects trends among the general population (see next section) and thus, in all likelihood, the beneficial spill-over of tobacco control policies, such as tobacco taxation and public smoking bans, which are aimed at the general population of smokers, rather than just at starting smokers.

Status in 2004-2005

- In 2004, 13% of Ontario teens age 15-19 were current smokers, and 10% were daily smokers (Vol. 11, No. 2, Figs. 2.1, 2.5).
- In 2005, two-thirds of students in grades 7-12 were lifetime abstainers, and fewer than 1% of students in grades 7-8 were current smokers (Vol. 11, No. 2, Figs. 2.2, 2.6).
- In 2004, 16% of retailers in Ontario were willing to sell cigarettes to youth aged 15 to 17. Gas stations had the highest rate of noncompliance (20%) (Vol. 11, No. 2, Figs. 2.11, 2.12).
- In 2005, two-thirds of student smokers received their most recent cigarette from a family member or a friend. More than half of all students felt it was easy to obtain cigarettes, while only one quarter said it was difficult or impossible (OSDUS, reported in Vol. 11, No. 2).
- In 2004, 86% of Ontario adults believed that stores selling cigarettes to underage youth should lose their tobacco license. Almost as many felt that friends or family members who supply tobacco to underage youth should be fined (CAMH Monitor, reported in Vol. 11, No. 2).
- The taxes on cigarettes were increased by \$1.25/carton, to bring the average retail price of a carton of 200 cigarettes to \$70.12 in July 2005.

Prevention Projects in 2004-2005

- Approximately \$1.5 million, or 20% of Strategy project funds, was devoted to prevention in 2004-2005 (Table 3.2).
- Lungs Are For Life was the principal prevention project during the year; TeenNet and the Media Network also reported a significant prevention component (50% of their effort).
- PHU involvement in smoking prevention varied considerably across the province: 34/36 health units provided schools with resource material, but only 20 offered training in Lungs Are For Life (Vol. 11, No. 2, Fig. 2.8), although all had received this newly revised prevention curriculum (Table 3.3).

Discussion

Public Health Impact

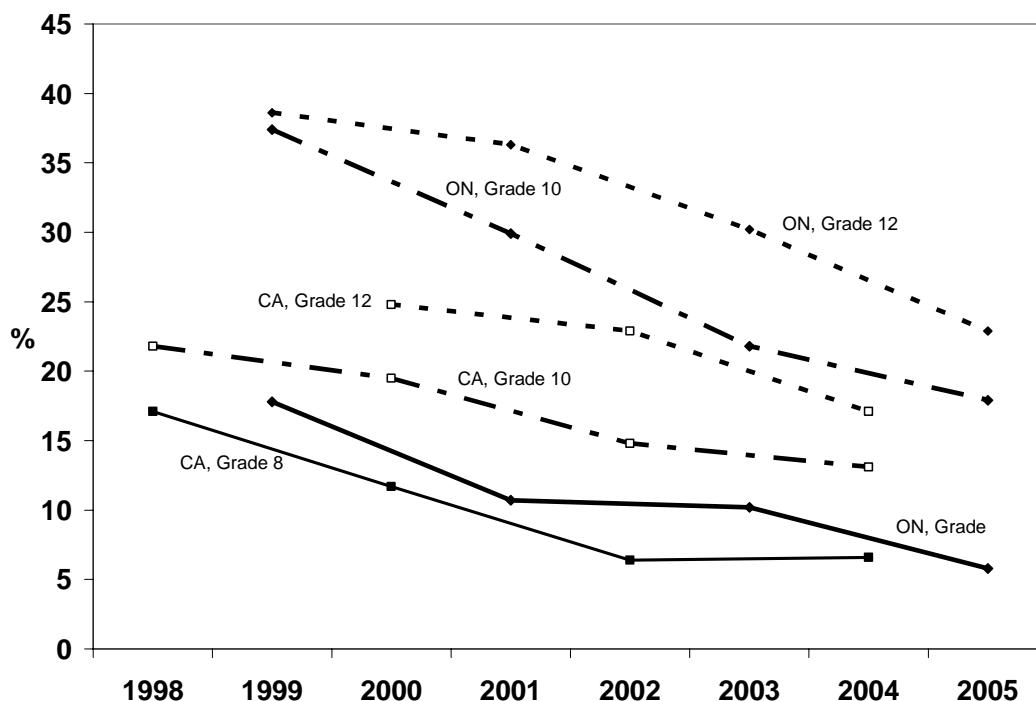
- **Reach.** There are 1.5 million youth aged 10 to 19 in Ontario, and the direct reach to youth of Strategy prevention programs is modest, at 5-10% (Table 3.3). An important exception is Lungs Are For Life, which has distributed the new curriculum to an estimated 50% of teachers and public health professionals working with K-12 students in Ontario. Despite a large increase in distribution of the curriculum in the past year, the number of youth exposed to it has not been documented. The reach of tobacco tax increases, like many policy measures, is nearly 100%—when implemented. The contrast with the actual reach of most current programs is dramatic and noteworthy.
- **Efficacy.** The results of TeenNet's *Smoking Zine* are generally positive and the effect on prevention is impressive for a one-session intervention. The preventive efficacy of Lungs Are For Life remains to be demonstrated. The efficacy of cigarette price increases in discouraging both uptake and continued

smoking is well documented, as is the beneficial effect of smoke-free spaces on smokers' behaviour, at least among adults.⁸

Progress

- From 1999 to 2005, the prevalence of smoking declined substantially in each of grades 7 through 12 (Vol. 11, No. 2, Fig. 2.1).
- Lifetime abstinence from smoking increased significantly from 57% in 2003 to 67% in 2005 (Vol. 11, No. 2, Fig. 2.6).
- The prevalence of smoking by Ontario students in 2005 was lower than at any time since student surveys began in 1977. While smoking is more common in Ontario than California, the overall downward trends are quite similar (Fig. 3.1, below).

