

# Indicators of OTS Progress

Ontario Tobacco Research Unit

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## PREFACE

The main sections in report three, *Indicators of OTS Progress*, have been organized according to Ontario Tobacco Strategy (OTS) goals of prevention, cessation, and protection. Each goal has a set of short, intermediate, and long-term objectives, which have guided the topics discussed in each section. These objectives have been developed in conjunction with OTS logic models by the OTS Steering Committee (see Appendix 3-B for logic models).

*Indicators of OTS Progress* is the third of four reports in the 2003-2004 *Monitoring and Evaluation Series*. The full series consists of:

**Number 1: *Tobacco Control Highlights: Ontario and Beyond*** – an overview of recent developments in Ontario and other provinces, providing context for what is happening in Ontario;

**Number 2: *OTS Project Evaluations: A Coordinated Review*** – a largely qualitative summary of accomplishments by OTS projects funded in 2003/2004;

**Number 3: *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 4: *OTS Progress and Implications*** – a discussion of the results and implications of the findings in the previous three reports.

This year, each of these reports are being released electronically on the Ontario Tobacco Research Unit web site as they become available; a printed volume incorporating all four parts will be distributed to our network when all sections are completed.

## ACKNOWLEDGMENTS

This chapter was prepared by the Monitoring and Evaluation Work Group of the Ontario Tobacco Research Unit (OTRU), under the editorial direction of Tom Stephens (Chair) and Shawn O'Connor (Co-ordinator). Contributing authors were Kate Zinszer (Prevention), Charles Victor (Cessation), Bo Zhang (Protection, Methods), and Lori Diemert (Methods). The chapter benefited from reviews by OTRU Principal Investigators. Rita Luk assisted with the smoke-free bylaw analysis, Yvonne Parti and Sandra Caswell copy-edited the report, and Sonja Johnston capably provided production assistance.

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## PREVENTION

### Reduction in Youth Smoking

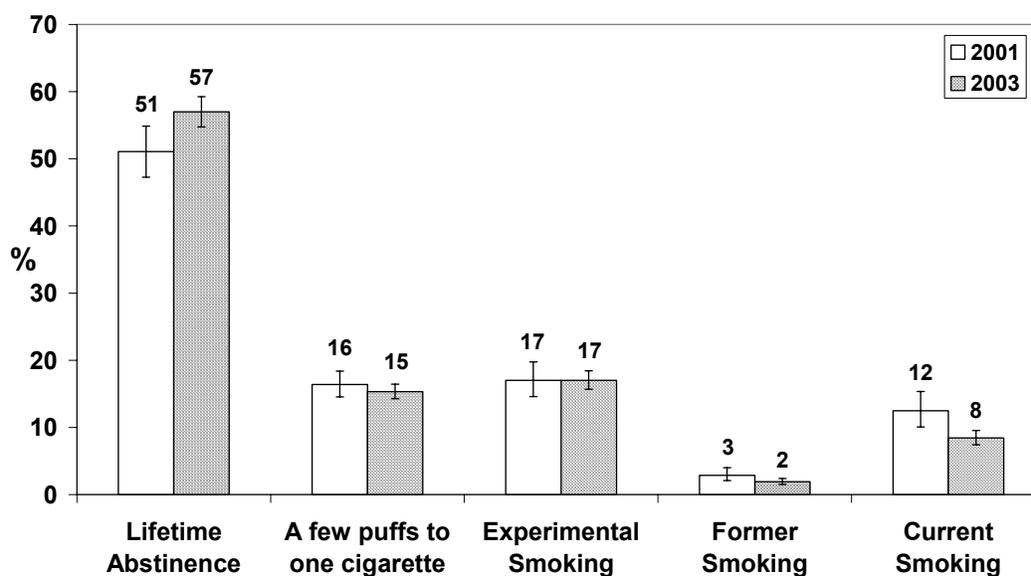
#### Current Smoking

The prevalence of current smoking, for Ontario students in grades 7 to 12, declined from 12% in 2001 to 8% in 2003 (Figure 3.1). One in ten Ontario students had smoked more than 100 cigarettes in their lifetime in 2003, with 8% having smoked in the past 30 days (i.e. current smokers). Almost all (99.7%) current smokers were smoking daily (OSDUS 2003, data not shown).

Among 15 to 19 year olds in Ontario in 2003, the prevalence of current smoking was 11% for both females and males (Figure 3.2). In Ontario, 15 to 19 year old female current smokers had a significantly lower smoking rate than 15 to 19 year old female current smokers in the rest of Canada. Male and female current smokers, 20 to 24 years old, both had similar rates of smoking in Ontario as well as within the rest of Canada. There were no significant gender differences in the current smoking rates between 15 to 19 and 20 to 24 year olds in Ontario and in the rest of Canada.

The prevalence of current smokers was 23% in 1999 for 15 to 19 year olds in Ontario, which was significantly higher than the 2003 prevalence of 11% (Figure 3.3). In 2003, the current smoking rates for 20 to 24 year olds were significantly higher than the smoking rates for 15 to 19 years in Ontario and in the rest of Canada.

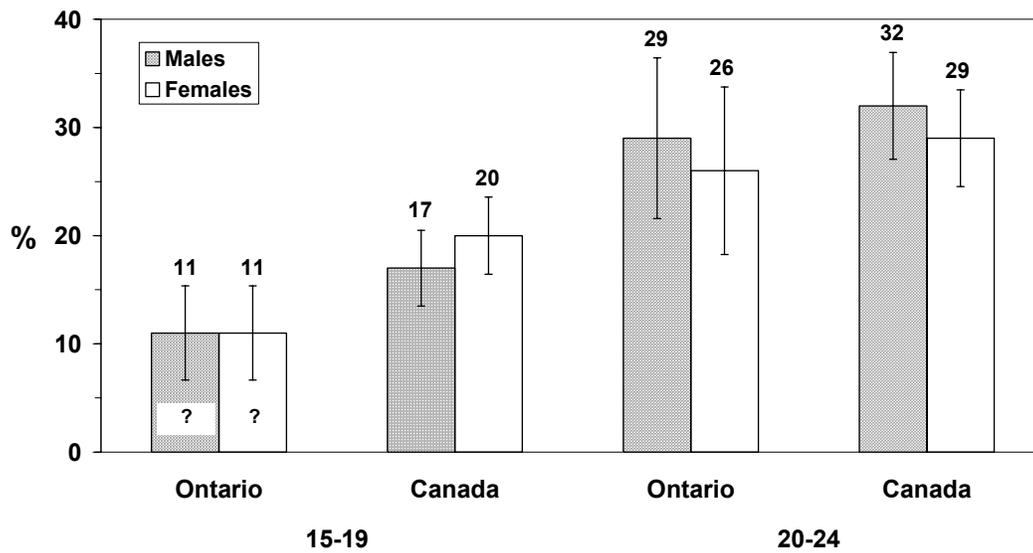
Figure 3.1: Lifetime Smoking Behaviour, by Year 2001 and 2003, Grades 7-12, Ontario



Note: Vertical lines represent 95% confidence intervals.

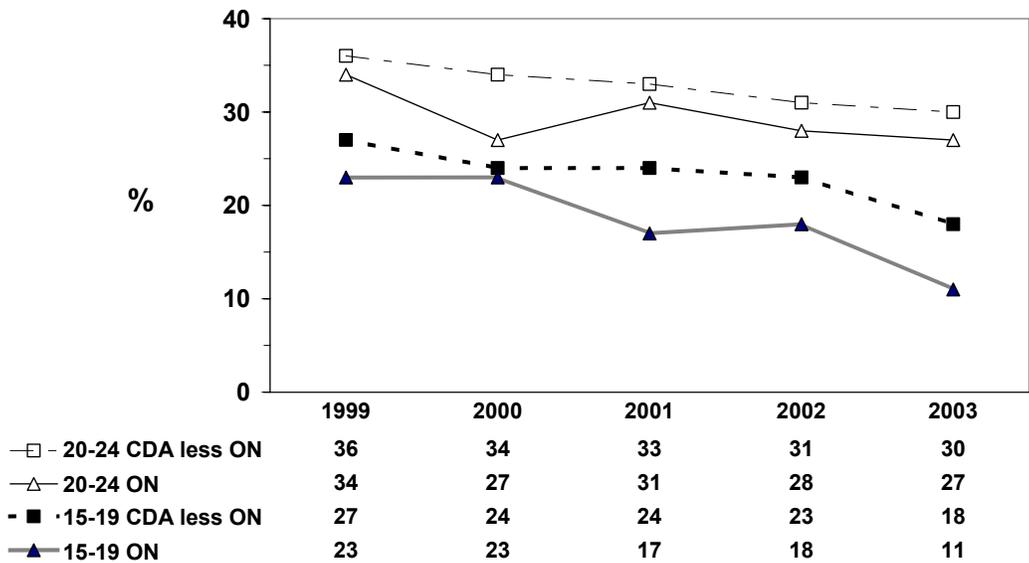
Source: OSDUS 2003.

Figure 3.2: Current Smoking, by Sex, Ages 15-19 and 20-24, Ontario and Rest of Canada, 2003



Note: ? = Interpret with caution, moderate level of error associated with estimate—Coefficient of Variation (CV) between 16.6% and 33.3%. Canada estimates exclude Ontario respondents. Vertical lines represent 95% confidence intervals.  
 Source: CTUMS (Annual) 2003.

Figure 3.3: Current Smoking, by Ages 15-19 and 20-24, Ontario and Rest of Canada, 1999-2003



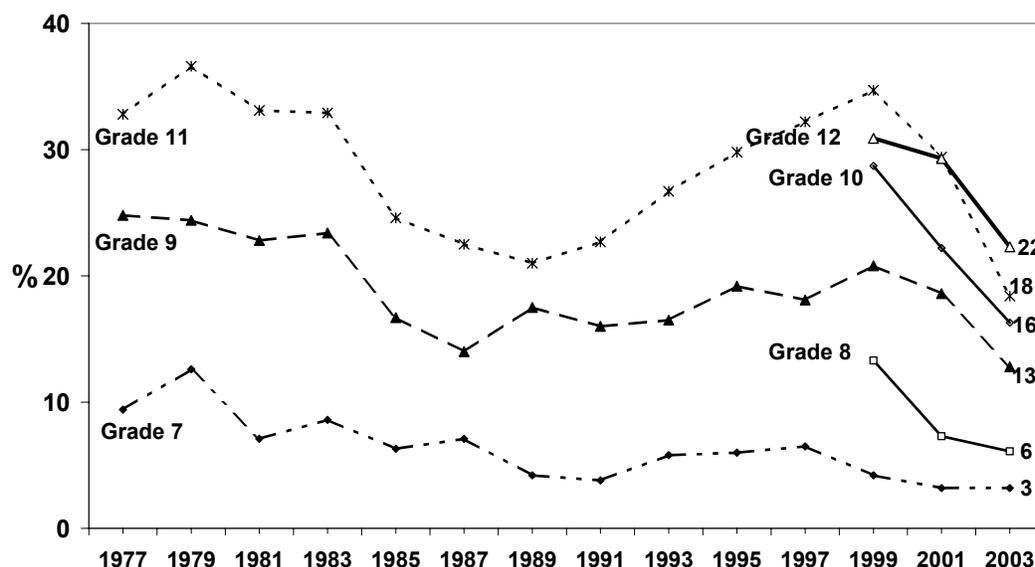
Note: Canada estimates exclude Ontario respondents.  
 Source: CTUMS (Annual) 1999-2003.

### Daily Smoking

Daily smoking among Ontario students has declined since 1999, and is now below the previous historic low levels of 1989 (Figure 3.4). In 2003, the prevalence of students smoking daily (over the past 12 months) ranged from 3% in grade 7 to 22% in grade 12. As expected, one-year smoking prevalence in grades 7 and 8 was lower than the rates found in grades 9, 10, 11, and 12.

Ontario's youth, aged 15 to 19, had a lower prevalence of daily smoking (within the last 30 days) than the rest of Canada, at 9% and 15%, respectively. In contrast, the daily smoking prevalence for 20 to 24 year olds in Ontario (22%) and in the rest of Canada (24%) did not significantly differ (CTUMS 2003, data not shown).

Figure 3.4: Daily Smoking, by Grade 7-12, Ontario, 1977-2003



Note: Students in grades 8, 10, and 12 were not surveyed prior to 1999.  
 Source: OSDUS 2003.

### Experimental Smokers and Lifetime Abstinence

In 2003, 15% of students smoked a few puffs on one cigarette, which was unchanged from the 2001 rate. Similarly, the prevalence of experimental smokers (i.e., less than 100 cigarettes in their lifetime) was unchanged from 2001 to 2003 at 17% (Figure 3.1). In 2003, the percentage of Ontario students who had never taken a puff of a cigarette in their lifetime was significantly higher than in 2001 (57% vs. 51%,  $p < .05$ ). This increase reflects the decrease in current smoking. In 2003, there were no significant differences between male and female students in lifetime smoking behaviours (OSDUS 2003, data not shown).

### Initiation

Among students who had ever smoked a whole cigarette, 45% smoked their first cigarette in grade 7 or before, and the majority of students (67%) smoked their first cigarette in grade 8 or before. The grades where students were most likely to report having smoked a first cigarette were grades 7, 8, and 9 (19%, 22% and 17%, respectively; OSDUS 2003, data not shown).

Among male youth aged 15 to 24 in Ontario, males who were currently smoking began smoking cigarettes daily by an average age of 17. Male youth within the rest of Canada began smoking daily at the age of 16. In 2003,

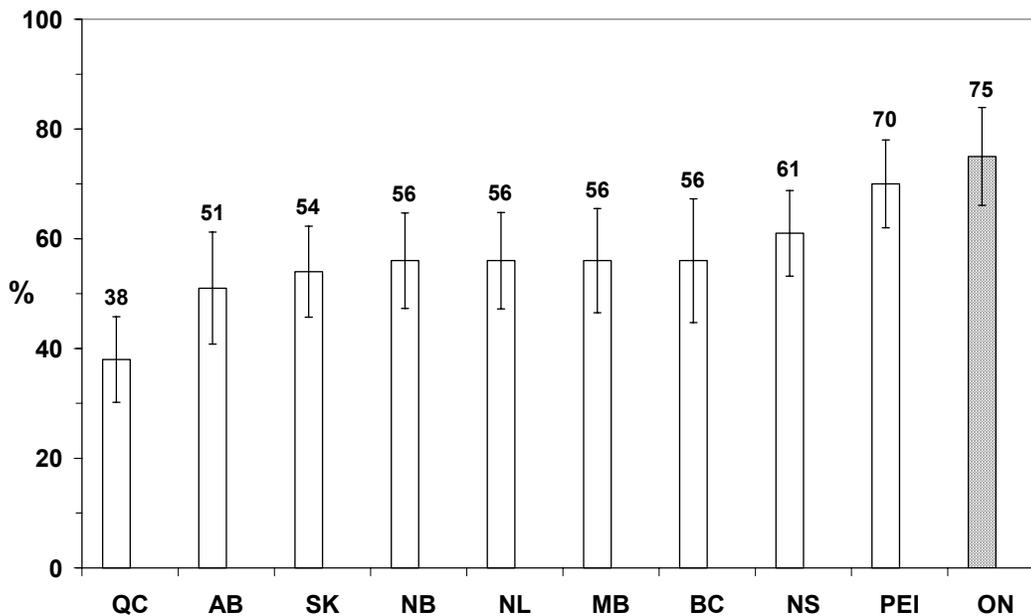
female current smokers in Ontario and in the rest of Canada started smoking cigarettes daily by the age of 16 and 15, respectively. In 2003, current smokers that were surveyed in Ontario, aged 15 to 24, reported starting smoking their first cigarette on average by age 15, but for the rest of Canada the average age was 14 years old (CTUMS 2003, data not shown).

