

# Indicators of Smoke-Free Ontario Progress

Ontario Tobacco Research Unit

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## PREFACE

*Indicators of Smoke-Free Ontario Progress* is the second of three reports in this year's *Monitoring and Evaluation Series*. The main sections in this second report have been organized according to Smoke-Free Ontario Strategy goals of prevention, cessation, and protection. The report presents surveillance data from a variety of sources, which informs progress toward each of these goals.

The full *Monitoring and Evaluation Series* for 2005-2006 consists of:

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

**Number 2: *Indicators of Smoke-Free Ontario 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: *Smoke-Free Ontario Progress and Implications***—a discussion of the implications of the findings in the previous two reports.

## ACKNOWLEDGEMENTS

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The monitoring and evaluation activities of the Ontario Tobacco Research Unit (OTRU) are conducted under the guidance of John Garcia, Director of Evaluation, and Robert Schwartz, Associate Director of Evaluation.

The interpretation and opinions expressed in this report are the responsibility of OTRU's Director of Evaluation and participating staff:

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## MACRO INDICATORS OF THE SMOKE-FREE ONTARIO STRATEGY

### Health Burden

As mentioned in Report 1 of this Series, in Ontario as in the rest of Canada, smoking remains the leading cause of morbidity and premature mortality. Tobacco use also poses a substantial economic burden to the people of Ontario, both in terms of direct costs, such as healthcare, and indirect costs related to productivity losses resulting from disability and premature death.

In 2002, the total economic cost of tobacco use in Ontario was almost \$6.1 billion (Table 2-1).<sup>1,2</sup> Productivity losses accounted for the largest share of this cost (over 73%). Direct healthcare costs accounted for the second largest share of total costs (almost 26%). These direct costs are related to the treatment of illness resulting from smoking, including acute care hospitalization, ambulatory care, family physician visits and prescription drug costs.

In 2002, healthcare was the biggest single direct cost associated with tobacco use in Ontario (and Canada). Fire damage attributable to tobacco use (\$33.2 million) combined with losses associated with the workplace (\$0.2 million) account for about 1% of the total other direct costs in Ontario in 2002.

**Table 2.1: Economic Costs of Tobacco Use, in Millions of Dollars, 2002**

Costs	Ontario	Canada
Direct healthcare costs	1,553.1 (25.6%)	4,360.2 (25.7%)
Direct cost for prevention and research	30.0 (0.5%)	78.1 (0.5%)
Other direct costs	33.4 (0.6%)	87.0 (0.5%)
Indirect costs: productivity losses	4,440.6 (73.3%)	12,470.9 (73.4%)
Total*	6,057.2 (100%)	16,996.2 (100%)

\* Cost components may not add to totals due to rounding.  
Source: Canadian Centre on Substance Abuse 2006.

### Tax and Price

The cost of tobacco use in Ontario exceeded government revenue obtained by taxing tobacco products (e.g., \$6.1 billion in total costs, which includes \$1.55 billion in direct healthcare costs in 2002 vs. \$1.2 billion in tobacco tax revenue in 2002-2003 fiscal).

Increasing the tax on cigarettes to the provincial and territorial average is a short-term objective of the Smoke-Free Ontario Strategy. In February 2006, the Ontario provincial tobacco tax on a carton of 200 cigarettes was raised by \$1.25. This increase brought the tax level on a carton of 200 cigarettes to \$24.70, which is still below

<sup>1</sup> Rehm J, Baliunas D, Brochu S, Fischer B, Gnam W, Patra J, et al. *The Costs of Substance Abuse in Canada 2002*. Ottawa, ON: Canadian Centre on Substance Abuse; 2006. (ISBN number 1-897321-10-4.) Available from: [http://www.ccsa.ca/CCSA/EN/Research/Research\\_Activities/TheCostsofSubstanceAbuseinCanada.htm](http://www.ccsa.ca/CCSA/EN/Research/Research_Activities/TheCostsofSubstanceAbuseinCanada.htm)

<sup>2</sup> Some costs associated with tobacco use were not included in this study. For instance, no enforcement estimates of tobacco-related crime are included. Private costs are also not included such as the cost of purchasing tobacco or nicotine replacement therapies to treat tobacco addiction.

that of all the other provinces and territories, except Québec (Table 2.2). Taxes in Ontario are \$9.60 lower than the average tax level of the other provinces and territories (\$34.30). Taxes on a carton of 200 cigarettes in Ontario are \$17.44 lower than in Newfoundland, which has the highest tax rate among the provinces and territories at \$42.14.