Figure 3.1: Student Smoking, by Grade, Ontario and California, 1998-2005

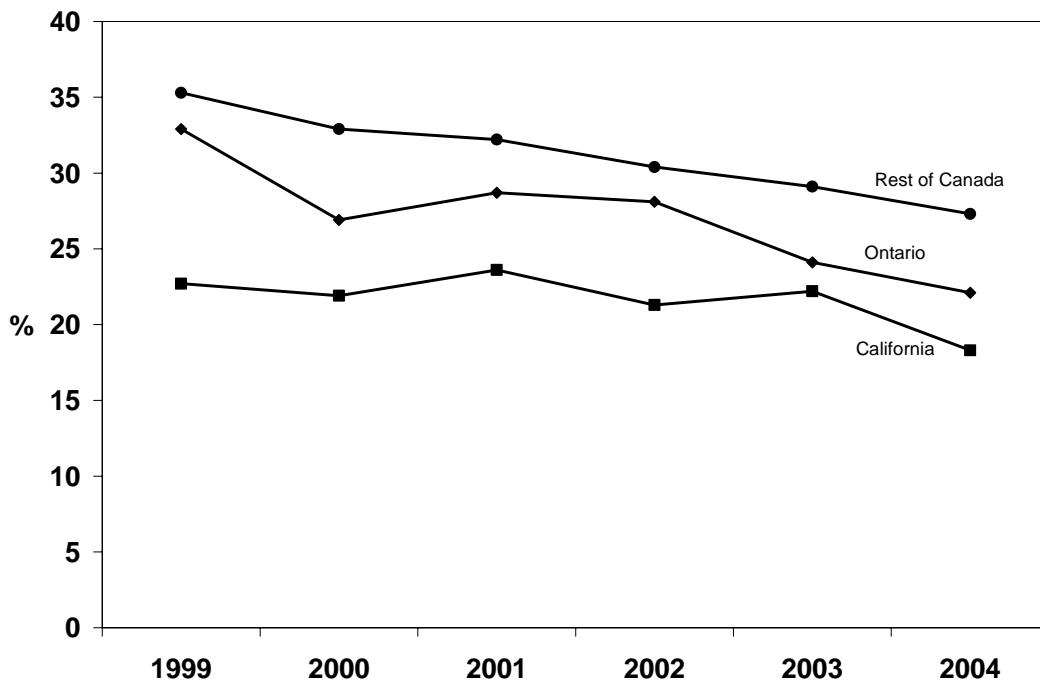


Sources: OSDUS and California Department of Health, Tobacco Control Division website.⁹

- The rate of current smoking by 15-19 year olds is just over half the level that it was five years earlier (13% in 2003 vs. 23% in 1999). This decline has been about the same in the rest of Canada, but smoking rates in Ontario are slightly lower (Vol. 11, No. 2, Fig. 2.3).
- Smoking by Ontario youth aged 20 to 24 has also declined since 1999, from 34% to 23%. The rate of smoking by these young adults in Ontario is now lower than their age peers elsewhere in Canada and the recent decline has been slightly greater (Vol. 11, No. 2, Fig. 2.3).
- Smoking by 18-24 year olds is somewhat more common in Ontario (22%) than California (18%), but the rate in California is essentially unchanged, while it has declined significantly in Ontario (Fig. 3.2, next page).
- Retailer compliance in 2004 (84% for sales to 15-17 year olds) improved from 2003 (76%), but was the same as in 1999. Compared to the rest of Canada, retailer compliance is usually slightly better, but it is very erratic from year to year (Vol. 11, No. 2, Fig. 2.11).

- There has been no change since 2002 in support for withdrawing tobacco licences from noncompliant retailers, but such support was already at a very high level (86%) and may have hit a “ceiling.”
- Public support for increased tobacco taxes rose to 43% of adults in 2004, from 37% in 2003, but overall agreement has changed little since 1998 (CAMH Monitor 2004, reported in Vol. 11, No. 2).
- Despite another increase in tobacco taxes in early 2005, the price for cigarettes in Ontario remained the second cheapest in Canada—approximately \$20 lower than in the Northwest Territories, Manitoba, and Saskatchewan (Vol. 11, No. 2, Fig. 2.10).

Figure 3.2: Current Smoking, Age 18-24, Ontario, Rest of Canada, and California, 1999-2004



Sources: CTUMS data (original analysis), and California Department of Health, Tobacco Control Division website.

Implications

For Policies and Programs

- The MHPSG target sought to achieve a daily smoking prevalence of 15% among 12-19 year olds by 2005. Because of the changes in smoking rates within the 15-19 year old group, there should be separate targets established for age 15-17 and 18-19 year olds. CTUMS provides a sample large enough for monitoring these age groups separately.
- Given the modest reach and uncertain efficacy of much of the current youth-oriented program activity, policy measures take on even greater importance. In particular, raising tobacco taxes needs to be a clear policy priority. The provincial government has committed to raising taxes to the national average, but 2004-2005 increases have not improved Ontario's position relative to other provinces and territories in any significant way. A commitment to making the taxes among the highest in Canada would be even more desirable. Meaningful tax increases have 100% reach and very high efficacy, i.e., the public health impact would be considerable.¹⁰ As part of such a move, the Ontario government should eliminate the

price advantage that is enjoyed by tobacco sticks—taxed at 50% of the rate for manufactured cigarettes—regardless of how the federal government treats this issue.¹¹

- There are no Strategy programs focused on the 20-24 year old age group, except those who are students. As prevention aimed at younger Ontarians is intensified, it will be important to consider what reinforcing efforts there should be among 20-24 year olds, including those who are in the workforce or unemployed.
- The OTS Prevention Logic Model identifies several potential projects needed for prevention. Those that are now notably absent in Ontario (Table 3.1) are projects to increase awareness among children, youth, young adults, parents, and policy-makers of the determinants of smoking initiation such as tobacco industry marketing, price, and social environment. Cooperation between the Ministries of Education and Health is needed to ensure delivery of high-quality prevention programming in all Ontario schools, especially in the formative years.