### Preferences for Light and Mild Cigarettes and Perceptions of Harm

Across Canada, the preference for light and mild cigarettes among smokers aged 15 to 19 and 20 to 24 ranged from highs of 72% and 76% in Ontario to lows of 33% and 42% in Québec (Figure 3.5). In 2002, 84% of current smokers in Ontario aged 20 to 24 preferred light or mild cigarettes; in 2003, three quarters preferred light or mild cigarettes (CTUMS 2003, data not shown).

Nationally, only a small percentage of smokers believed that light and mild cigarettes reduce the amount of tar inhaled, reduce health risk without quitting, and reduce health risk (Table 3.1). Ontario data was not presented for the beliefs associated with smoking light and mild cigarettes because of small sample sizes.

**Figure 3.5: Preference for Light and Mild Cigarettes, by Province, Current Smokers, Ages 15-24, 2003**



*Note:* Light and mild cigarettes include “ultra” and “extra” brands. Vertical lines represent 95% confidence intervals.  
*Source:* CTUMS (Annual) 2003.

Table 3.1: Percentage of Smokers who Believed Misperceptions Regarding Light and Mild Cigarettes, Canada, 2003\*

Misperception	% Males 15-24	% Females 15-24
Reduce amount of tar inhaled	16	16
Reduce health risk without quitting	13	8
Reduce health risk	14	8

\* Interpret with caution, moderate levels of error associated with estimates—Coefficient of Variation (CV) between 16.6% and 33.3%.  
 Source: CTUMS (Annual) 2003.

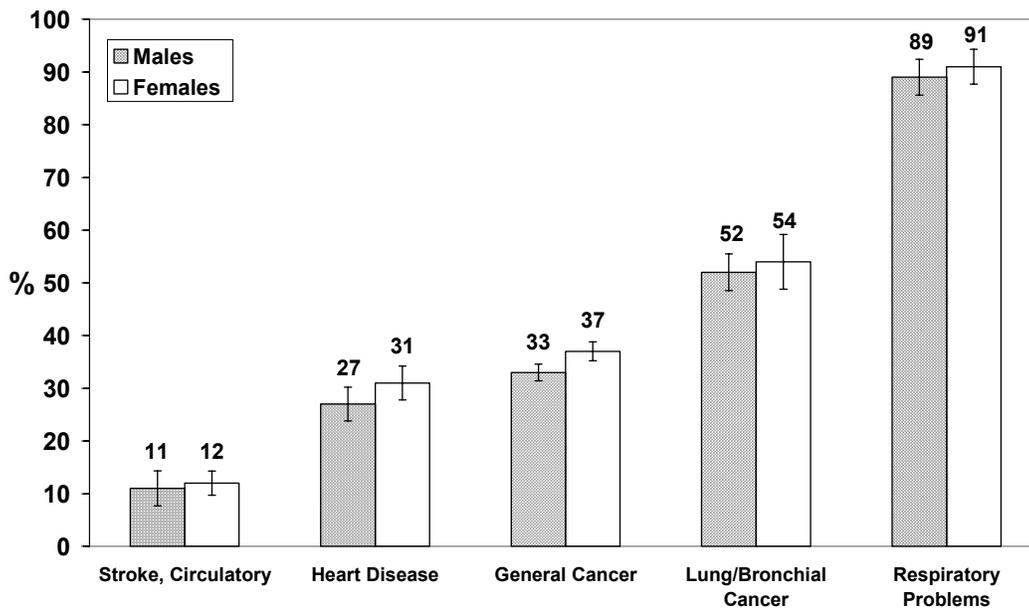
### Knowledge of Health Effects and Determinants of Smoking

In 2003, students in Ontario were most likely to identify respiratory problems as a health effect caused from smoking cigarettes, when compared to the other health effects as listed in Figure 3.6. Female and male students in Ontario had similar rates of awareness of the health effects from smoking a cigarette. The rates of awareness of health effects caused by smoking, between fifth and sixth graders and students in grades seven to nine, were also similar.

In Ontario, peer modeling (defined as friends and popular kids smoking) was identified by three quarters of the surveyed students in grades 5 to 9, making it the most widely recognized smoking determinant (Figure 3.7). Students in grades 7 to 9 were more likely to acknowledge curiosity and because it's not allowed as smoking determinants, compared to students in grades 5 to 6 ( $p < 0.5$ ). There were significant gender differences in the perceptions of smoking determinants; female students were more likely to identify a smoking determinant than were male students (YSS 2002, data not shown).

In Ontario, a high percentage of students in grades 5 to 9 recognized that tobacco is addictive. In Ontario, the percentage of male students who were aware of tobacco's addictiveness ranged from 86% to 92% for grades 5 to 9 and for female students the awareness ranged from 91% to 95%. For the rest of Canada, 75% of male students and 77% of female students in grades 5 to 9 recognized that tobacco was addictive. There were significant differences in the awareness of tobacco's addictiveness between students in Ontario and in the rest of Canada. Ontario students, females and males, in grade 5 were more aware of the addictiveness of tobacco than were grade 5 students in the rest of Canada (91% and 86% vs. 77% and 75%, respectively;  $p < .05$ ). Also, male students in grade 6 in Ontario had significantly higher levels of awareness than did the same group in the rest of Canada (90% vs. 81%,  $p < .05$ ; YSS 2002, data not shown).

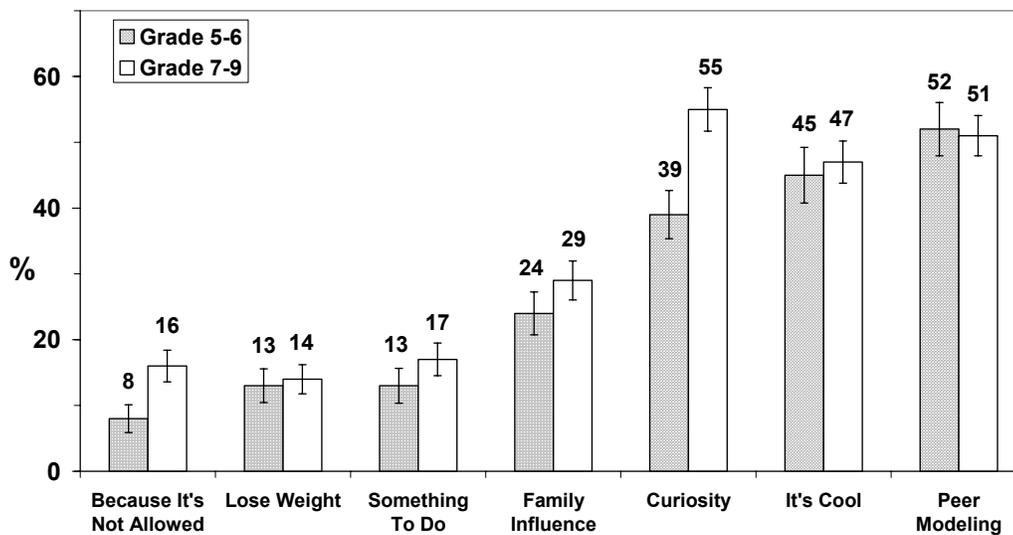
Figure 3.6: Unprompted Awareness of Health Effects of Smoking, by Sex, Grades 5-9, Ontario, 2003<sup>i</sup>



Note: Vertical lines represent 95% confidence intervals.

Source: Youth Smoking Survey 2002.

Figure 3.7: Perceptions of Determinants of Smoking, by Grade 5-6 and 7-9, Ontario, 2003<sup>ii</sup>



Note: Ordered by grade 5-6 prevalence of perception of determinants. Vertical lines represent 95% confidence intervals.

Source: Youth Smoking Survey 2002.

<sup>i</sup> The health effects were obtained in an open-ended question: "What health problems can people get if they smoke for many years?"<sup>6</sup>

<sup>ii</sup> Perceptions of the determinants of smoking were obtained in a question that listed 11 options, all of which the respondent could mark as a reason for peers to start to smoke.<sup>6</sup>

## Youth Access

### Sources of Cigarettes

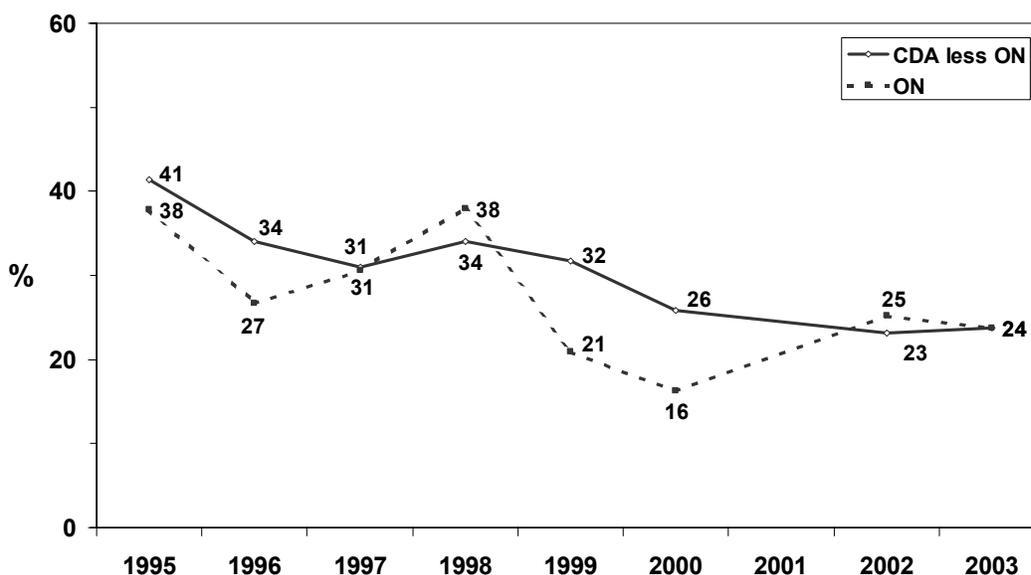
In 2003, 54% of underage youth in Ontario, 15 to 18 years old, usually obtained their cigarettes from retail stores, in contrast to obtaining them from social sources such as friends or family members. An even larger proportion of underage youth in the rest of Canada (63%) acquired cigarettes from retail stores, with 37% obtaining cigarettes from social sources (CTUMS 2003, data not shown).

### Retailer Non-Compliance

In 2003, 24% of retailers in Ontario as well as in the rest of Canada were willing to sell cigarettes to underage youth ages 15 to 17 (Figure 3.8), which is unchanged from 2002. The rate of retailer non-compliance in Ontario, over the past nine years, has ranged from a low of 16% in 2000 to a high of 38% in 1995 and in 1998. Fourteen percent of retailers in Ontario and 21% in the rest of Canada were willing to sell to 15 year olds (AC Nielsen 2003, data not shown). A 16 year old was less likely than a 15 or 17 year old to be sold cigarettes in Ontario. A youth of 15 years was less likely to be sold cigarettes in the rest of Canada, when compared to 16 and 17 year olds.

In 2003, the rates of non-compliance were similar for the different types of retail outlets (Figure 3.9). The most substantial increase in compliance was observed in independent convenience stores, which increased from 58% in 1995 to 81% in 2003.

Figure 3.8: Retailer Non-Compliance, by Ontario and the Rest of Canada, 1995-2003



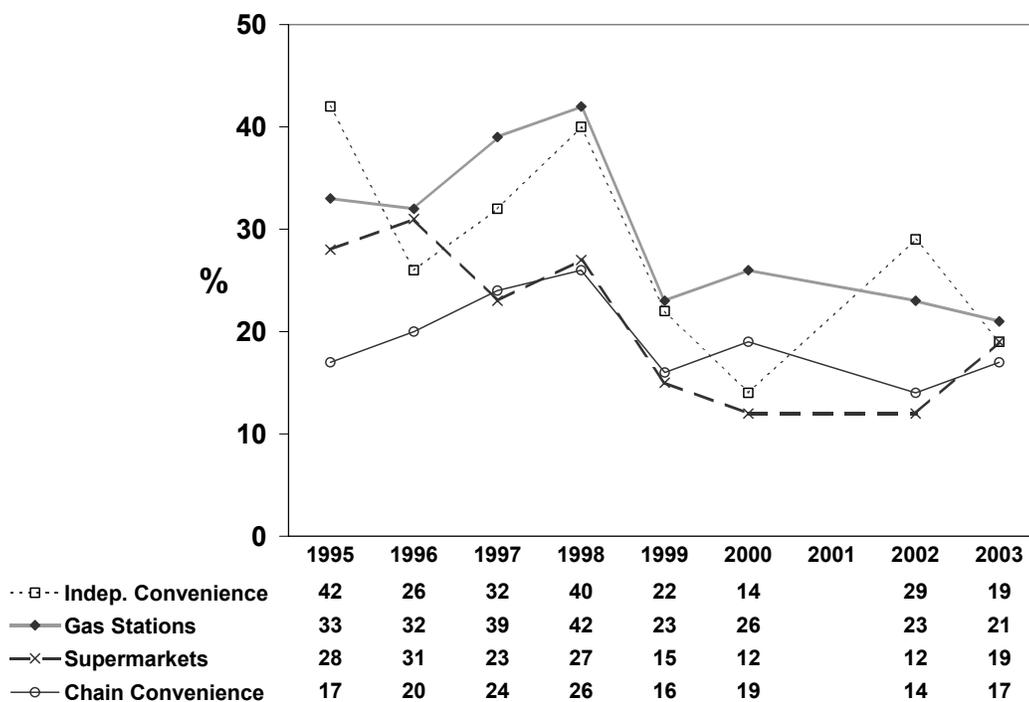
Note: Canadian average excludes Ontario. Data from 1995 to 2000 based upon AC Nielsen core cities, 2002 and 2003 data based upon 30 cities. Data not collected in 2001.

Source: AC Nielsen 1995-2000, 2002-3.

In 2003, 73% of retailers in Ontario asked for age identification from an underage youth. Only 2% of retailers who asked for age identification sold cigarettes to minors, compared to 84% who did not ask. Throughout the rest of Canada, 6% of retailers who asked for age identification were likely to sell to underage youth compared to the 85% who did not ask (AC Nielsen, data not shown).

Additionally, gender of the underage youth was a factor in the rate of retailer non-compliance. In 2003, underage females in Ontario were less likely than their male counterparts to be sold cigarettes (15% vs. 32%). Retailer non-compliance for underage female customers (23%) and male customers (25%) was similar in the rest of Canada. The rate of retailer non-compliance in Ontario drastically increased for underage males from 2002 (15%) to 2003 (32%). Conversely, the rate of retailer non-compliance decreased considerably for underage females in Ontario from 37% in 2002 to 15% in 2003 (AC Nielsen 2003, data not shown).

Figure 3.9: Retailer Non-Compliance, by Type of Retailer, Ontario, 1995-2003



Note: Data from 1995 to 2000 based upon AC Nielsen core cities, 2002-3 data based upon 30 cities. Data not collected in 2001.  
 Source: AC Nielsen 1995-2000, 2002-3.

### Attitudes Toward Tobacco Control Policies

The goal of a prevention strategy is to prevent smoking initiation and addiction among children, youth, and young adults. Public support for key tobacco control policies related to prevention is one measure of progress toward this goal.

#### Youth Access

In 2003, 86% of Ontario adults believed that stores convicted of selling tobacco to youth under the age of 19 should lose their tobacco license. Furthermore, 81% of adults in Ontario felt that friends or family members who supply tobacco to underage youth should be fined. Current smokers were less likely to support stores losing their license for supplying tobacco to underage youth than were never smokers (80% vs. 89%). Current smokers were also less likely to support fines for family and friends who supply tobacco to underage youth than were never smokers (74% vs. 85%). The rates of approval for these tobacco control policies are unchanged from 2002 (CAMH Monitor 2003, data not shown).

### Tax Increase

In 2003, 37% of adults in Ontario favoured increasing taxes on cigarettes, which is unchanged from 2002 (41%). As expected, never smokers were more likely to favour a tax increase (50%) than were former smokers (36%; CAMH Monitor 2003, data not shown).