Ontario also has the second lowest price for a carton of 200 cigarettes in Canada at \$71.45 (Table 2.2). Only Québec is lower at \$64.77. The Northwest Territories has the highest price at \$94.78, \$23.33 higher than the price in Ontario. Ontario's price is \$11.22 lower than the simple average of the other provinces and territories (\$82.67).

**Table 2.2: Price and Tax on a Carton of 200 Cigarettes, by Provinces and Territories, August 2006**

Jurisdiction	Total Tax	Retail Price	Tax as % of Price
Newfoundland	\$42.14	\$87.53	48%
Northwest Territories	\$42.00	\$94.78	44%
Manitoba	\$40.39	\$87.02	46%
Saskatchewan	\$40.39	\$87.01	46%
Nova Scotia	\$36.81	\$82.21	45%
British Columbia	\$35.80	\$85.56	42%
Prince Edward Island	\$34.90	\$82.76	42%
Alberta	\$32.00	\$78.45	41%
Nunavut	\$31.20	\$91.12	34%
New Brunswick	\$28.98	\$78.16	37%
Yukon	\$26.40	\$72.73	36%
ONTARIO	\$24.70	\$71.45	35%
Québec	\$20.60	\$64.77	32%
Canada, less ON (average)	\$34.30	\$82.67	41%

*Note:* Tax includes provincial or territorial tobacco tax and PST, where applicable. Ontario excluded from average. Jurisdictions ordered by tax.

*Sources:* Statistics Canada (Price) 2006, Finance Canada (Tax) 2006, Ontario Tobacco Research Unit (secondary data analysis).

## Tobacco Sales

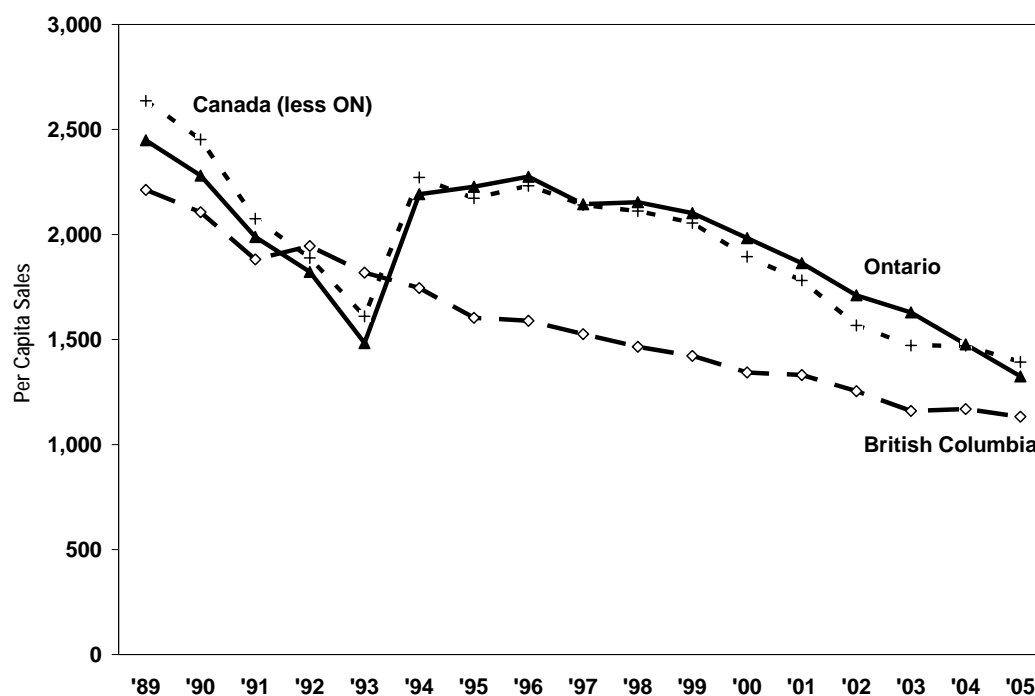
### Per Capita Cigarette Sales

The Ontario government has committed to reduce per capita cigarette sales by 20% for the period 2003 to the end of 2007.<sup>3</sup> Compared to 2003, per capita sales had already fallen by 18.7% by the end of 2005 (1629 cigarettes sold per capita in 2003 vs. 1325 in 2005). This represents 2.6 billion fewer cigarettes sold in Ontario.