For Research and Evaluation

- To better understand prevention, better monitoring data are needed on the factors affecting uptake. We do not know how many youth receive effective tobacco control education, how many charges were laid for smoking on school property, and how much of the PHU budgets were devoted to prevention activities.
- In the same spirit, it is important to continue to monitor smoking among 20-24 year olds in Ontario, and to be alert for on-campus promotion of tobacco products and post-secondary initiation of smoking.
- There is sufficient variation in youth smoking rates across Canada's provinces that it may be feasible to systematically compare tobacco control measures to ascertain what works. The recent declines in student smoking and the relatively favourable ranking of Ontario youth versus other provinces occurred against a backdrop of relatively low tobacco prices, modest retailer compliance, and modest prevention programming. But also in the background are declining rates of smoking by Ontario adults and diminishing opportunities to smoke in public. A major research question, which also has profound policy implications, is whether smoking among Ontario youth is most effectively addressed by prevention programming, or whether measures aimed successfully at adults also have a beneficial spill-over among youth.
- Additional innovation is needed in this area and such innovations (e.g., the new youth action alliances) should be evaluated.
- Research to establish the most cost-effective means of achieving both reach and efficacy in prevention programming is a continuing need.

PROGRESS TOWARD CESSATION GOAL

Efforts directed at the cessation objective account for a substantial proportion of Strategy effort, yet the evidence for reduced adult smoking is mixed. This suggests how difficult it is to reach committed smokers and perhaps the need for more extensive (and/or intense) programming.

Status in 2004-2005

- In 2004, 21% of Ontario adults (1.95 million persons) were current smokers while 17% smoked daily (Vol. 11, No. 2, Figs. 2.14, 2.18). About three-quarters (77%) of all smokers were daily smokers (Vol. 11, No. 2, Fig. 2.19).
- The prevalence of current smoking was significantly higher among men than women (25% vs. 18%, respectively), and was inversely related to both education and occupational status (Vol. 11, No. 2, Figs. 2.17, 2.18).
- Unlike past years, there were no significant differences among the health planning regions in the prevalence of smoking (Vol. 11, No. 2, Fig. 2.15).
- Over two-thirds (69%) of Ontario smokers used “light/mild” cigarettes in 2004 (Vol. 11, No. 2, Fig. 2.22), and many did so—erroneously—for health reasons. For instance, over one quarter of these smokers believe “light/mild” cigarettes reduce the amount of tar inhaled (CTUMS 2004, cited in Vol. 11, No. 2).
- In 2004, a little over half (57%) of adult smokers intended to quit smoking within six months and a quarter (27%) had a 30-day deadline (Vol. 11, No. 2, Fig. 2.23).

Cessation Projects in 2004-2005

- \$2.7 million (one-third of province-wide project budgets in 2004-2005) was devoted to cessation (Table 3.2).
- The province-wide, toll free Smokers’ Helpline accounted for most of the cessation budget; two other province-wide projects focused on cessation were the Clinical Tobacco Intervention and Leave the Pack Behind. TeenNet and the Aboriginal Tobacco Strategy also had significant cessation components.

Discussion

Public Health Impact

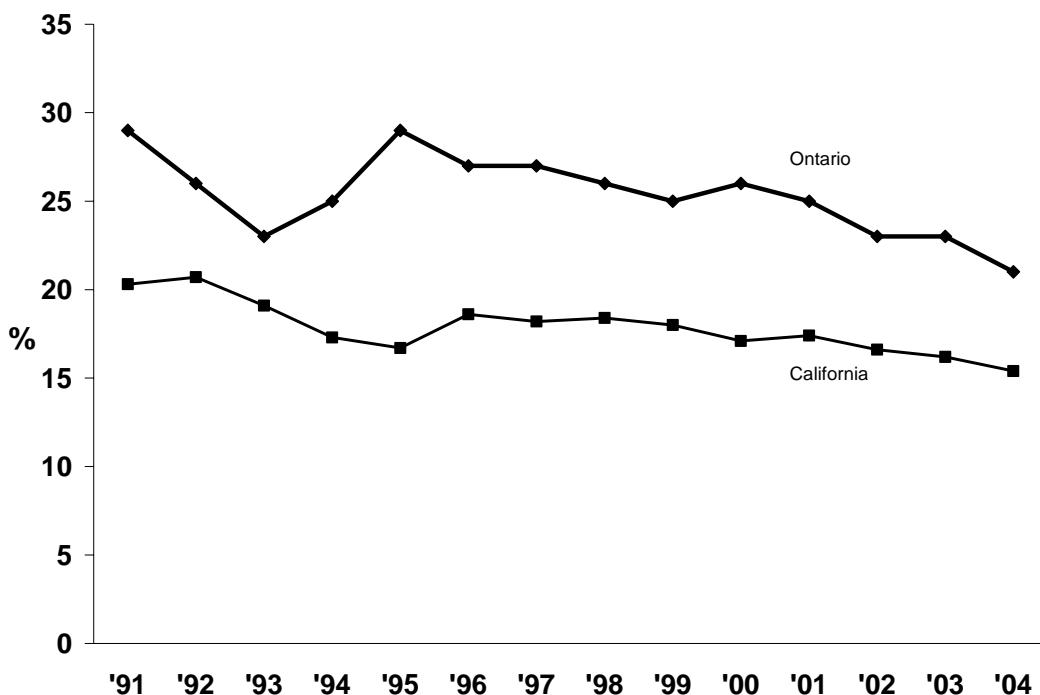
- **Reach.** The Smokers’ Helpline had reached 2% of Ontario smokers by March 2005. Almost two-thirds of Ontario college and university students had some exposure to Leave the Pack Behind and one-third had some form of direct interaction with the project. Since January 2000, 22% of physicians, dentists, pharmacists and their office staff have had contact with the Clinical Tobacco Intervention (Table 3.3).
- **Efficacy.** The efficacy of cigarette price increases in discouraging continued smoking is well documented, as is the beneficial effect of smoke-free spaces on smokers’ behaviour, at least among adults.⁸ The very modest tax increase implemented in 2004-2005 was less than the rate of inflation that year, and the real price of cigarettes (Vol. 11, No. 1, Fig. 1.2) actually dropped compared to the year before. On the other hand, the spread of smoke-free public spaces to cover 30% of the Ontario population was above the national average (Vol. 11, No. 1, Fig. 1.1) and undoubtedly helped to encourage cessation and reduce amounts smoked while protecting the health of nonsmokers.