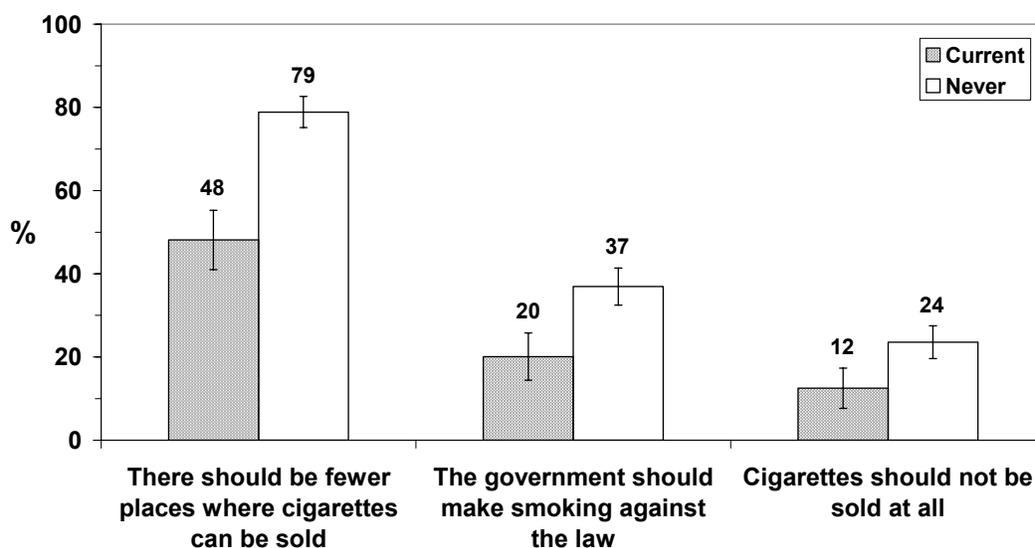
### Regulating Tobacco and Tobacco Sales

In 2003, a large proportion of adults in Ontario (62%) believed that tobacco companies should not be allowed to display products on or near the counters in convenience stores, grocery stores, or in gas stations. Support for the regulation of product displays was higher among never smokers (68%) compared to current smokers (48%; CAMH Monitor 2003, data not shown).

In 2003, the majority of women in Ontario favoured increased restrictions on the sale of tobacco whereas the majority of men were opposed to increased restrictions on the sale of tobacco (CAMH Monitor 2003, data not shown). As well, support for regulating sales varied by smoking status (Figure 3.10). There was increased support among lifetime abstainers compared to current smokers for the following policies: fewer places to sell cigarettes, a law to make smoking illegal, and for cigarettes to not be sold at all. A smaller percentage of current smokers supported the same policies.

The rates of support for regulating produce displays, selling cigarettes in government stores, and not selling cigarettes at all were unchanged from 2002 (CAMH Monitor 2003, data not shown).

Figure 3.10: Support for Product Regulation, by Smoking Status, Ages 18+, Ontario, 2003



Note: Vertical lines represent 95% confidence intervals.

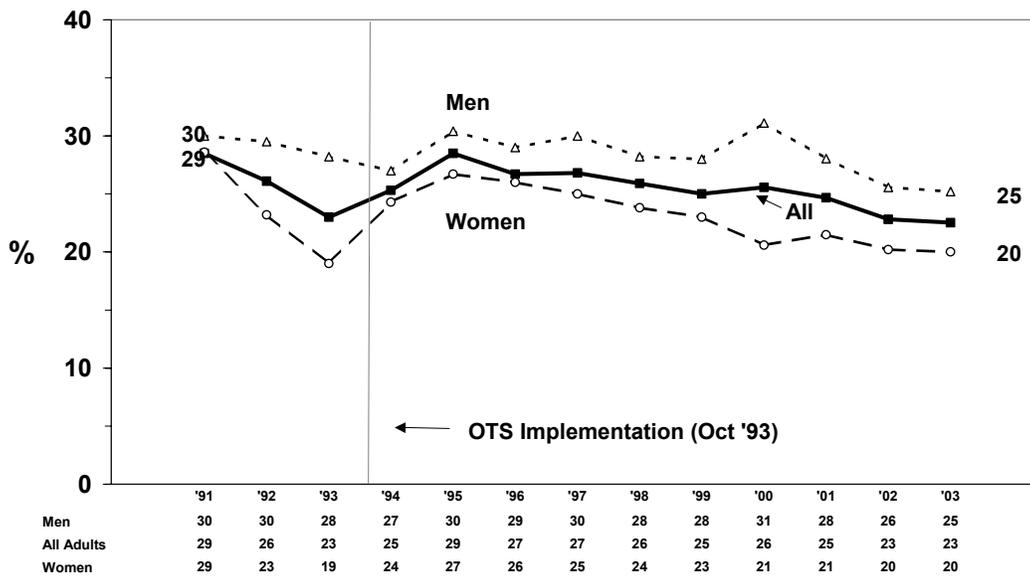
Source: CAMH Monitor 2003.

## CESSATION

### Current Smoking

In 2003, 23% of Ontario adults were current smokers (i.e., smoked daily or occasionally in the past month and had smoked at least 100 cigarettes in lifetime; Figure 3.11). This prevalence was unchanged from 2002, interrupting a downward trend that began in 1995. In contrast to previous years, the prevalence of current smoking among men was not significantly different from that of women.

Figure 3.11: Current Cigarette Smoking, by Sex, Age 18+, Ontario, 1991-2003



Source: CAMH Monitor 2003.

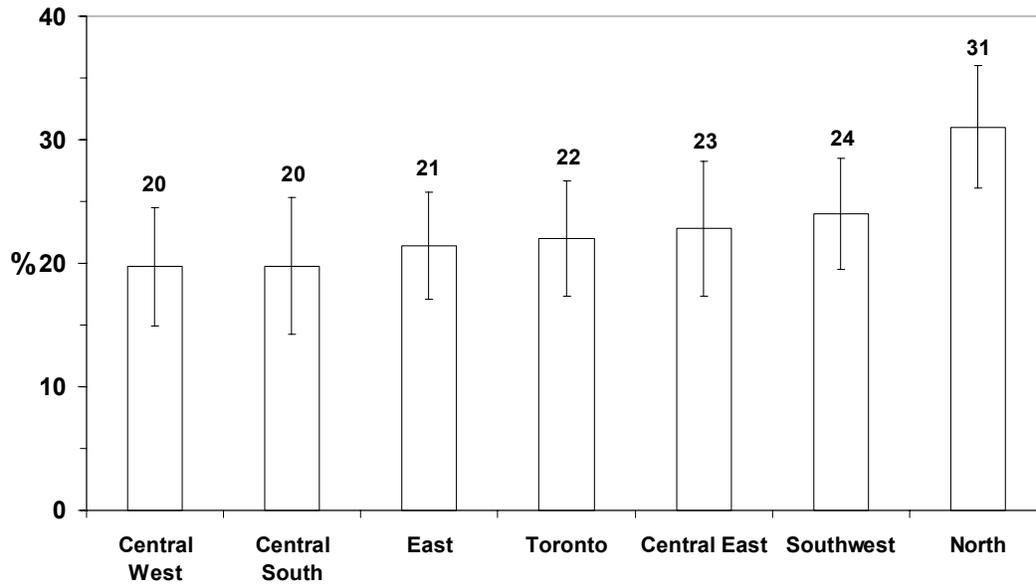
### Region

In 2003, the prevalence of current smoking varied by Health Planning Region, ranging from 20% in Central West and Central South to 31% in the North Region (Figure 3.12). Specifically, current smoking prevalence was significantly higher in the North compared to the Central West, Central South and East regions ( $p < .05$ ). Within each Health Planning Region, there was no significant change in current smoking from 2002 to 2003 (CAMH Monitor 2003, data not shown).

### Age

Unlike previous years, adults under 30 were no more or less likely to smoke than adults aged 30 and over (Figure 3.13). Adults aged 60 and over had the lowest rate of smoking of all age groups. Within each age category, there were no significant sex differences in current smoking prevalence.

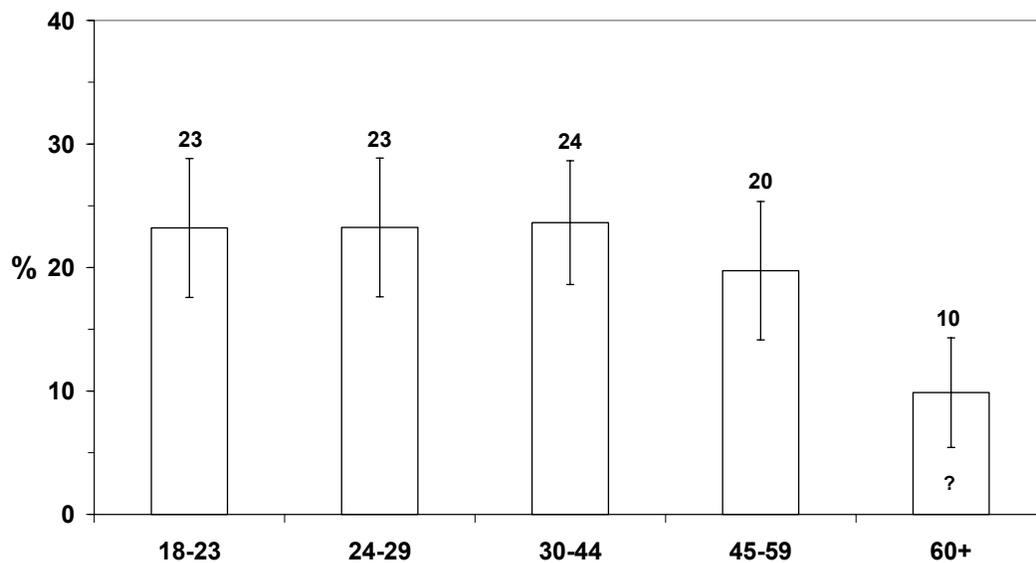
Figure 3.12: Current Cigarette Smoking, by Health Planning Region, Age 18+, Ontario, 2003



Note: Vertical lines represent 95% confidence intervals.

Source: CAMH Monitor 2003.

Figure 3.13: Current Cigarette Smoking, by Age, Ontario, 2003



Note: ? = Interpret with caution, moderate levels of error associated with estimate—Coefficient of Variation (CV) between 16.6% and 33.3%. Vertical lines represent 95%.

Source: CTUMS (Annual) 2003.

**Education**

Ontario adults with less education were far more likely to be current smokers in 2003 (Figure 3.14). Moreover, the differences between each level of education were significant, consistent with findings reported in previous years.

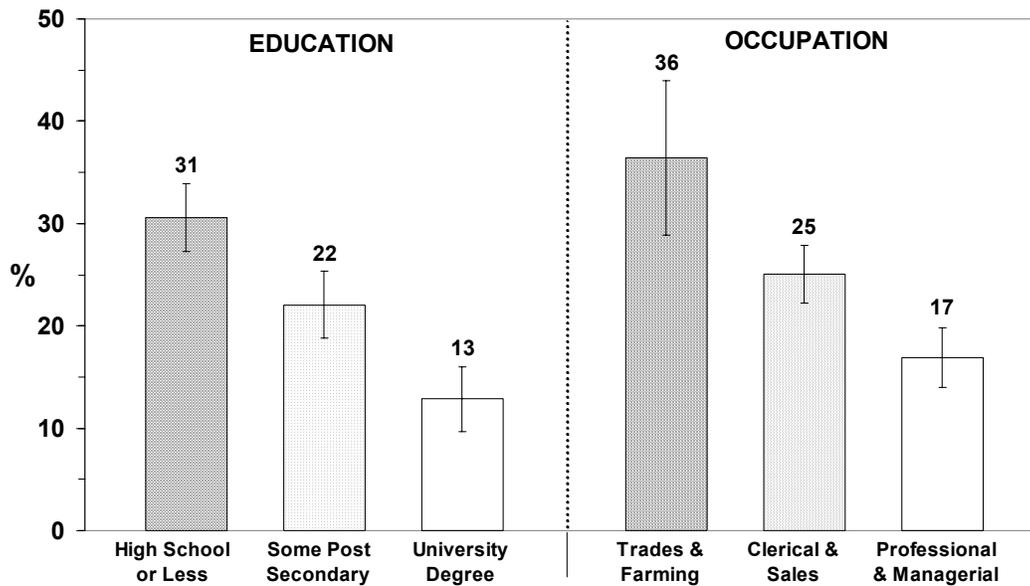
**Occupation**

As in past years, trade and farm workers were significantly more likely to be current smokers than either clerical and sales workers or professional and managerial workers (36% vs. 25% and 17%, respectively,  $p < .05$ ; Figure 3.14). Clerical and sales workers also had a significantly higher smoking prevalence than professional and managerial workers (25% vs. 17%).

**Pregnancy**

As reported in 2001, 14% of expectant mothers in Ontario (aged 20-44) who gave birth in the past five years smoked during their most recent pregnancy (CCHS 2001, data not shown). This is comparable to more recent national data (CTUMS 2003, data not shown), which found 11% of expectant mothers (aged 20-44) smoked during their most recent pregnancy, unchanged from 2002.

**Figure 3.14: Current Cigarette Smoking, by Education and by Occupation, Age 18+, Ontario, 2003**



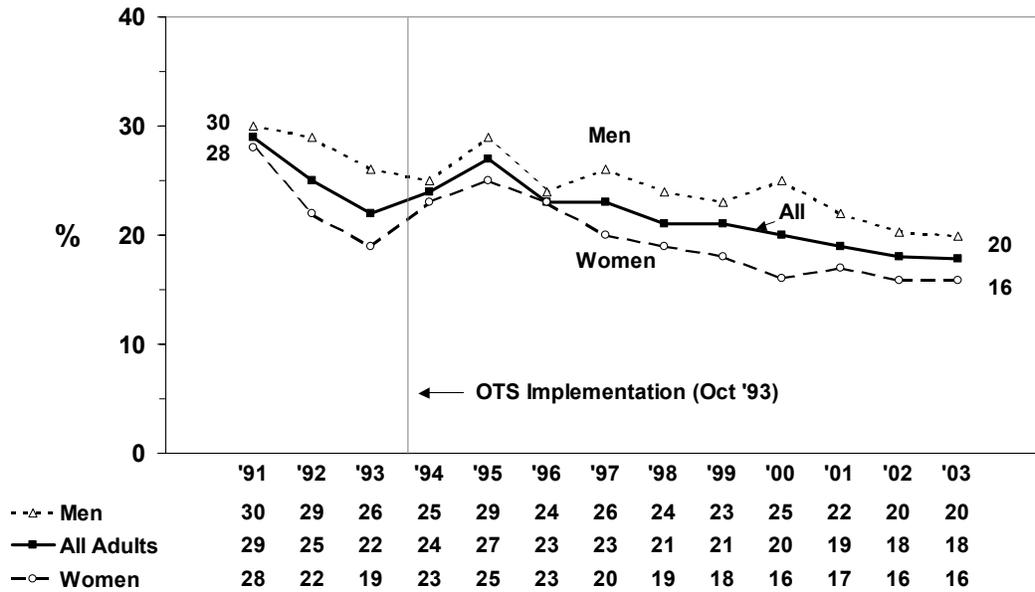
*Note:* Vertical lines represent 95% confidence intervals.  
*Source:* CAMH Monitor 2003.

**Daily and Occasional Smoking**

In 2003, the prevalence of daily smoking in Ontario remained unchanged from 2002 at 18% (Figure 3.15), which is a significant decrease from 1991 (29%) and 1995 (27%). As in recent years, the prevalence of daily smoking in the general population was significantly higher for men than women (20% vs. 16%).