In 2005, per capita cigarette sales in Ontario fell below average sales reported in the rest of Canada for the first time since 1994 (Figure 2.1). In 2005, British Columbia had the lowest rate of per capita sales (1133 vs. 1325 in Ontario).

<sup>3</sup> [http://www.mhp.gov.on.ca/english/health/smoke\\_free/background.asp](http://www.mhp.gov.on.ca/english/health/smoke_free/background.asp) (March 2, 2006)

Figure 2.1: Per Capita Cigarette Sales, by Select Provinces and National Average (Less Ontario), 1989-2005



*Note:* Cigarette sales include cigarettes and fine cut and domestic and imported sales.

*Source:* Health Canada (sales), Statistics Canada (population), Ontario Tobacco Research Unit (secondary data analysis).

## Smokeless Tobacco Sales and Use

Smokeless tobacco, sometimes referred to as spit tobacco, is chew tobacco and snuff taken orally (or nasally). In Ontario, wholesale sales of smokeless tobacco have remained low and virtually unchanged in recent years, which reflects no overall market growth in this sector. For instance, sales were 43,541 kilograms in 2003, 46,364 kilograms in 2004, and 44,723 kilograms in 2005. Per capita sales of smokeless tobacco in Ontario were relatively constant, ranging from 4 to 5 kilograms per capita. It should be noted, however, that the use of smokeless tobacco is a particular concern in some regions of the province where anecdotal evidence and survey data suggest a possible increase in use among youth. From a surveillance perspective, one consideration is whether smokeless tobacco use refers to lifetime use, past year use, or current use (typically defined as past 30 day use). The prevalence of current use is more interpretable than is use for a longer duration (e.g., lifetime or past year use), which does not necessarily reflect recent use. In Canada, among youth aged 15-24, the prevalence of current use of smokeless tobacco in the past 30 days was 1% (CTUMS 2005; data for Ontario do not meet release criteria due to small numbers). When asked about having ever used smokeless tobacco, 8% of youth aged 15-24 in Ontario said they had tried these products (CTUMS 2005). Among youth in grades 5-9, 3% said they had seriously thought about using smokeless tobacco (YSS 2004-2005).<sup>4</sup>

<sup>4</sup> This estimate must be interpreted with caution because of a moderate level of error associated with estimate—Coefficient of Variation (CV) between 16.6% and 33.3%.

## PREVENTION

This goal of the Smoke-Free Ontario Strategy aims to prevent smoking initiation and regular use among Ontario's children, youth and young adults to eliminate tobacco-related illness and death among Ontarians.

### Youth Smoking

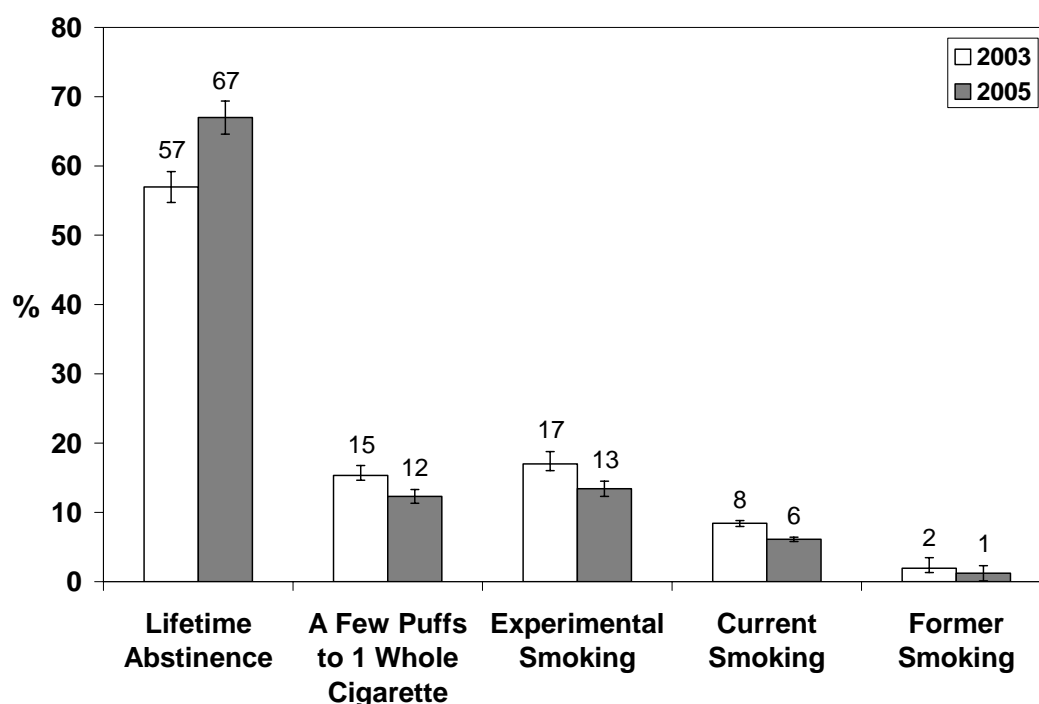
Two of the long-term objectives of the Strategy focus on reducing the prevalence and the initiation of tobacco use among children (<15 years), youth (15-19 years) and young adults (20-24 years).