Progress

- The prevalence of current smoking (21%) in 2004 was down from 2003 (Fig. 3.3). This was also true of daily smoking, which stood at 17% in 2004 (Vol. 11, No. 2, Fig. 2.18). While modest, this decline may

mark the resumption of a downward trend that began in 1995 for both indicators, but appeared to stall in 2003. Progress through 2002 had suggested that the MHPSC goal of 15% prevalence for daily smoking would be reached by 2005, but that now seems unlikely.

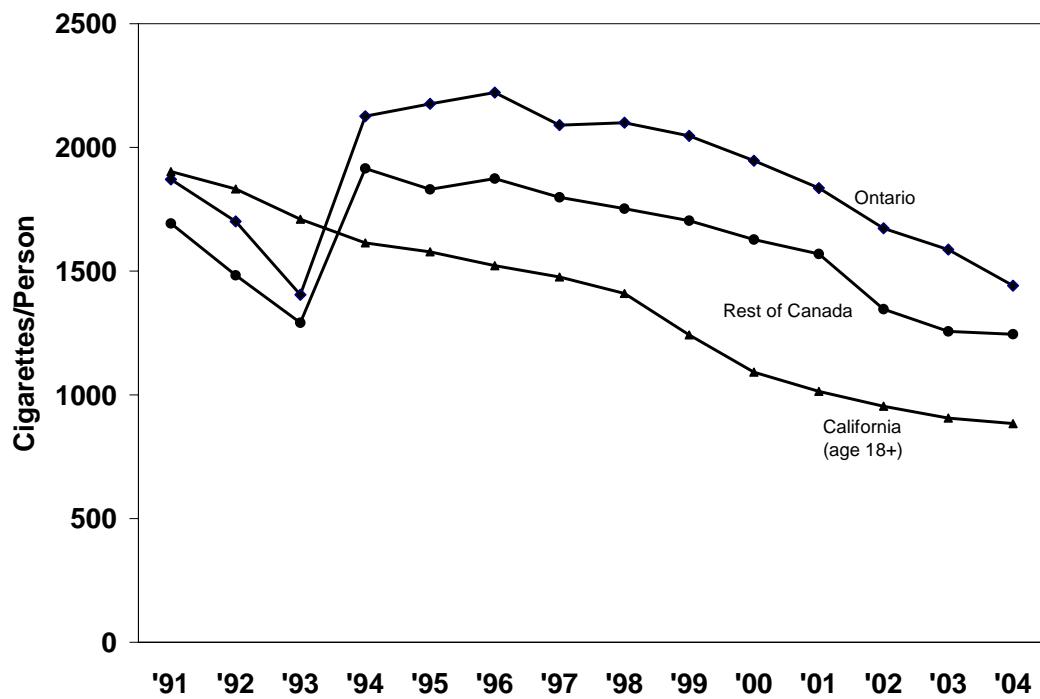
Figure 3.3: Current Cigarette Smoking, Age 18+, Ontario and California, 1991-2004



Sources: CAMH Monitor and California Department of Health, Tobacco Control Division website.