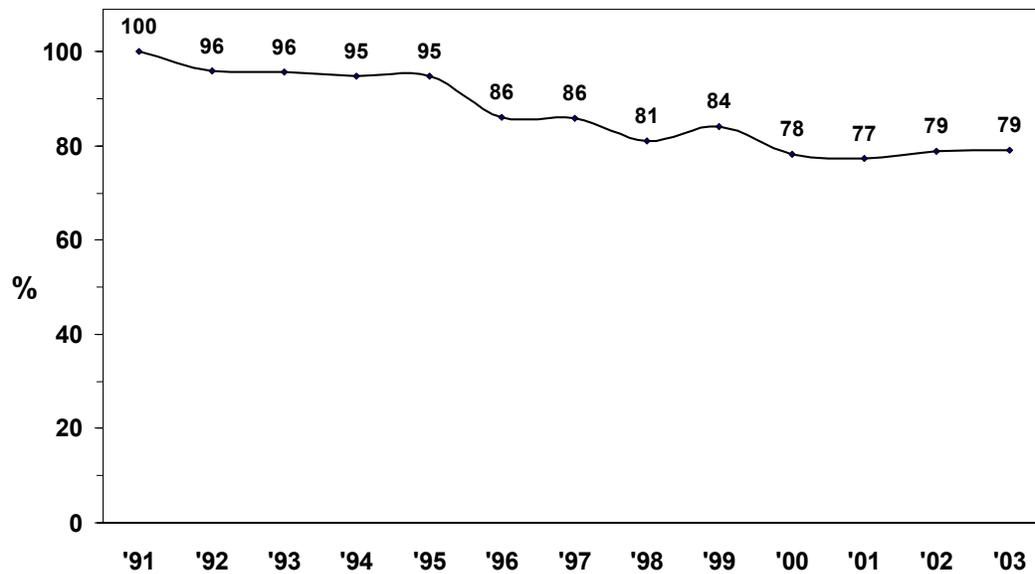
Of all current smokers in 2003, 79% were daily smokers and 21% were occasional smokers (Figure 3.16). Although unchanged in recent years, this trend is in contrast to 1991, when virtually all smokers smoked daily. Among current smokers, in 2003, the prevalence of daily smoking between men and women did not differ.

Figure 3.15: Daily Cigarette Smoking, by Sex, Age 18+, Ontario, 1991-2003



Source: CAMH Monitor 2003.

Figure 3.16: Daily Smoking as a Proportion of Current Smoking, Age 18+, Ontario, 1991-2003

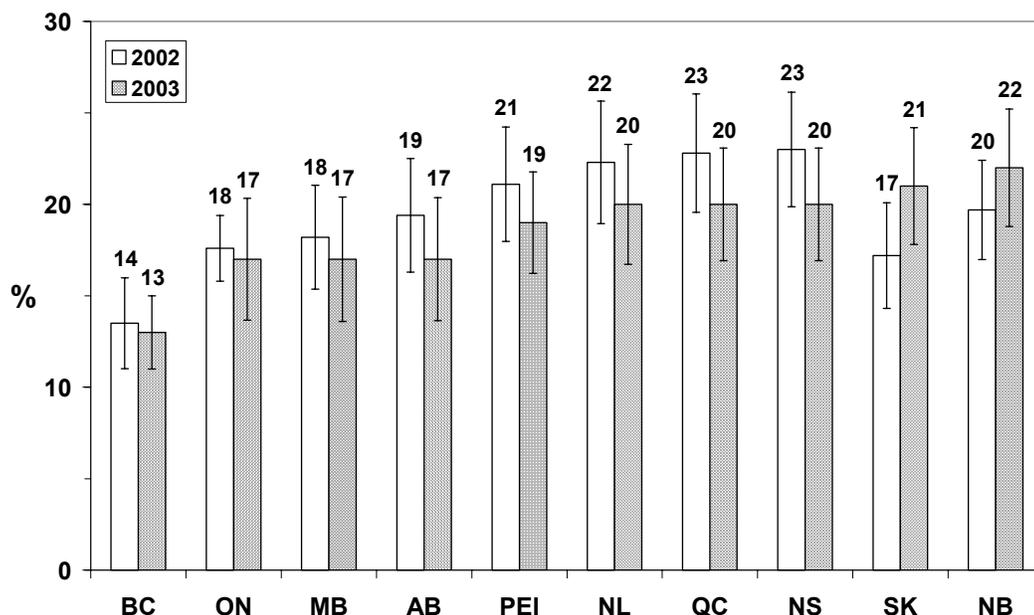


Source: CAMH Monitor 2003.

Across Canada in 2003, the rate of daily cigarette smoking ranged from a low of 13% in British Columbia to a high of 22% in New Brunswick (Figure 3.18). Only British Columbia had a significantly lower daily smoking rate than Ontario (13% vs. 17%,  $p < .05$ ), whereas the daily smoking rate in New Brunswick was the only provincial rate that was significantly higher when compared to Ontario (22% vs. 17%,  $p < .05$ ). Current smoking rates

followed a similar pattern, about 2-4% percent higher than rates reported for daily smoking. From 2002 to 2003, there were no significant changes in the rates of daily smoking in Ontario and the other provinces.

Figure 3.17: Daily Cigarette Smoking, by Province, Age 18+, Canada, 2002 and 2003



Note: Ordered by 2003 prevalence of daily smoking. Vertical lines represent 95% confidence intervals.

Source: CTUMS (Annual) 2003.

### Level of Use

In 2003, the mean number of cigarettes smoked per day by daily smokers was 16.3. This consumption level has not been significantly different since 1992 (Figure 3.18).

Men smoked significantly more cigarettes per day in 2003 than women (18.3 vs. 14.0,  $p < .05$ ), a pattern consistent with previous years. Adult daily smokers aged 18-34 smoked fewer per day than those aged 35-54 and 55+ (13.3 vs. 18.6 and 17.0, respectively). Moreover, daily smokers who held a university degree smoked significantly fewer cigarettes per day than those with high school or less (14.7 vs. 20.3, respectively,  $p < .05$ ; CAMH Monitor 2003, data not shown).

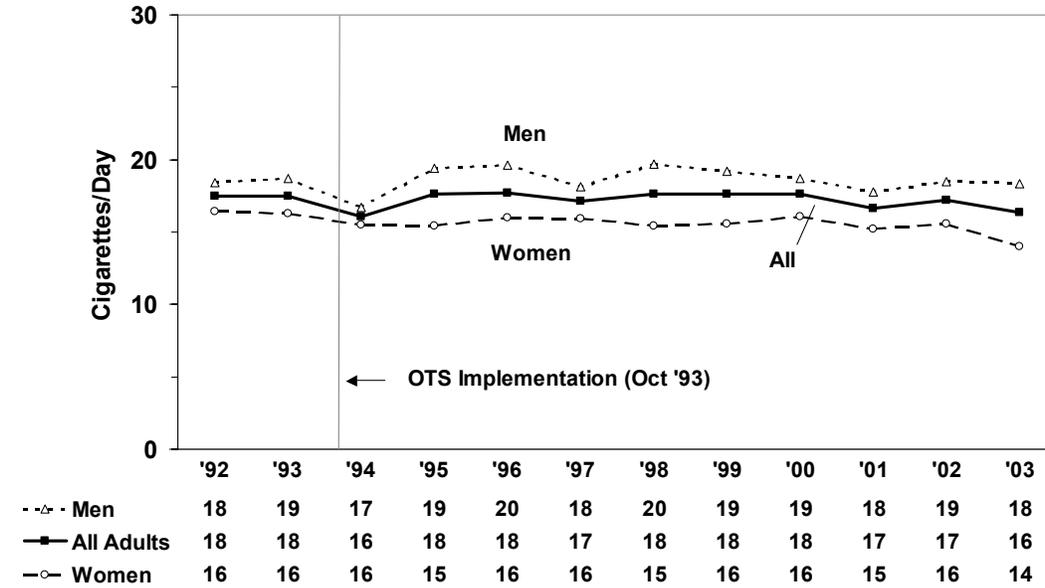
### Dependence

The Heaviness of Smoking Index<sup>1</sup> is a scale combining time to first cigarette each morning and number of cigarettes per day (Figure 3.19). (A score of 0-2 indicates low dependence, 3-4 indicates moderate dependence, and 5-6 indicates high dependence.) Although 18% of Ontario adults were daily smokers in 2003 (Figure 3.15), only 15% of these smokers were highly dependent on cigarettes (CAMH Monitor 2003, data not shown). Conversely, over half (52%) of daily smokers had a low dependence on cigarettes and 33% were moderately dependent, unchanged from previous years.

In 2003, a significantly higher proportion of women had a low dependence on cigarettes compared to men (60% vs. 46%,  $p < .05$ ); while a significantly lower proportion of women had a moderate dependence on cigarettes (26% vs. 39%,  $p < .05$ ; Figure 3.19). However, there were no significant differences between the proportion of women and men at high levels of cigarette dependence. Furthermore, 18-34 year old daily smokers were significantly

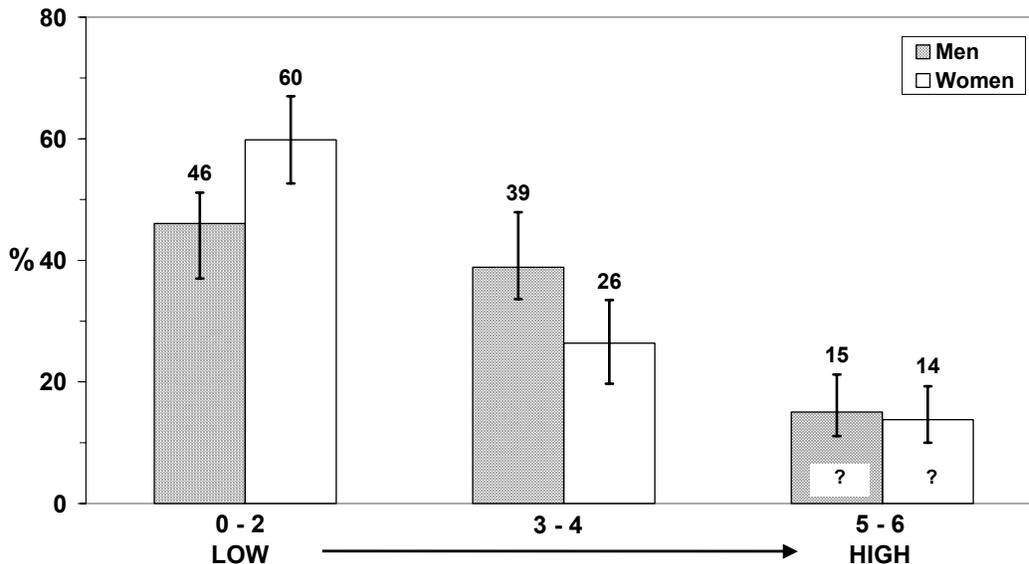
more likely to have a low dependence on cigarettes than daily smokers aged 35-54 and 55+ (68% vs. 43% and 46%, respectively; CAMH Monitor 2003, data not shown).

Figure 3.18: Mean Number of Cigarettes Smoked Daily, by Sex, Daily Smokers, Age 18+, Ontario, 1992-2003



Source: CAMH Monitor 2003.

Figure 3.19: Nicotine Dependence: Heaviness of Smoking Index, by Sex, Daily Smokers, Age 18+, Ontario, 2003



Note: ? = Interpret with caution, moderate levels of error associated with estimate—Coefficient of Variation (CV) between 16.6% and 33.3%. Vertical lines represent 95% confidence intervals.

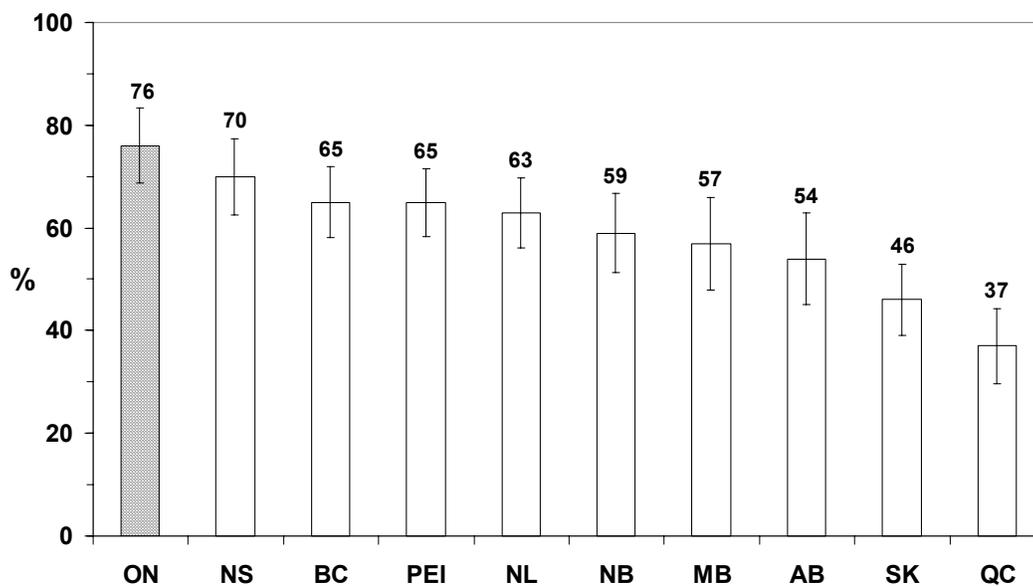
Source: CAMH Monitor 2003.

### Preferences for Light and Mild Cigarettes

In 2003, 76% of adult current smokers in Ontario smoked light or mild cigarettes (Figure 3.20), statistically unchanged from 2002. Women and men were not significantly different in their use of light or mild cigarettes (82% vs. 72%; CTUMS 2003, data not shown). Ontario smokers were significantly more likely to smoke light or mild cigarettes than smokers in Saskatchewan, Manitoba, Alberta, Québec, and New Brunswick ( $p < .05$ ).

Many Ontario adults who used light or mild cigarettes erroneously believed these to be less harmful than regular ones. For instance, in 2003, 23%<sup>iii</sup> believed these cigarettes reduced the amount of tar inhaled, and 19%<sup>i</sup> believed they reduced the health risk of smoking (CTUMS 2003, data not shown).

Figure 3.20: Preference for Light and Mild Cigarettes, by Province, Current Smokers, Age 18+, Canada, 2003



Note: Light and mild cigarettes include “ultra” and “extra” brands. Vertical lines represent 95% confidence intervals.

Source: CTUMS (Annual) 2003.

### Other Tobacco Products

In Ontario, lifetime use<sup>iv</sup> of chewing tobacco, pinch, or snuff among adults was 7%, which was not significantly different from that reported in the rest of Canada (9%). The lifetime use of cigars and pipes by Ontario adults (30% and 12%, respectively) was significantly lower than the use of these products in the rest of Canada (39% and 18%, respectively). Furthermore, significantly more adult men than women have ever used these tobacco products. The current prevalence of use of these tobacco products, as measured by past 30-day use, is not reportable due to Statistics Canada release criteria prohibiting the release of low prevalence estimates (CTUMS 2003, data not shown).

<sup>iii</sup> Interpret with caution, moderate levels of error associated with estimate—Coefficient of Variation (CV) between 16.6% and 33.3%.