#### Lifetime Smoking Behaviour

From 2003 to 2005, the percentage of students in Ontario who had never taken a puff of a cigarette (lifetime abstinence) increased significantly from 57% to 67% ( $p < .05$ ; Figure 2.2). In 2005, the prevalence of lifetime abstinence from smoking significantly decreased with grade (90% in grade 7 vs. 49% in grade 12;  $p < .05$ ). The prevalence of lifetime abstinence did not vary by sex (OSDUS 2005, data not shown).

In 2005, 12% of students smoked from a few puffs to one whole cigarette, a significant decrease from 15% in 2003 ( $p < .05$ ). Similarly, the prevalence of experimental smoking (i.e., less than 100 cigarettes in their lifetime) decreased from 17% in 2003 to 13% in 2005 ( $p < .05$ ). Both smoking behaviours increased with grade in 2005. The prevalence of students who took a few puffs of a cigarette ranged from 6% in grade 7 to 16% in grade 12, and the prevalence of experimental smoking ranged from 3% in grade 7 to 20% in grade 12. Neither the prevalence of puffing nor the prevalence of experimental smoking varied by sex (OSDUS 2005, data not shown).

Figure 2.2: Lifetime Smoking Behaviour, by Year, Grades 7-12, Ontario, 2003 and 2005



Note: Vertical lines represent 95% confidence intervals.

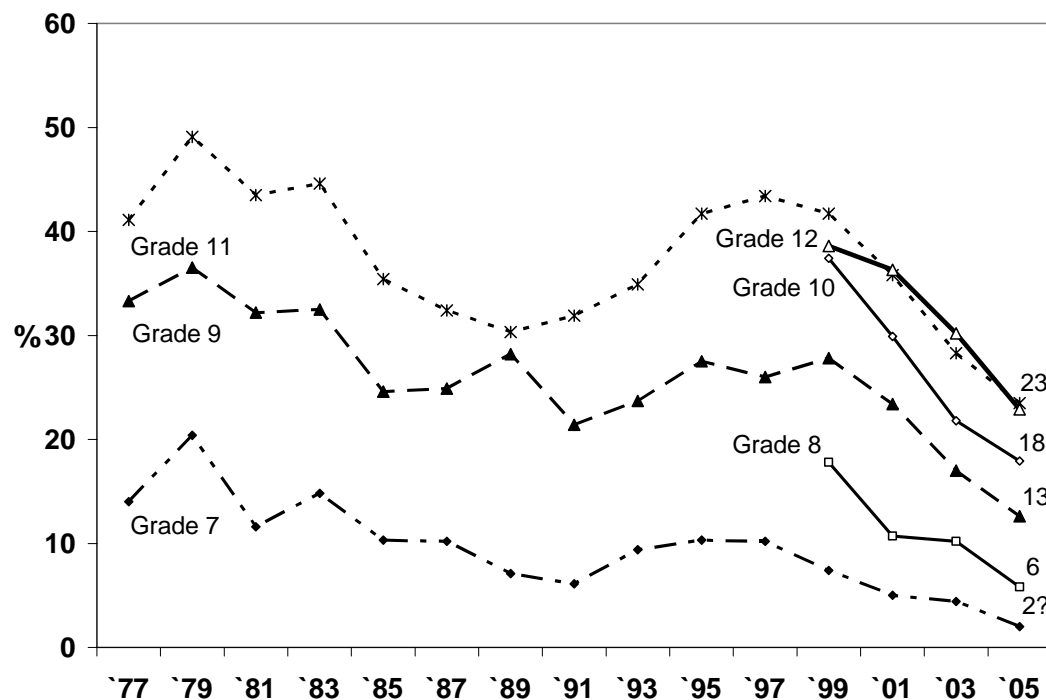
Source: OSDUS 2005.