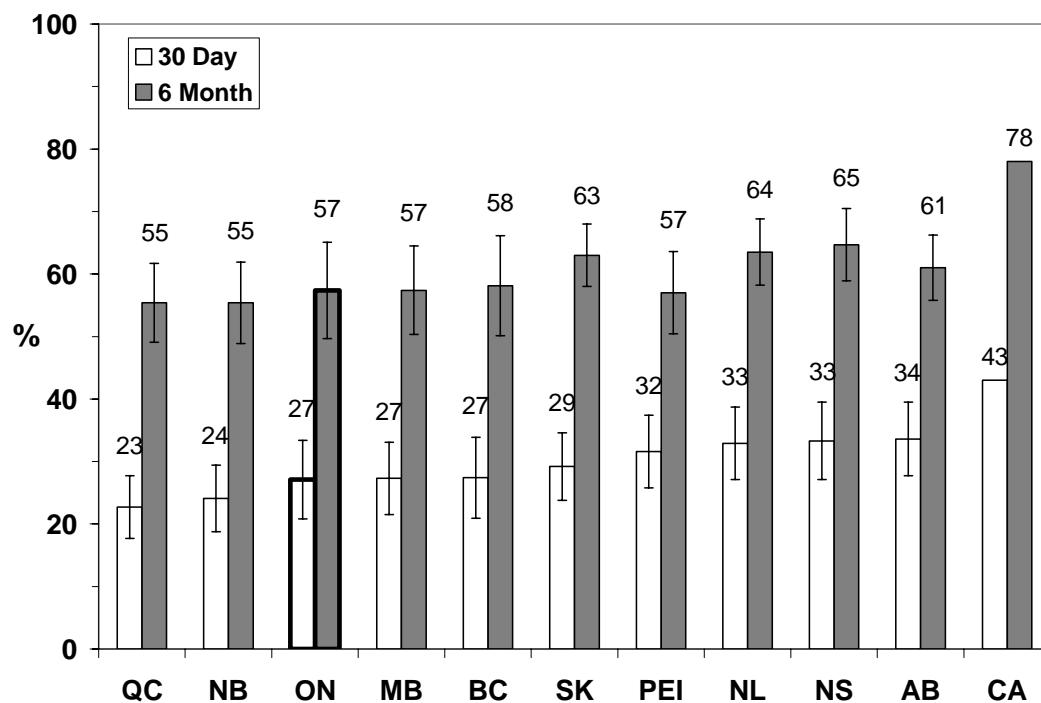
- Although adult current smoking is more common in Ontario than in California, the decline in Ontario has been greater, notwithstanding the sharp increase that followed the 1994 tobacco tax rollback (Fig. 3.3).
- From 1999 to 2004, the average daily cigarette consumption of Ontario smokers decreased 12.5%—a decline that is not statistically significant (Vol. 11, No. 2, Fig. 2.21). In California, during this same period, daily consumption dropped a comparable amount—15.1%.¹²
- From 1999-2004, there was a 30% decline in per capita cigarette sales in Ontario. This is about the same rate of decline as in California and the rest of Canada (Fig. 3.4), although in the last two years, the decline may be accelerating in Ontario, in contrast to these other jurisdictions. (Note that the age basis is different for Ontario and California, so direct comparisons of consumption are not possible, although trends can be compared.)
- The proportion of Ontario smokers intending to quit has not changed since 2001. Quit intentions in Ontario consistently rank among the least ambitious in Canada, and are substantially lower than among smokers in California (Fig. 3.5).

Figure 3.4: Per Capita Cigarette Consumption in Ontario, the Rest of Canada (Age 15+), and California (Age 18+), 1991-2004



Sources: Health Canada (original analysis for this report) and California Department of Health Services, Tobacco Control Section website.

Figure 3.5: Intentions to Quit Smoking, by Province, Smokers Age 15+, and in California (CA), Smokers Age 18+, 2004



Sources: CTUMS, 2004 and California Department of Health Services, Tobacco Control Section, May 2005. Vertical lines represent 95% confidence intervals.

- In 2004, public awareness of the Smokers' Helpline was higher (24%) than in 2002 (19%) but unchanged from 2003. Awareness of local quit programs also did not change from the year before (CAMH Monitor data, cited in Vol. 11, No. 2).
- There was no increase over 2002 or 2003 in the proportion of smokers who received advice to quit from their doctor, nor is this proportion (53%) different in Ontario from other provinces (Vol. 11, No. 2, Fig. 2.25).
- In summary, when compared to most of the rest of Canada, Ontario has a lower rate of daily smoking by adults, but somewhat lower intentions to quit and a slightly stronger preference for “light/mild” cigarettes.

Implications

For Policies and Programs

- In California, adult smoking dropped 0.9 percentage points annually from the approval of its tobacco control effort in 1988 until 1995. From 1995 to 2002—a period when program funding was cut back substantially—there was no net change in adult smoking prevalence in California.⁹ This illustrates the importance of consistent tobacco control funding.
- The health consequences of smoking¹³ argue for intensified cessation efforts in the province. A population approach to cessation¹⁴ should be an integral part of such an effort, and there should be a priority on early cessation.¹⁵

- Economic analysis demonstrates that the Smokers' Helpline produces fiscal benefits that significantly outweigh its costs, and that the cost of more promotion for the Helpline would be more than offset by the resultant increases in productivity and improved health.¹⁶
- The ongoing challenge of reaching substantial proportions of smokers in the general population points to the importance of policy measures such as increasing tobacco taxes and province-wide smoke-free legislation. Widespread compliance with the new *Smoke-Free Ontario Act*, starting June 1, 2006, will be critical to its success in delivering clean air to nonsmokers—and another incentive for smokers to quit. Steadily increasing tobacco taxes to reach—and keep up with—the national average will also be critical to the overall success of tobacco control.
- Serious consideration should be given to setting a new MHPSG target for adult smoking, one that will motivate extra effort and will not simply be reached by continuing recent trends. Such a goal should specify current in addition to daily smoking, to take account of the sizeable proportion of non-daily smokers and the shift of smokers from daily to occasional.
- The Cessation Logic Model identifies several short-term outcomes, some of which are missing from the current Strategy:
 - Projects to increase public awareness of (a) the adverse effects of smoking during pregnancy and child-rearing, and (b) deceptive tobacco industry marketing practices;
 - Projects to increase awareness among the public and policy-makers of policies that promote cessation, particularly tobacco taxation;
 - Cessation initiatives aimed at low SES and other high-risk populations.
- Within the framework of cessation efforts, there is also a need for messages directed at the vast majority of Ontario smokers who choose “light/mild” brands. Many of them do so in the mistaken belief that these brands are safer and make quitting less pressing.

For Research and Evaluation

- Research is needed to clarify the determinants behind the motivation to quit—or lack of it—including the role of erroneous beliefs about “light/mild” cigarettes, and about the health benefits and the difficulties of quitting.
- Although Ontario is one of the few provinces with an active program to train physicians (and other health care professionals) in smoking cessation counselling, patients who smoke are no more likely to receive such advice from their doctors than are patients in other provinces. The reasons for this need elucidation.
- Standard definitions for key constructs such as former smoker need to be adopted by all projects for the sake of comparison and consistency.
- Comparison with progress in other jurisdictions, such as California and the rest of Canada, is useful for understanding progress in tobacco control, and for providing a context for interpreting Ontario’s efforts.