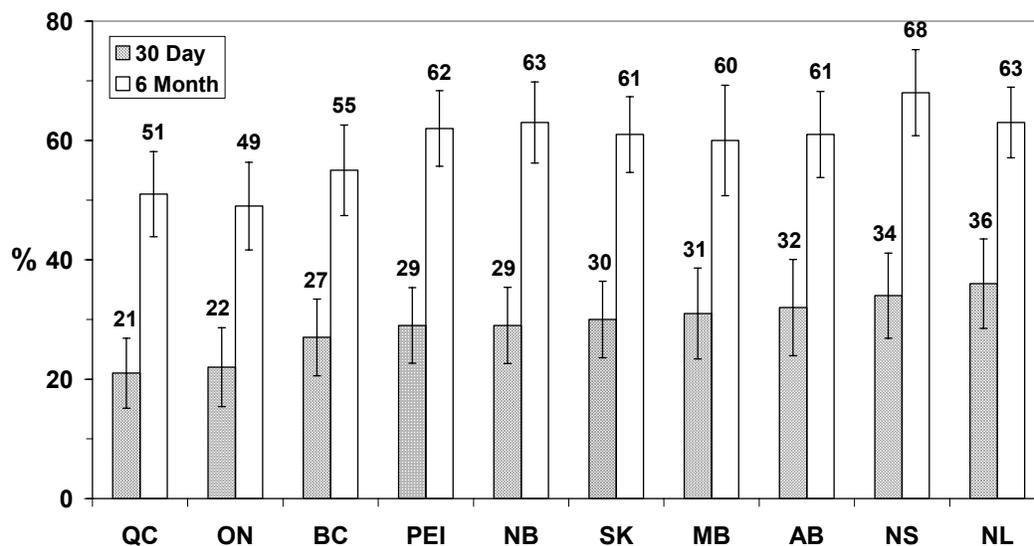
<sup>iv</sup> Refers to any use of tobacco products in one’s lifetime, and does not reflect current prevalence.

## Smoking Cessation

### Intentions to Quit

In 2003, almost half (49%) of Ontario current smokers expressed an intention to quit smoking within six months of their interview; close to one-quarter (22%) indicated a serious intention to quit within 30 days (Figure 3.21). Smokers in Prince Edward Island, Nova Scotia, New Brunswick and Newfoundland had significantly higher 6-month quit intentions than those in Ontario ( $p < .05$ ). However, only smokers in Newfoundland had significantly higher 30-day quit intentions than smokers in Ontario ( $p < .05$ ). In Ontario, 6-month and 30-day quit intentions remained unchanged from 2002 (CTUMS 2003, data not shown).

**Figure 3.21: Intentions to Quit Smoking within Next 30 Days and 6 Months, by Province, Current Smokers, Age 18+, Canada, 2003**



*Note:* Ordered by prevalence of 30-day quit intentions. Vertical lines represent 95% confidence intervals.

*Source:* CTUMS (Annual) 2003.

### Former Smokers

In 2003, just over half of all lifetime ever smokers in Canada (53%) were former smokers (i.e., they had not smoked for one or more years; CTUMS 2003, data not shown).

Nationally, the number one reason former smokers gave for quitting was their own desire to quit (19%); while a significantly lower proportion, 14%, reported the cost of cigarettes as the reason. These findings were similar to those in Ontario, with 21% reporting their desire to quit as the number one reason, and 7%<sup>v</sup> reporting the cost as the second most common reason (CTUMS 2003, data not shown).

### Relapse

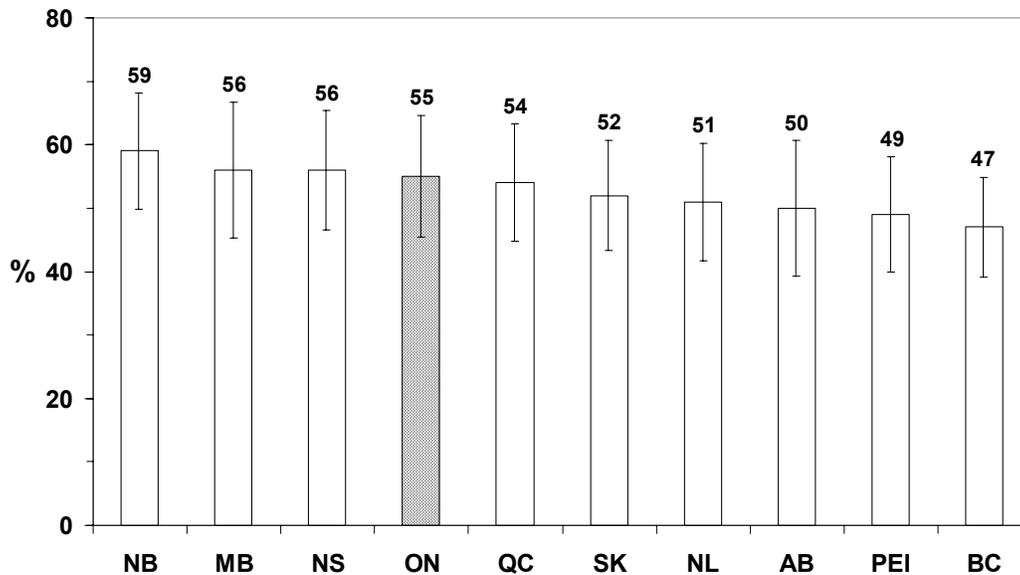
In 2003, 10% of former adult smokers in Ontario reported more than one quit attempt before quitting for good, which was significantly lower than the rest of Canada at 14% ( $p < .05$ ). In Ontario, there were no significant differences between the proportion of men reporting more than one quit attempt as compared to women (11% vs. 8%; CTUMS 2003, data not shown).

<sup>v</sup> Interpret with caution, moderate levels of error associated with estimate—Coefficient of Variation (CV) between 16.6% and 33.3%.

### Physician Advice

Among current smokers who had visited a doctor in the past year, the percent who reported being advised to quit by their physician ranged from a high of 59% in New Brunswick to a low of 47% in British Columbia (Figure 3.22). In Ontario, 55% of current smokers reported being advised to quit smoking by a physician, a rate not significantly different from previous years and similar to other Canadian provinces.

Figure 3.22: Received Physician Advice to Quit Smoking, by Province, Age 18+, Current Smokers Visiting a Doctor in the Past 12 Months, Canada, 2003

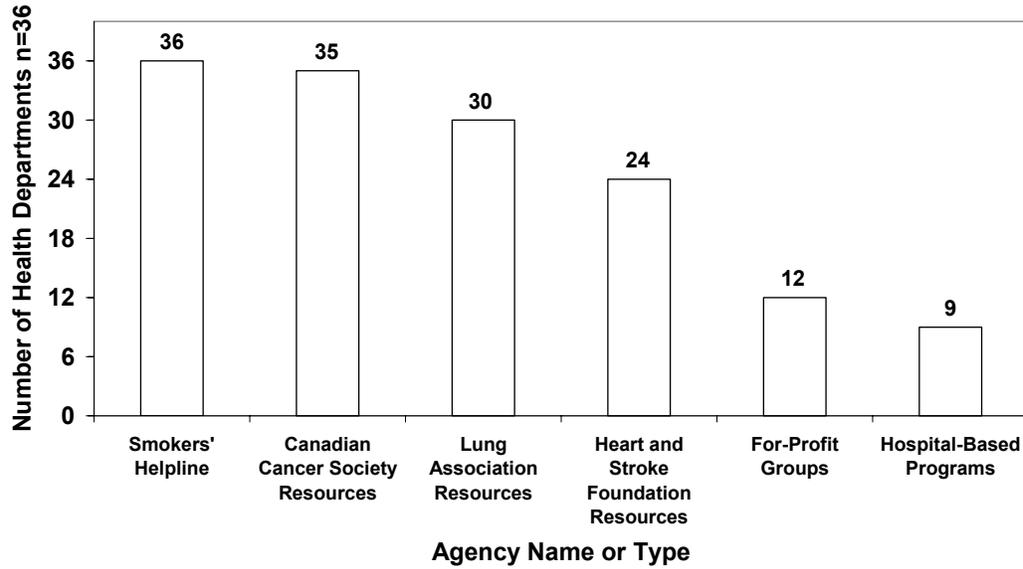


Source: CTUMS (Cycle 2) 2003.

### Availability of Cessation Programs

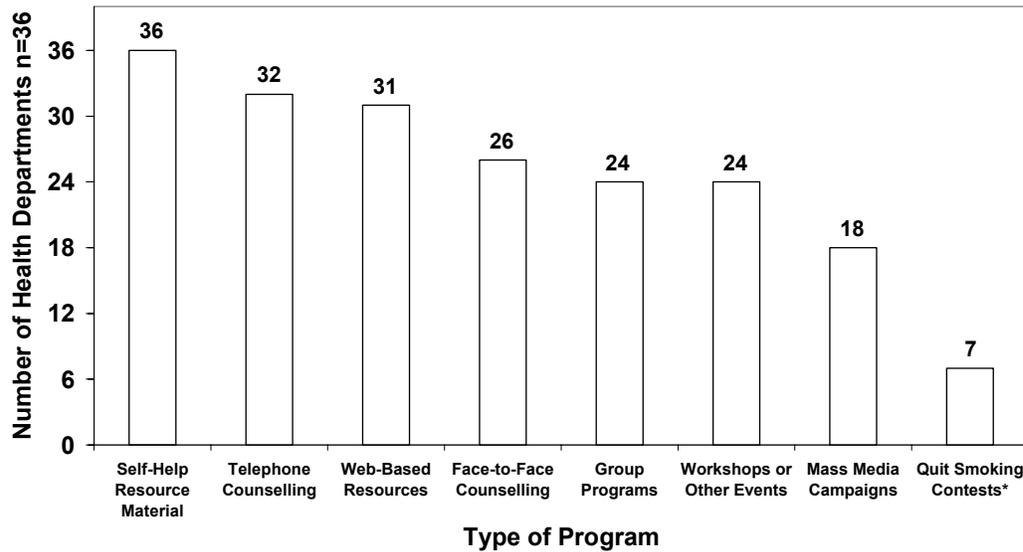
In 2003, all Public Health Departments in Ontario responding to a survey (n = 36 out of 37 Health Departments) offered self-help resource material to aid in smoking cessation (Figure 3.23). Telephone counseling and web-based resources were the next most commonly available cessation programs (32 and 31 Health Departments respectively). In addition, Health Departments were considerably more likely to refer clients to non-governmental organizations for smoking cessation resources programs or support, than to hospital based programs or for-profit groups as these programs may not exist or are scarce for some health departments (Figure 3.24).

Figure 3.23: Smoking Cessation Programs Offered by Public Health Departments, Ontario, 2003\*



\* Interpret with caution. The Province initiated and funded Quit and Win contests in 2002 and 2004 but not in 2003.  
 Source: Provincial Scan of Smoking Cessation Services and Programs (2003): Health Unit Survey.

Figure 3.24: Agency of Referral by Public Health Department for Clients Seeking Smoking Cessation Resources, Ontario, 2003



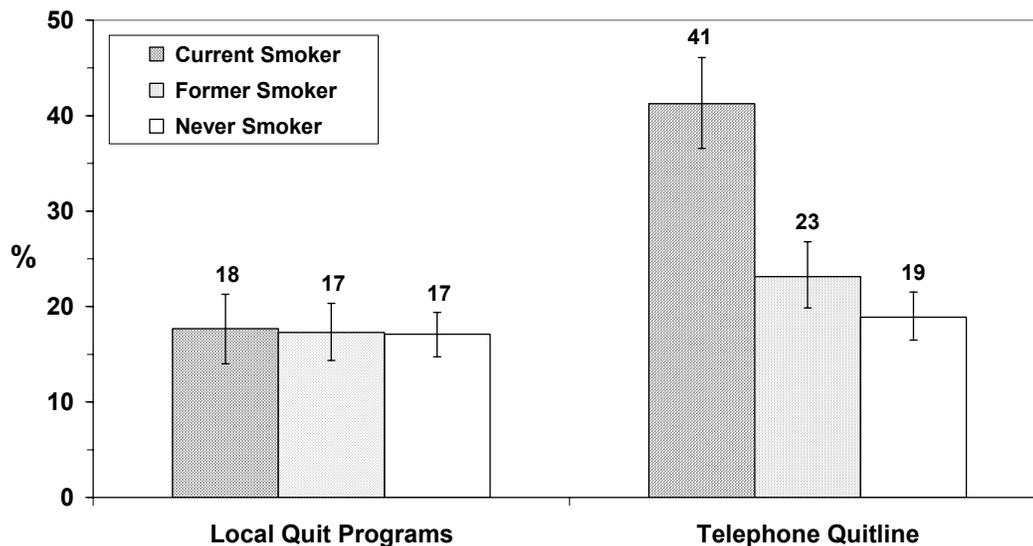
Source: Provincial Scan of Smoking Cessation Services and Programs (2003): Health Unit Survey.

### Awareness of Cessation Programs

In 2003, awareness of the 1-800 Quitline was significantly higher compared to 2002 (25% vs. 19%,  $p < .05$ ). As in previous years, Quitline awareness was also significantly higher than awareness of local quit programs (25% vs. 17%,  $p < .05$ ), with awareness for local quit programs unchanged from 2002 (CAMH Monitor 2003, data not shown).

Current smokers were more likely to be aware of the Quitline than former or never smokers (Figure 3.25). With respect to awareness of local quit programs, there were no reportable differences by smoking status.

**Figure 3.25: Awareness of Smoking Cessation Programs, Past Month Recall, by Smoking Status, Age 18+, Ontario, 2003**



Note: Vertical lines represent 95% confidence intervals.

Source: CAMH Monitor 2003.

In 2003, the percentage of individuals who were aware of cessation programs varied among Ontario’s seven Health Planning Regions (Figure 3.26). Specifically, awareness of the telephone Quitline reached a high of 32% in the North, which was significantly higher than awareness reported in each of the following Health Regions: Toronto (23%), South West (22%), and Central West (22%;  $p < .05$ ). Similarly, the range in awareness for local quit programs peaked in the North at 27%, dropping to a low of 11% in the Toronto Region. Further, the North had significantly higher awareness than Central East (15%), Central South (15%) and the Toronto Health Region ( $p < .05$ ).

### Views of the Tobacco Industry and Its Products

Tobacco industry denormalization —reducing societal acceptance of tobacco products and their manufacturers— is one of several OTS strategic components aimed at reducing cigarette consumption, increasing the number of quit attempts for current smokers, and increasing quit smoking policies.

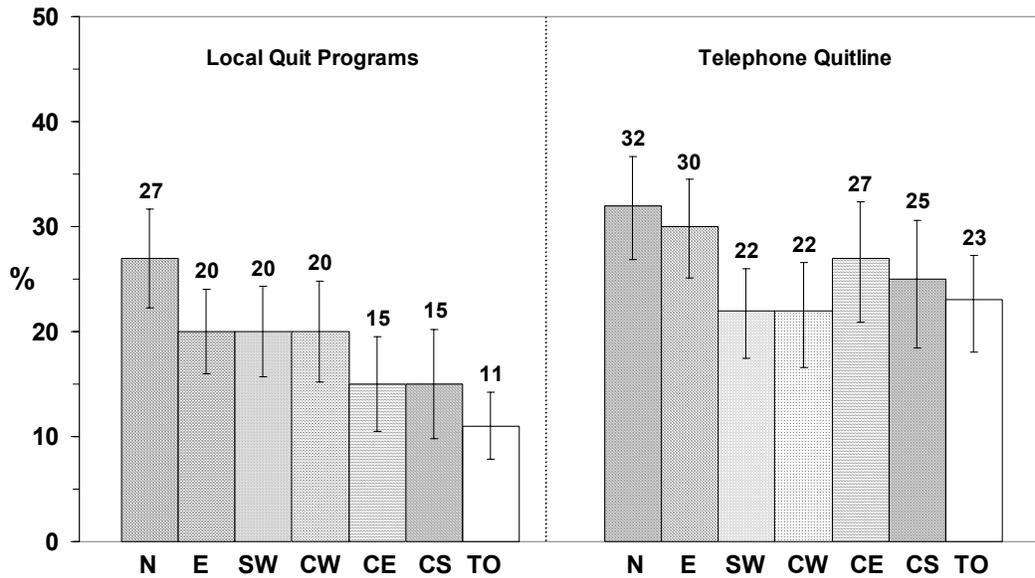
Over two-thirds (70%) of residents in Ontario believe that the tobacco industry either rarely tells the truth or never tells the truth about the effects of smoking on health. This percentage was consistent across age groups, and

sexes. However, only 52% of Ontario residents strongly or somewhat agree that the Ontario government should sue the tobacco companies for health-care costs that result from tobacco smoking (CAMH Monitor 2003, data not shown).

**Point of Sale**

Ontario residents were significantly more likely to agree that tobacco companies should not be allowed to put product displays on or near the sales counter than to disagree (62%, and 33% respectively,  $p < .05$ ; CAMH Monitor 2003, data not shown).

**Figure 3.26: Awareness of Smoking Cessation Programs, Past Month Recall, by Health Planning Region, Age 18+, Ontario, 2003**



*Note:* Health Planning Regions: N = North, E = East, SW = South West, CW = Central West, CE = Central East, CS = Central South, TO = Toronto. Vertical lines represent 95% confidence intervals.

*Source:* CAMH Monitor 2003.

## PROTECTION

### Second Hand Smoke (SHS) in Restaurants and Bars

By the end of March 2004, 8 in 10 Ontarians (80%) were covered by 100% smoke-free restaurant bylaws, and 4 out of 10 Ontarians (40%) were covered by corresponding bar bylaws, which represents a significant improvement over 2003 (Table 3.2). Among the communities covered by 100% smoke-free restaurant bylaws in March 2004, 63% of the population were covered by the bylaws with designated smoking rooms (DSRs), that are enclosed smoking sections separately ventilated to the outdoors. Meanwhile, among the communities covered by 100% smoke-free bar bylaws, 30% of the population were covered by the bylaws with DSRs.

By the end of October 2004, about 9 in 10 Ontarians were covered by 100% smoke-free restaurant and bar bylaws (91% and 87%, respectively; Table 3.2), while among the communities covered by 100% smoke-free restaurant and bar bylaws, 54% of the population were covered by the bylaws with DSRs (for both restaurant and bar bylaws). By January 2006, 92% of Ontarians will be living in communities with smoke-free restaurants and 89% will be in communities with smoke-free bars (based on jurisdictions that have passed, but not yet implemented, smoke-free bylaws), while 52% and 51% of the population will be living in communities covered by 100% smoke-free bylaws with DSRs in restaurants and bars, respectively.

**Table 3.2: Population Covered by Smoke-Free Restaurant and Bar Bylaws, Ontario**

Public Place	March 2003 (%)	March 2004 (%)	October 2004 (%)	January 2006 <sup>a</sup> (%)
Restaurants	63	80	91	92
Bars	24	40	87	89

<sup>a</sup> Passed but not yet implemented.

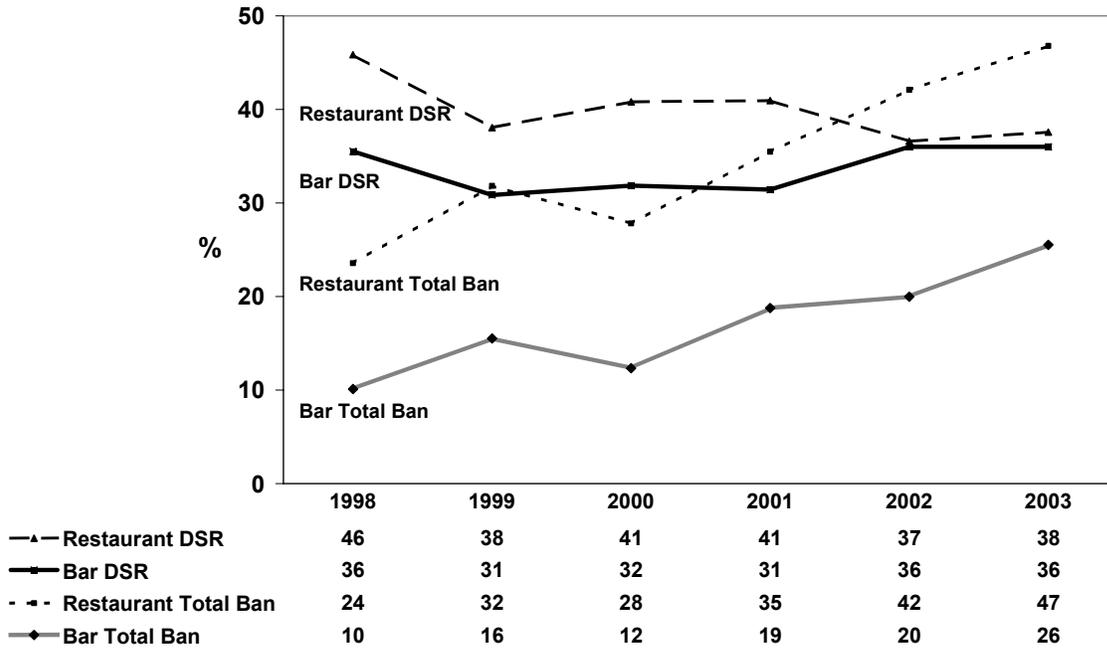
Source: 1. Ontario Campaign for Action on Tobacco  
2. Non-smokers' Right Association

Since 1998, support for complete bans in restaurants and bars has steadily increased, whereas support for bans with DSRs has been relatively stable (Figure 3.27). In 2003, Ontarians were more supportive of total bans and bans with DSRs, in restaurants compared to bars (84% vs. 62%,  $p < .05$ ), a finding consistent with previous years. Support for total bans on smoking in restaurants was higher than that for bans with DSRs, 47% versus 38% ( $p < .05$ ).

In 2003, smoking status predicted support for total smoking bans in restaurants, with current smokers less supportive than either former or never-smokers (30% vs. 44% and 56%, respectively,  $p < .05$ ; CAMH Monitor 2003, data not shown).

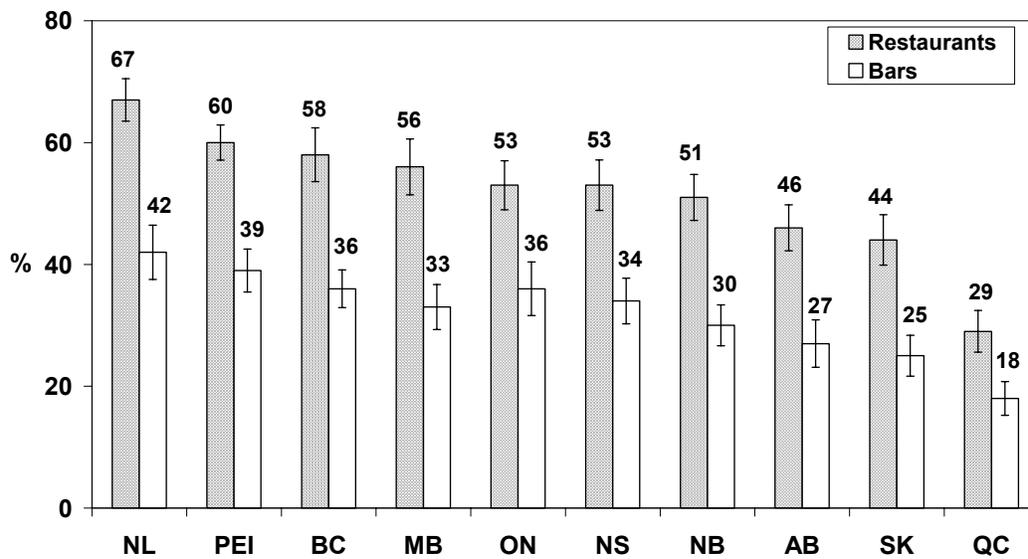
Support for total bans in restaurants and bars varies greatly among the provinces, with Newfoundland being the most supportive (67% and 42%), and Québec the least (29% and 18%; Figure 3.28). Support for bans in restaurants was lower among Ontario residents than residents of Newfoundland and Prince Edward Island (53% vs. 67% and 60%, respectively,  $p < .05$ ).

Figure 3.27: Support for Smoking Restrictions in Restaurants and Bars, Age 18+, Ontario, 1998-2003



Note: DSR = Designated smoking rooms that are enclosed smoking sections, separately ventilated to the outdoors.  
 Source: CAMH Monitor 2003.

Figure 3.28: Support for a Total Ban on Smoking in Restaurants and Bars, by Province, Age 15+, Canada, 2003



Note: Ordered by prevalence of support for total ban in restaurants. Vertical lines represent 95% confidence intervals.  
 Source: CTUMS (Annual) 2003.

## SHS at Work

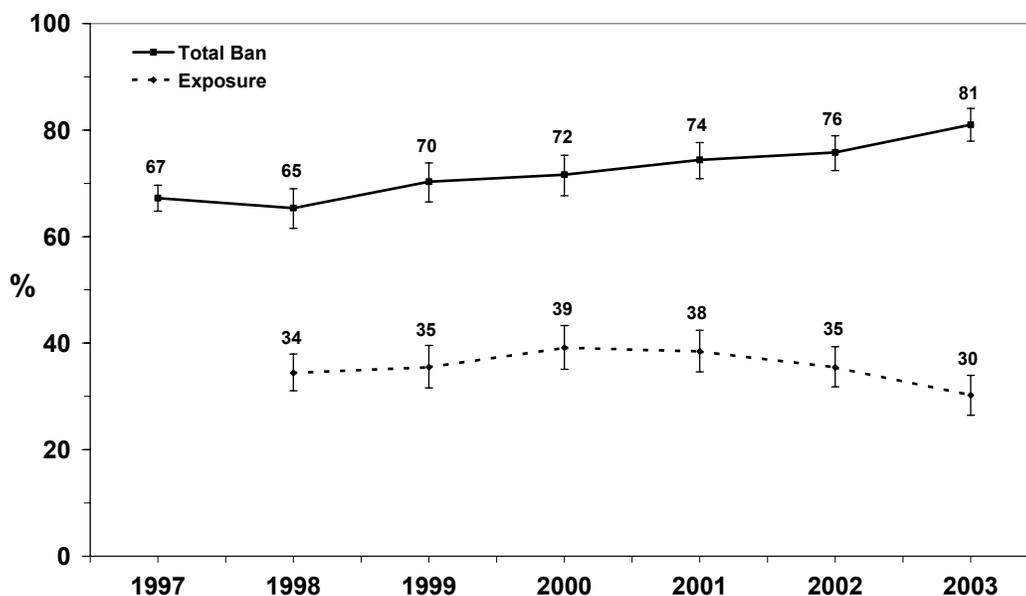
### Rules and Exposure at Work

Since 1997, the proportion of Ontario workers covered by total smoking bans in the workplace increased from 67% to 81% in 2003 (Figure 3.29). Despite the significant year-over-year increase in total smoking bans, 30% of all workers reported some workplace exposure to SHS in 2003 (i.e., for five or more minutes at least once in the past five days); the reported exposure was significantly lower than in 2000 and 2001, but not lower than other years.

Of the 81% of workers reporting a total workplace ban on smoking, 22% indicated being exposed to SHS (significantly lower than 28% reported in 2002), albeit some might have been exposed to tobacco smoke breathed outside during breaks with colleagues (CAMH Monitor 2003, data not shown).

Smoking bans were more common in white-collar workplaces. In Ontario, 84% of professional/managerial occupations worked in environments with a complete smoking ban compared to 81% of those in clerical/sales and 65% of those in trade/farm workers. In recent years, the prevalence of total workplace smoking bans has been relatively stable within these occupation categories (CAMH Monitor 2003, data not shown).

**Figure 3.29: Total Smoking Bans and Reported Workplace SHS Exposure, Workers Age 18+, Ontario, 1997-2003**

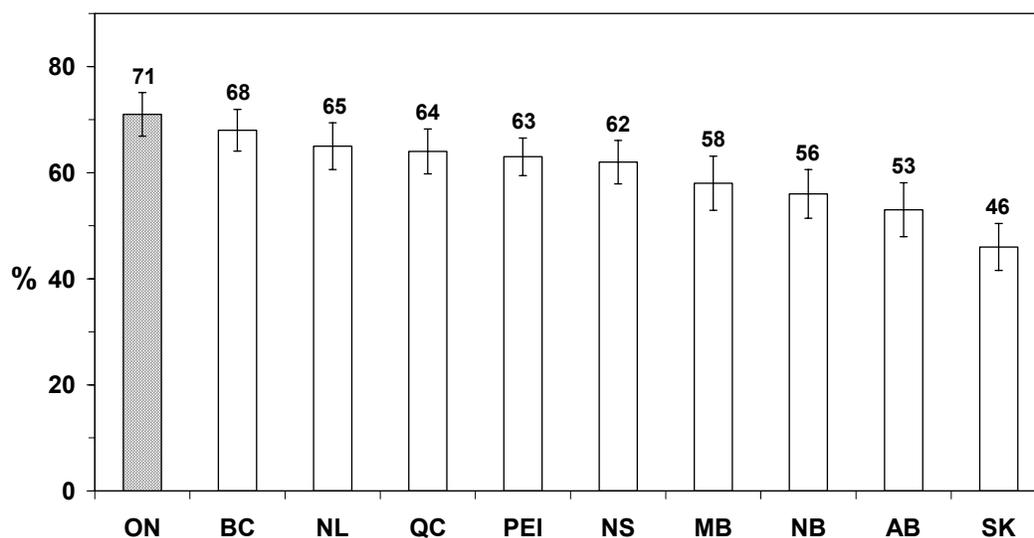


*Note:* Response categories for total ban include “smoking is only allowed outside” and “smoking is not allowed at all.” Vertical lines represent 95% confidence intervals.

*Source:* CAMH Monitor 2003.

The prevalence of total smoking bans at work ranged from a high of 71% in Ontario to a low of 46% in Saskatchewan (Figure 3.30). The percentage point increase from 2002 to 2003 is the highest (15%) in Prince Edward Island (48% in 2002 and 63% in 2003), while the percentage point increase is 2% in Ontario (69% in 2002 and 71% in 2003).

Figure 3.30: Total Smoking Ban at Work, by Province, Workers Age 15+, Canada, 2003



*Note:* Total smoking ban refers to “smoking restricted completely” (no designated areas). Vertical lines represent 95% confidence intervals.  
*Source:* CTUMS (Annual) 2003.

### Support for Smoking Restrictions at Work

In 2003, 88% of Ontario adults supported smoke-free spaces in the workplace (either total smoking bans or DSRs), significantly higher than in 2002 (83%; CAMH Monitor 2003, data not shown). More people supported total bans than DSRs (55% vs. 33%,  $p < .05$ ).

In 2003, smoking status continued to be associated with support for smoking restrictions in workplaces. Significantly more never and former smokers favoured a total ban than current smokers (64% and 55% vs. 36%, respectively). Women were significantly more supportive of total smoking bans in the workplace than men (61% vs. 49%), but this difference by sex disappeared when smoking status was taken into account (CAMH Monitor 2003, data not shown).