PROGRESS TOWARD PROTECTION GOAL

In 2004-2005, there was more activity and progress in the protection area than in either prevention or cessation. Support for, and implementation of, smoke-free spaces continued to grow, but there remained considerable variation according to location. The most significant development was the introduction, and subsequent passage, of province-wide smoke-free legislation, to come into effect at the end of May 2006.

Status in 2004-2005

- By the end of March 2005, the majority of Ontarians lived in a municipality with smoke-free restaurants and bars. However, significant proportions (54%) of these so-called smoke-free spaces included designated smoking rooms (DSRs). About one-third (35%) of the population lived where there were complete bans with no DSRs (Vol. 11, No. 1, Fig. 1.1).
- More than half of Ontario adults (57%) in 2004 supported complete bans on smoking in restaurants, while one-third (34%) favoured a ban on smoking in bars (Vol. 11, No. 2, Fig. 2.29).
- In 2004, 88% of Ontario workers were protected by total smoking bans in the workplace. Nevertheless, 30% of all workers reported some workplace exposure to secondhand smoke, including 21% of nonsmoking workers (CAMH Monitor data, cited in Vol. 11, No. 2).
- In 2004, 87% of Ontario adults supported smoking bans at work. Opinions favouring complete bans were twice as common as opinions tolerant of DSRs (59% vs. 28%) (Vol. 11, No. 2, Fig. 2.32).
- In 2004, there was regular smoking inside 11% of Ontario households with children 0-14 years of age, meaning that 176,000 Ontario children were routinely exposed to secondhand smoke in their homes (CTUMS data cited in Vol. 11, No. 2). In 2005, one in three (30%) nonsmoking students in grades 7-12 reported at least one person smoking regularly inside their homes (OSDUS data cited in Vol. 11, No. 2).
- Exposure to secondhand smoke at home varied widely among health units in Ontario in 2003 (CCHS, 2003), from a low of 6% of homes to a high of 16% (Vol. 11, No. 2, Table 2.3).
- In 2004, 75% of Ontarians supported a legal ban on smoking in a car while children are present and 64% supported a legal ban on smoking inside the home if children are living there (CAMH Monitor 2004, cited in Vol. 11, No. 2).

Protection Projects in 2004-2005

- Approximately \$3.5 million was devoted to protection in 2004-2005. Protection claimed 45% of the total budget for province-level projects (Table 3.2), largely due to reclassifying the Mass Media Campaign under this goal.
- In addition to the Mass Media Campaign, the Ontario Tobacco-free Network, Youth Initiatives, and the Media Network reported that at least half their effort was directed to enhancing protection for nonsmokers.

Discussion

Public Health Impact

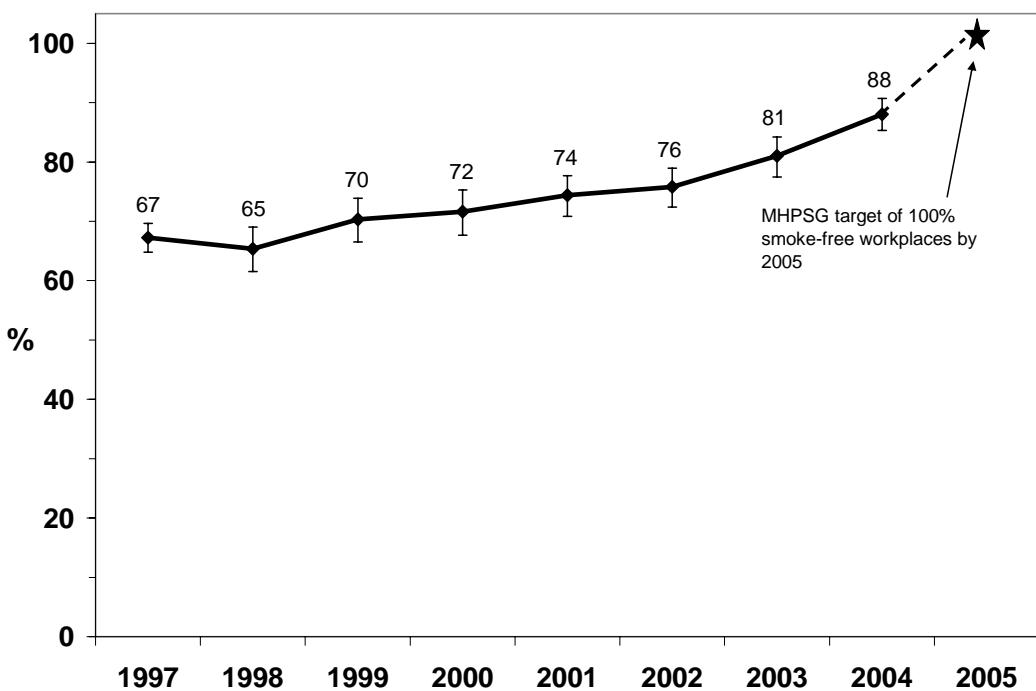
- **Reach.** Eight in 10 adult Ontarians were reportedly exposed to the Mass Media Campaign in 2004-2005, and 50-63% recalled one of the specific campaigns (Table 3.3). The Media Network and the Ontario Tobacco-free Network reached 65-100% of their respective target groups, which were other organizations engaged in tobacco control (Table 3.3).
- **Efficacy.** The development and strengthening of smoke-free bylaws have undoubtedly constituted the major achievement in the protection field (Table 3.1). The OTN and Media Network provided vital

assistance to the communities engaged in this effort. Leave the Pack Behind continues to promote smoke-free areas on campuses. The Media Campaign is contributing to the growing support for 100% smoke-free restaurants and bars.