### SHS in Homes and in Cars

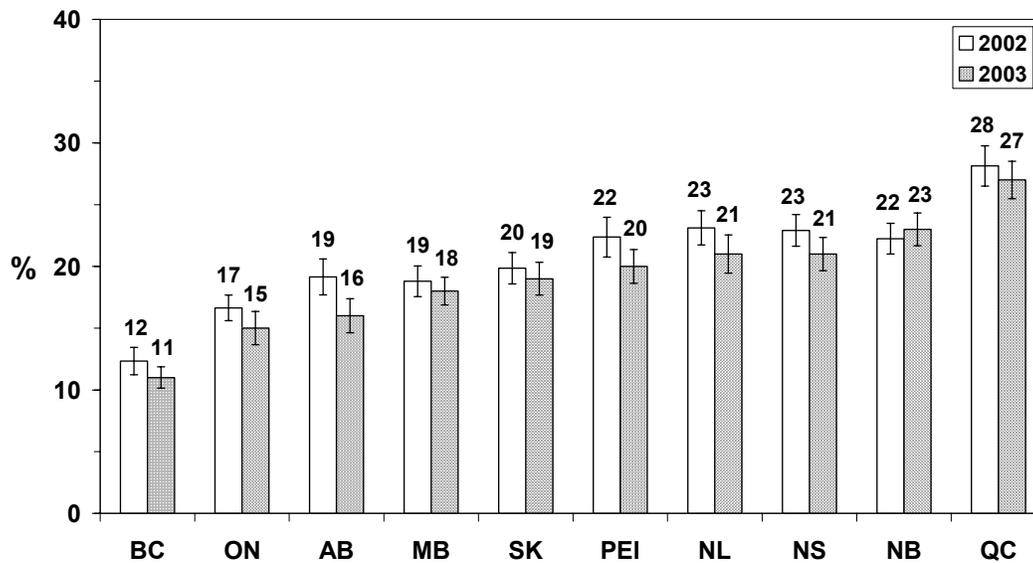
#### Household Exposure

In 2003, household exposure to SHS (family members or visitors smoke inside the home every day or almost every day) varied by province ranging from 11% in British Columbia to 27% in Québec (Figure 3.31). The majority of provinces saw a decrease in exposure from those reported in 2002, although these decreases were not statistically significant. In 2003, family members or regular visitors smoked inside 15% of Ontario households everyday or almost everyday (exposing over 676,000 households). In 2003, 11% of Ontario households with children 0-14 years of age had family members and visitors smoked inside the home every day or almost every day, corresponding to approximately 130,000 Ontarian children exposed to SHS in their homes (CTUMS 2003, data not shown).

### Smoking Restrictions in Homes

In Ontario, among households with no regular smokers, 90% prohibited cigarette smoking in the home (data are not available for households with smokers; CTUMS 2003, data not shown). Among Ontario women who were pregnant in the past five years, 95% were not regularly exposed to household SHS by their partner during their latest pregnancy (CTUMS 2003, data not shown).

**Figure 3.31: Reported Exposure to SHS at Home (Everyday or Almost Everyday), by Province, Households, Canada, 2002 and 2003**



Note: Ordered by 2003 SHS exposure prevalence. Vertical lines represent 95% confidence intervals.

Source: CTUMS (Household, Annual) 2003.

### Support for Smoking Restrictions in Homes and in Cars

Eighty seven percent of Ontario adults believe that parents should not smoke inside the home while small children are present. Moreover, 63% of Ontario adults believe that there should be a law that prohibits parents smoking inside the home if children are living there, which is significantly higher than in 2002 (57%). High support is not limited to non-smokers; indeed, 60% of current smokers are supportive of a law prohibiting smoking inside a car when a child is present, a significant increase from 50% in 2002, although the support among former and never smokers are still significantly higher than current smokers (73% in former smokers and 79% in never smokers,  $p < .05$ ; CAMH 2003, data not shown).

## APPENDIX 3-A: MONITORING METHODS

### Data Sources

#### AC Nielsen Tobacco Compliance Survey, 1995-2000, 2002-3

The *Tobacco Compliance Survey* is a federal survey of tobacco retailers in 10 provinces, focusing on youth access and retailer compliance to federal and provincial laws.<sup>2</sup> Research teams (one minor 15-17 years of age, and one adult) were sent to 5,452 tobacco retail establishments in 30 cities across Canada. The 2002 and 2003 samples were larger than previous years, with five cities (Moncton, Kingston, St. Catharines, Thunder Bay, and Red Deer) added to the core 25 cities sampled in the past (St. John's, Charlottetown, Bathurst, Fredericton, Saint John, Halifax, Sydney, Chicoutimi/Jonquière, Montréal, Québec City, Sherbrooke, Ottawa, Sudbury, Toronto, Windsor, Brandon, Winnipeg, Regina, Saskatoon, Calgary, Edmonton, Medicine Hat, Kelowna, Campbell River/Courtney, and Vancouver). The regional data is useful for understanding the national trend, but care must be taken when comparing results between regions; the survey is not intended as a rating of cross-jurisdictional performance. It was not possible to impose the same controls for age and gender of teens in all of the cities as were placed nationally.

In 2003, the survey was conducted from June to September 2003.<sup>2</sup> This is consistent with collection methods from 1995-1999 and 2002 (2000 data was collected November 3, 2000 through to January 16, 2001). Minors attempted to buy a name brand pack of cigarettes, with clear instructions about how to withdraw from the attempted transaction if retailers were willing to sell. Minors carried no identification and were instructed to be untruthful when asked their age. An adult researcher supervised the minors and collected data relating to posting of mandatory signs and tobacco advertising at point of sale.

#### Canadian Tobacco Use Monitoring Survey (CTUMS)

Health Canada's *Canadian Tobacco Use Monitoring Survey* is a nationwide, tobacco-specific, random telephone survey.<sup>3</sup> Annual data are based on two cycles, the first collected from February to June, and the second from July to December. The sample design is a two-stage stratified random sample of telephone numbers. To ensure that the sample is representative of Canada, each province is divided into strata or geographic areas (Prince Edward Island had only one stratum). As part of the two-stage design, households are selected first and then, based on household composition, one, two, or no respondents are selected. The purpose of this design is, in part, to over-sample individuals 15-24 years of age. In general, CTUMS samples the Canadian population aged 15 and older (excluding residents of the Yukon, Northwest Territories, Nunavut, and full-time residents of institutions). There were 47,982 households (87.0% response rate) and 21,300 individuals (87.0% response rate) who participated in the 2003 survey. Sample allocation is approximately equal across the provinces, except for British Columbia (3,200 individuals participated in the survey), while 2,103 Ontarians participated in the survey (a 89.4% response rate). All survey estimates were weighted and variance estimates were calculated based on procedures outlined in the 2003 CTUMS technical documentation.

#### Centre for Addiction and Mental Health Monitor (CAMH Monitor)

The Centre for Addiction and Mental Health's *CAMH Monitor* is an Ontario-wide, random telephone survey, focusing on addiction and mental health issues.<sup>4</sup> Administered by the Institute for Social Research at York University, this ongoing monthly survey has a two-stage probability selection design. In 2003, the survey sample of 2,411 represents 9,118,084 Ontario residents aged 18 and older, excluding people in prisons, hospitals, military establishments, and transient populations such as the homeless. The response rate was 58%. The CAMH Monitor replaced earlier surveys at the Centre including the *Ontario Alcohol and Other Drug Opinion Survey* (1992-1995) and the *Ontario Drug Monitor* (1996-1999). Reported trend data are based on all of these surveys, which used similar questions and sampling methods. All survey estimates were weighted, and variance estimates and statistical tests were corrected for the sampling design.

### **Ontario Student Drug Use Survey (OSDUS)**

The Centre for Addiction and Mental Health's *Ontario Student Drug Use Survey* is a province-wide survey.<sup>5</sup> It has been running since 1977 and is currently conducted every two years (in the spring) by the Institute for Social Research at York University. The 2003 survey used a two-stage (school, class) cluster sample design and sampled 6,616 students from 37 public and Catholic school boards; 126 schools, and 383 classes in elementary and secondary school grades participated (i.e., grades 7 to 12). Students enrolled in private schools, special education classes, those institutionalized for correctional or health reasons, those on Indian reserves and Canadian Forces bases, and those in the far northern regions of Ontario were not included in the target population. These exclusions comprise approximately 7% of Ontario students. The survey sample represented about 970,000 students in Ontario. The student response rate was 72%. All survey estimates were weighted, and variance estimates and statistical tests were corrected for the complex sampling design.

### **Youth Smoking Survey**

The first national *Youth Smoking Survey* (YSS) was conducted by Statistics Canada in 1994.<sup>6</sup> The two components of the survey included children aged 10 to 14 who were surveyed at school and youth aged 15 to 19 who were interviewed at home, by telephone. Health Canada repeated the school portion of the 1994 *Youth Smoking Survey* in 2002. The 1994 and 2002 survey coverage exclude residents from the Yukon, Northwest Territories, Nunavut, as well as persons living on Indian Reserves, inmates of institutions, attendees of special schools (schools for the deaf or blind), and those attending a school on a military base.

The survey was administered to a sample of children in grades 5 to 9 (in Québec primary school grades 5 and 6 and secondary school grades 1 to 3) by sampling classes from a frame of all public and private schools in Canada.<sup>6</sup> A two-stage stratified clustered design was utilized as the sampling design, with schools as primary sampling units and with classes as secondary sampling units. There were 19,018 students who participated in the survey and Ontario's student response rate was 77%. All survey estimates were weighted, and variance estimates were calculated based on procedures outlined in the 2002 Youth Smoking Survey – User Guide.

### **Ontario Tobacco Research Unit Monitoring & Evaluation Series**

In the subsequent text, comparisons are sometimes made among several years of survey data. Generally, these data are reported in the text or in accompanying figures or tables. On occasion, statements are made comparing current year data with that previously reported. If these data are not presented in the text, it should be understood that previously reported data refer to that found in past Annual Monitoring Reports released by the Ontario Tobacco Research Unit.<sup>7</sup>

### **Strengths and Weaknesses of Surveys**

Each of the surveys described has its own particular strengths, and we draw on these in the preceding presentation. For instance, because of the period over which the CAMH surveys have been conducted (1977 for OSDUS and since 1991 for the CAMH Monitor), trend data on provincial smoking behaviour is unsurpassed. Additionally, OSDUS and the CAMH Monitor provide sub-provincial (i.e., regional) estimates. Although CTUMS is a fairly new survey (1999), its strengths are its breadth of tobacco-specific questions, including knowledge, attitudes, and behaviours, and the opportunity it affords to make inter-provincial comparisons. AC Nielsen provides estimates of compliance among various types of retailers; however, the precision of these estimates is unknown.

Direct comparison of results from different surveys may not always be appropriate because the surveys employ different methodologies (e.g., school-based vs. telephone surveys) and can have different question wording and response categories. Moreover, the population of interest (e.g., people aged 12 or over vs. people aged 15 or over), purpose of survey, and response rates of the surveys can vary. To aid the reader, figures and tables depicting survey data are accompanied by a detailed title, which typically provides information on the survey question,

population of interest, age, and survey year. Figures and tables also have data sources listed in figure and table notes.

## Estimating Population Parameters

Sample surveys are designed to provide an *estimate* of the true value of a particular characteristic in the population such as the population's average tobacco-related knowledge, attitudes, and behaviours (e.g., the percentage of Ontario adults who report using cigarettes in the past month). Because not everyone in a province is surveyed, the true population value is unknown and is therefore estimated from the sample. Sampling error will be associated with this estimate. A *confidence interval* provides an interval around survey estimates and contains the true population values with a specified probability. In this report, 95% confidence intervals are used, which means that there is a 95% probability that the given confidence interval will contain the true value of the quantity being estimated. For instance, if the prevalence of current smoking among Ontario adults on Survey A is 25% and the confidence interval is 22% to 28%, there is a 95% probability that the true value in the population falls between 22% and 28% ( $25\% \pm 3$ ).

It is equally true that an estimate of 20% ( $\pm 3$ ) from Survey A is no different from a 25% ( $\pm 4$ ) estimate from Survey B (assuming both Survey A and B ask the same question). This occurs because the upper limit on Survey A's estimate ( $20 + 3 = 23\%$ ) overlaps with the lower limit on Survey B's estimate ( $25 - 4 = 21\%$ ), albeit, a formal test of significance might prove otherwise. This argument holds for comparisons of estimates from different survey years, and between groups within the same survey (e.g., prevalence of smoking between men and women). To aid the reader in making comparisons, 95% confidence intervals are provided where possible. Note that when comparing more than two groups (e.g. provinces or regions), comparisons of the lowest rate with the highest can be misleading if standard tests of significance are used. Multiple comparison procedures can adjust for the number of means or proportions in a set that are being compared to provide a more formal testing procedure. Such comparisons have not been done in these reports, so caution should be exercised when looking at differences across several settings.

## Formal Tests of Significance

A significant difference refers to a difference between two (or more) group estimates that is not likely due to chance. Specifically, a difference significant at the 5% level is one for which differences as extreme, or more extreme, would occur by chance alone less than 5% of the time if the *true values* in the two groups were the same.

Formal tests of statistical significance have not always been performed. One should therefore interpret trend data (e.g., differences in yearly estimates) and comparisons between two or more estimates (e.g., men and women) with caution. When a formal significance test has been conducted, significance is indicated in the text by a probability statement, such as  $p < .05$ . Statements of significance that do not include a specified probability are based on non-overlapping confidence intervals.

In some figures we have used '?' to indicate interpret with caution due to moderate level of error associated with estimate — Coefficient of Variation (CV) between 16.6% and 33.3%.

## Smoking Status Definitions

Definitions are given for only those categories of smoking status referred to in this report. CTUMS definitions have been derived by OTRU and do not necessarily reflect those used by Health Canada, especially for "current" and "daily" smoker.

### Current Smoker

- CAMH Monitor - Someone who presently smokes daily or occasionally, or has smoked at least 100 cigarettes in his or her life and smoked within the last 30 days.
- CTUMS - Someone who has smoked at least 100 cigarettes in his or her life and smoked within the last 30 days (a daily or occasional smoker). (Health Canada does not use the 100-cigarette criterion.)
- OSDUS - Someone who has smoked at least 100 cigarettes in his or her life and smoked within the last month.

### Daily Smoker

- CAMH Monitor - Someone who is a current smoker (i.e., smoked at least 100 cigarettes in his or her life and some within the last 30 days) and presently smokes daily.
- CTUMS - Someone who has smoked at least 100 cigarettes in his or her life and smoked daily within the past 30 days.
- OSDUS - Someone who has smoked one or more cigarettes daily during the past 12 months.

### Occasional Smoker

- CAMH Monitor - Someone who is a current smoker (i.e., smoked at least 100 cigarettes in his or her life and some within the last 30 days) and presently smokes on occasion, but not daily.
- CTUMS - Someone who is a current smoker (i.e., smoked at least 100 cigarettes in his or her life, some during the past 30 days) and presently does not smoke every day.

### Experimental Smoker

- OSDUS - Someone who has smoked more than one and less than 99 cigarettes in his or her life.

### Former smoker

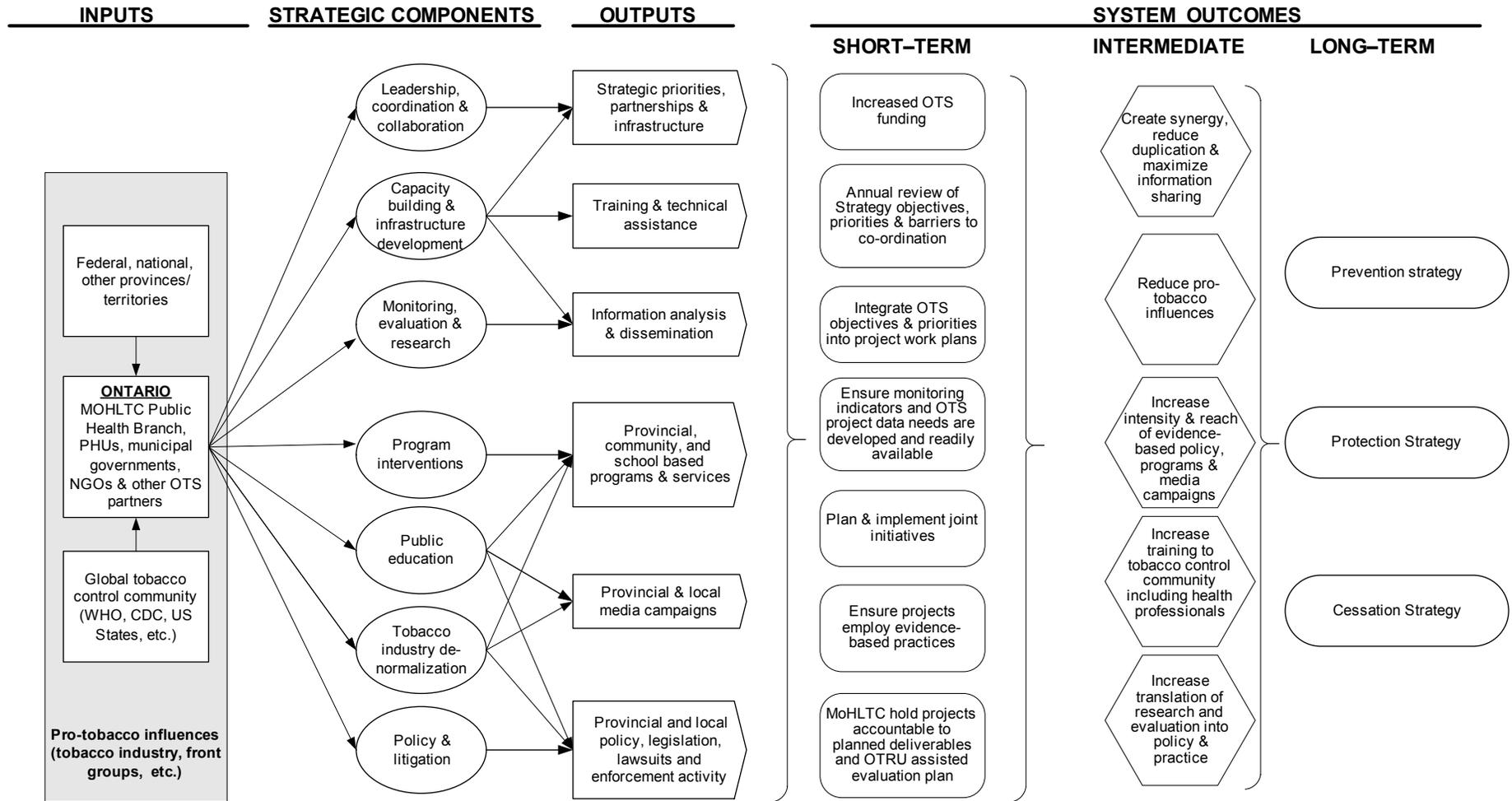
- CAMH Monitor - Someone who has smoked at least 100 cigarettes in his or her life, but has not smoked for at least one year.
- CTUMS – Someone who has smoked at least 100 cigarettes in his or her life, but has not smoked for at least one year.
- OSDUS – Someone who has smoked at least 100 cigarettes in his or here life, but none in the last month.

### Ever smoker

- CTUMS – Someone who has smoked at least 100 cigarettes in his or her life (current and former smokers).

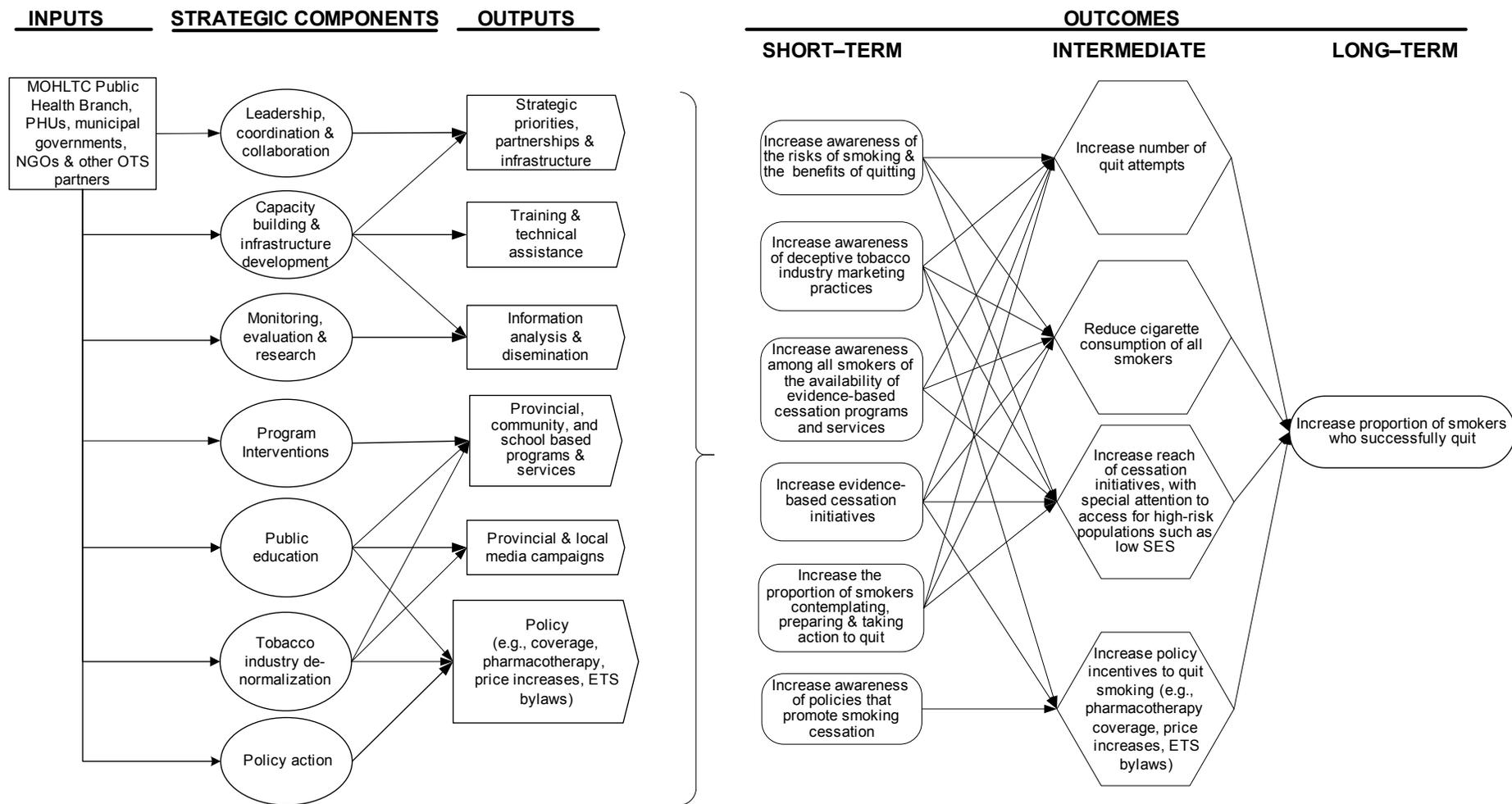
# APPENDIX 3-B: LOGIC MODELS

**OVERALL SYSTEM LOGIC MODEL OF THE ONTARIO TOBACCO STRATEGY**  
**STRATEGY GOAL: To Eliminate Tobacco Related Illness and Death**



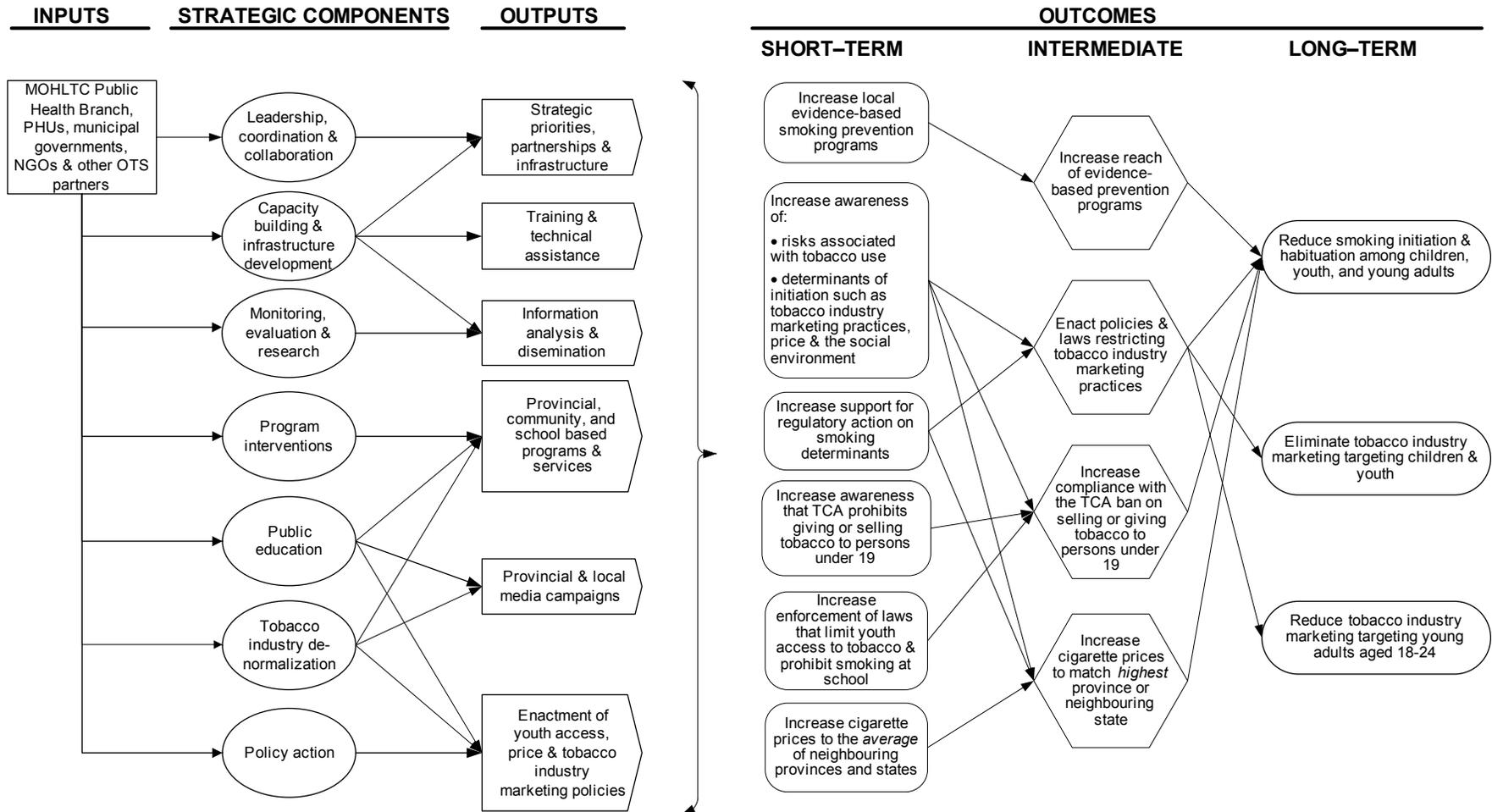
# CESSATION LOGIC MODEL OF THE ONTARIO TOBACCO STRATEGY

**GOAL: Reduce Smoking in Ontario in order to Eliminate Tobacco Related Illness and Death**



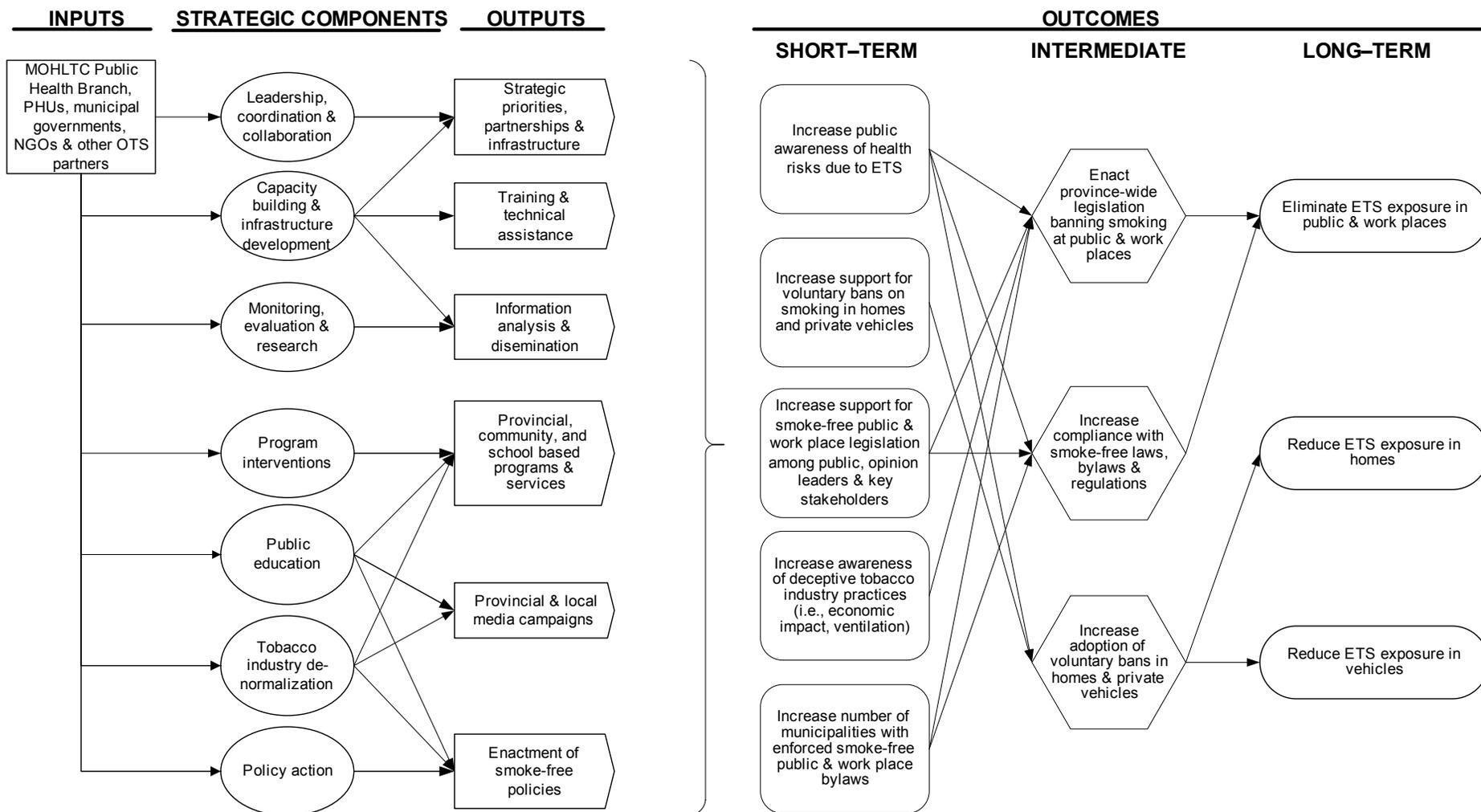
## PREVENTION LOGIC MODEL OF THE ONTARIO TOBACCO STRATEGY

**GOAL: Prevent Smoking Initiation and Habitual Use among Children, Youth, & Young Adults in order to Eliminate Tobacco Related Illness and Death**



## PROTECTION LOGIC MODEL OF THE ONTARIO TOBACCO STRATEGY

**GOAL: Eliminate Involuntary Exposure to Environmental Tobacco Smoke (ETS) in order to Eliminate Tobacco Related Illness and Death**



## REFERENCES

- <sup>1</sup> Heatherton, T.F., Kozolwski, L., Frecker, R.C., Rickert, W., & Robinson, J. Measuring the heaviness of smoking: using self-reported time to the first cigarette of the day and number of cigarettes smoked per day. *British Journal of Addiction*, 1989; 84: 791-799.
- <sup>2</sup> AC Nielsen. Evaluation of Retailers' Behaviour Towards Certain Youth Access-to-Tobacco Restrictions. Final Report of Findings: 2002. Toronto, ON: AC Nielsen, 2002.
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- <sup>6</sup> Statistics Canada. 2002 Youth Smoking Survey – User Guide. Ottawa, ON: Special Surveys Division, 2002.
- <sup>7</sup> Ontario Tobacco Research Unit. Monitoring and Evaluation Series, 1999 – 2003 [Special Reports (Vol. 5-9)]. Available at: [http://www.otru.org/special\\_reports.html](http://www.otru.org/special_reports.html). Accessed on: February 23, 2003.