Progress

- Overall, most nonsmokers are reasonably well protected in public places and workplaces in Ontario, but protection is uneven and progress in some areas has been slow. Residents of smaller communities and in some health units do not have the same level of protection as other citizens.
- There has been decent progress in the proportion of workplaces that are smoke-free, but it has been too slow to reach the MHPSG target of 100% of workers by 2005 (Fig. 3.6). Moreover, many workers report exposure in nominally smoke-free workplaces, suggesting compliance with existing restrictions is less than it should be, or that DSRs are not providing adequate protection.

Figure 3.6: Total Smoking Bans at Work, Adult Workers Aged 18+, Ontario, 1997-2004, and 2005 MHPSG Target



Source: CAMH Monitor

- Support for complete bans on smoking in restaurants and bars has grown substantially since 1998, while opinion favouring DSRs has declined (Vol. 11, No. 2, Fig. 2.28). For the first time, a majority of adults supports a complete ban on restaurant smoking. However, Ontario remains only average on this issue compared to other provinces (Vol. 11, No. 2, Fig. 2.29).
- More generally, protection from secondhand smoke in public places in Ontario has grown substantially in recent years (Table 3.1), especially in bars, although DSRs are widespread. Complete protection in public places (no DSRs) compares well to the Canadian average, but covers only a third of the population (Vol. 11, No. 1, Fig. 1.1).
- There is good progress in extending protection in homes with young children and in this regard Ontario compares well with the rest of Canada (Fig. 3.7, next page). However, this MHPSG objective has not

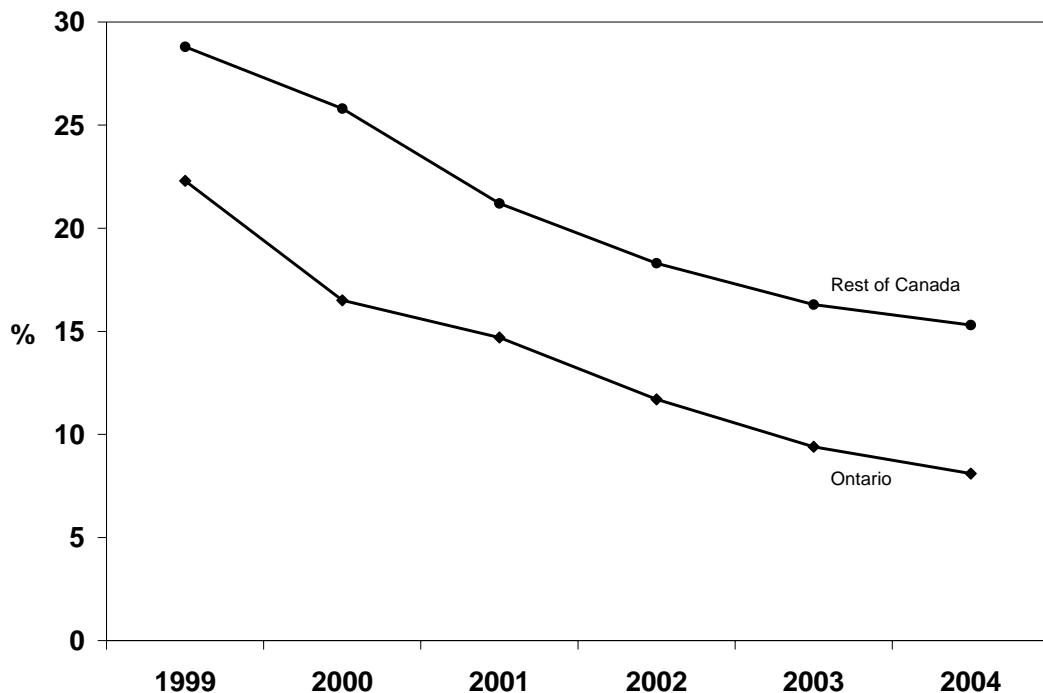
been defined in measurable terms, unlike those for workplaces and public places, and thus the rate of progress cannot be judged.

Implications

For Policies and Programs

- The MHPSG target of 100% smoke-free workplaces will not be achieved without the province-wide legislation that comes into force on 31 May 2006—and this assumes that compliance levels are higher than they are with current municipal bylaws or corporate policies.
- Similarly, the MHPSG target of 100% smoke-free public places such as bars and restaurants would not be reached without provincial legislation. As with workplaces, enactment of the new legislation will not by itself guarantee compliance. However, it appears that the legislation is essential to deal with the widespread prevalence of DSRs, which are not only unreliable as protection but are also increasingly unpopular with the public.
- Judging by the extent of exposure to secondhand smoke at work when voluntary restrictions are presumably in place, enforcement of the new legislation will be an important consideration. Equally important will be public support for the new legislation. This support will be fostered by a clear understanding of the health dangers of secondhand smoke and the ineffective nature of DSRs. A public education campaign with clear messages focused on this theme is needed. While the current Mass Media Campaign deals with secondhand smoke, its messages about the health dangers of secondhand smoke are indirect. The need for informed awareness is part of the Protection Logic Model.
- In response to any new initiatives to generate support for more awareness of and action on secondhand smoke, there will undoubtedly be resistance by the tobacco industry. Consideration should be given to projects to expose the industry's role in propagating myths that downplay the harmfulness of secondhand smoke.

Figure 3.7: Regular Secondhand Smoke Exposure in Homes with Children Age 0-11, Ontario and the Rest of Canada, 1999-2004



Source: CTUMS (original analysis for this report)

- It is time to set a quantitative target for progress toward the MHPSG objective for more smoke-free homes, as exists for other tobacco-related objectives. At the same time, there should be an objective established with respect to smoke-free cars. Clear targets will provide both an incentive to action and a basis for assessing progress.
- To accelerate the positive trend in smoke-free homes, expanded efforts are needed to bolster the voluntary approaches taken to date. Although there may be reluctance to legislate on this matter, public support for legislation is fairly high: in 2004, 75% of Ontarians supported a legal ban on smoking in a car while children are present and 64% supported a legal ban on smoking inside the home if children are living there (CAMH Monitor data cited in Vol. 11, No. 2).
- It is well established that smoke-free workplaces have a positive effect on smokers as well as nonsmokers, by encouraging cessation or at least reduction in amount smoked.^{17,18,19} It thus makes sense that the introduction of province-wide smoke-free legislation be accompanied by an enhanced cessation program in Ontario. This is discussed further under Cessation.

For Research and Evaluation

- We need a better understanding of the true nature of workplace secondhand smoke exposure and the reasons why it is not declining as total workplace smoking bans increase. In almost all settings, the compliance/enforcement picture is not clear.
- It is important to assess whether social desirability is affecting survey reports of smoking at home, in cars with children, and around pregnant women. Reports of exposure at home obtained from student surveys seem to be higher than those obtained from adults in household surveys. The Youth Smoking Survey may provide an opportunity to assess the accuracy of reporting on smoking in homes and cars.

- Because the evidence used for knowledge of the health effects is dated, this topic needs to be part of surveillance efforts again.
- There are no recent data on smoking in schools. It would be worthwhile to have an update on compliance, enforcement, and support for smoke-free schools in the province.
- Also important is ongoing monitoring of compliance with the *Smoke-Free Ontario Act* in workplaces and public places.

PROGRESS TOWARD DEVELOPING THE ONTARIO TOBACCO STRATEGY

This final section deals briefly with some overarching strategy issues and indicators that are not restricted to Prevention, Cessation or Protection.

Strategy Overview in 2004-2005

- Funding for the OTS totalled \$30.8 million, or \$2.48 per capita (Vol. 11, No. 1, Table 1.2). This does not include funding for the public health units or resource centres for tobacco control, figures that are difficult to estimate with accuracy. While Ontario's funding in the early 2000s was just below the national average of \$2.68 per capita, with recent changes, Ontario now invests about \$4 per capita in tobacco control.
- The Strategy continued to employ a mix of strategies (Table 3.2), notably public education (47% of the total funding for province-wide projects) and assistance to smokers (26%). Multi-faceted tobacco control programs for specific communities such as Aboriginals and post-secondary students, and development of tobacco-control infrastructure for other health agencies, accounted for 14% and 13% of the provincial budget, respectively.
- During the course of 2004-2005, strategic leadership and coordination responsibility shifted from the Ministry of Health and Long-Term Care to the new Ministry of Health Promotion.

Discussion

Progress

- Per capita funding did not change in absolute dollar amounts from renewal in 1999 through March of 2004, while population growth and inflation reduced the real per capita value of Strategy funding by 18.5%. The recently announced increases have not only restored per capita funding, but have greatly surpassed 1999 levels.
- Tobacco taxes have increased in Ontario in the last three years, but still remain the second lowest in Canada (Vol. 11, No. 1, Fig. 1.2). In April 2005, a carton of cigarettes cost \$66, well below the average of \$78 for the rest of the country. The \$1.25 increase of January 2005 did not change Ontario's position vis-à-vis other provinces and the territories. Indeed, it was so modest that the increase in cigarette prices did not even keep up with inflation.
- There has been no government action in Ontario on litigation to recover health care costs, in contrast to British Columbia, nor to recover lost tobacco tax revenue, as the federal government is attempting. Litigation is one of the strategic components in the Strategy system logic model.
- Monitoring of progress in tobacco control has benefited from new data sources, while evaluation of Strategy projects has developed somewhat unevenly. The quality of evidence from projects still often makes it difficult to attribute gains in tobacco control to their activities.

Public Health Impact

- Public health impact is the product of both reach and efficacy and, as noted above, a rather small proportion of Strategy-funded projects reach the population directly (Table 3.3). However, the development of tobacco control infrastructure since 1999 has resulted in better coordination, experienced individuals and organizations, and a comprehensive set of logic models to guide planning and evaluation.
- There is a need to promote and extend the reach of those strategies that are effective in reducing tobacco use. This includes the need to ensure more youth are exposed to tobacco control initiatives in schools.
- Real increases to the price of tobacco reach all smokers and are known to be efficacious. No single project can have the public health impact of a real price increase.

- The *Smoke-Free Ontario Act* has great potential for a positive impact—its reach will be to all regions of the province and to smokers in all manner of public settings. Its efficacy in providing clean air and, indirectly, a disincentive to smoke, will depend upon compliance and a complementary cessation strategy.

Implications

For the Strategy as a whole, some of the key implications of this evidence are:

- Since 1994, progress in tobacco control in Ontario has been impressive, especially in the past five years. OTRU's monitoring of key indicators shows progress in each of prevention, cessation, and protection.
- Despite this progress, there is a shortage of rigorous evidence to attribute these population-level effects to specific Strategy projects. However, this is steadily improving, and new evaluation initiatives such as the OTRU Tobacco Survey will assist in this regard.
- Logic models for each project would also be a useful planning and evaluation tool, as they are for the Strategy as a whole.
- Continuing to increase tobacco taxes will generate revenue, promote prevention, and encourage cessation. The government's stated commitment to raise the price of cigarettes to the Canadian average suggests that this lesson has been accepted, but the increases to date have been too modest to meet this goal.
- The level of funding for tobacco control is no longer a pressing issue in Ontario. And, in contrast to 1999, the last time that funding was increased, the new resources will be spent more effectively because of the infrastructure that is now in place.
- A comprehensive, evidence-based and accessible population cessation strategy will be essential to take full advantage of the incentive to quit that will result from implementation and enforcement of the new *Smoke-Free Ontario Act*.

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