About 7% of students had smoked more than 100 cigarettes in their lifetime in 2005, with 6% having smoked in the past 30 days and 1% smoking abstinent for the past 30 days (i.e., current smokers and former smokers, respectively).

### Current Smoking

In 2005, rates of past year smoking among Ontario students continued to increase as students advanced in school, from 2% in grade 7 to 23% in grade 12 (Figure 2.3). While rates appear to decrease in all grades since the previous survey in 2003, only the decrease among grade 12 students, from 30% to 23% ( $p < .05$ ), was significant. Overall, the prevalence of smoking more than one cigarette in the past year among all students in grades 7 to 12 decreased from 19% in 2003 to 14% in 2005 ( $p < .05$ ; OSDUS 2005, data not shown).

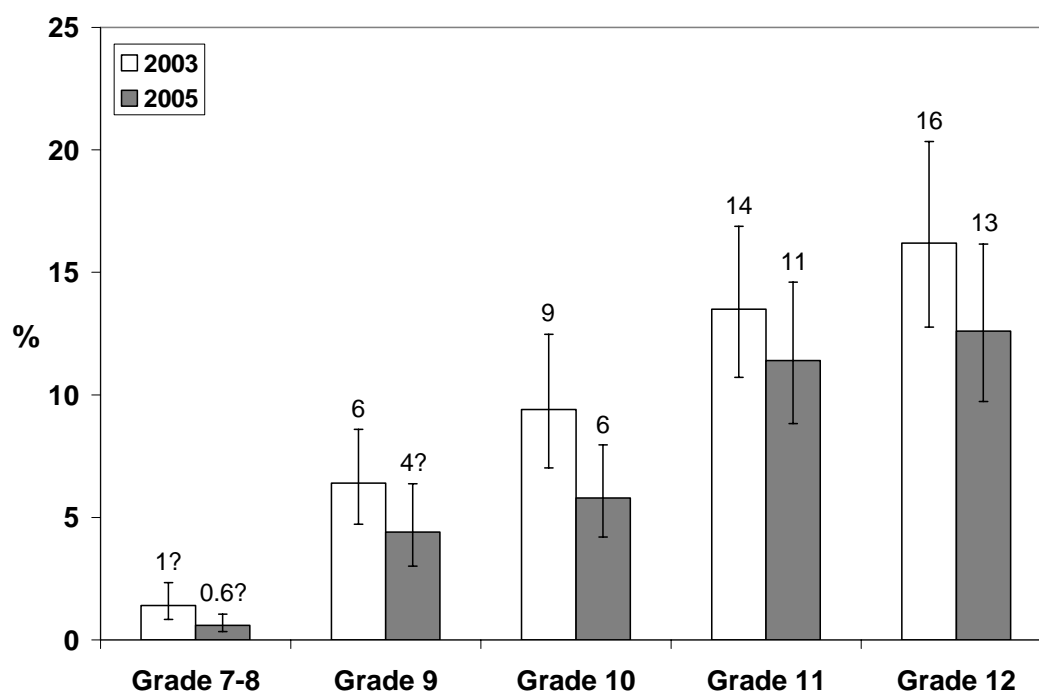
**Figure 2.3: Past Year Smoking, by Grades 7-12, Ontario, 1977-2005**



? = This estimate must be interpreted with caution because of a moderate level of error associated with estimate—Coefficient of Variation (CV) between 16.6% and 33.3%.  
Source: OSDUS 2005.

The prevalence of current smoking in the past 30 days also increased with grade (Figure 2.4). In 2005, less than 1% of students in grades 7 and 8 were current smokers compared to 13% of students in grade 12 ( $p < .05$ ). Almost all current smokers (94%) smoked daily (OSDUS 2005). According to the Centre for Addiction and Mental Health's Ontario Student Drug Use Survey (OSDUS), the overall prevalence of current smoking in the past 30 days decreased from 8% in 2003 to 6% in 2005 ( $p < .05$ ).

Figure 2.4: Current Smoking in Past 30 Days, by Grades 7-12, Ontario, 2003 and 2005



? = This estimate must be interpreted with caution because of a moderate level of error associated with estimate—Coefficient of Variation (CV) between 16.6% and 33.3%.

Note: Vertical lines represent 95% confidence intervals.

Source: OSDUS 2005.

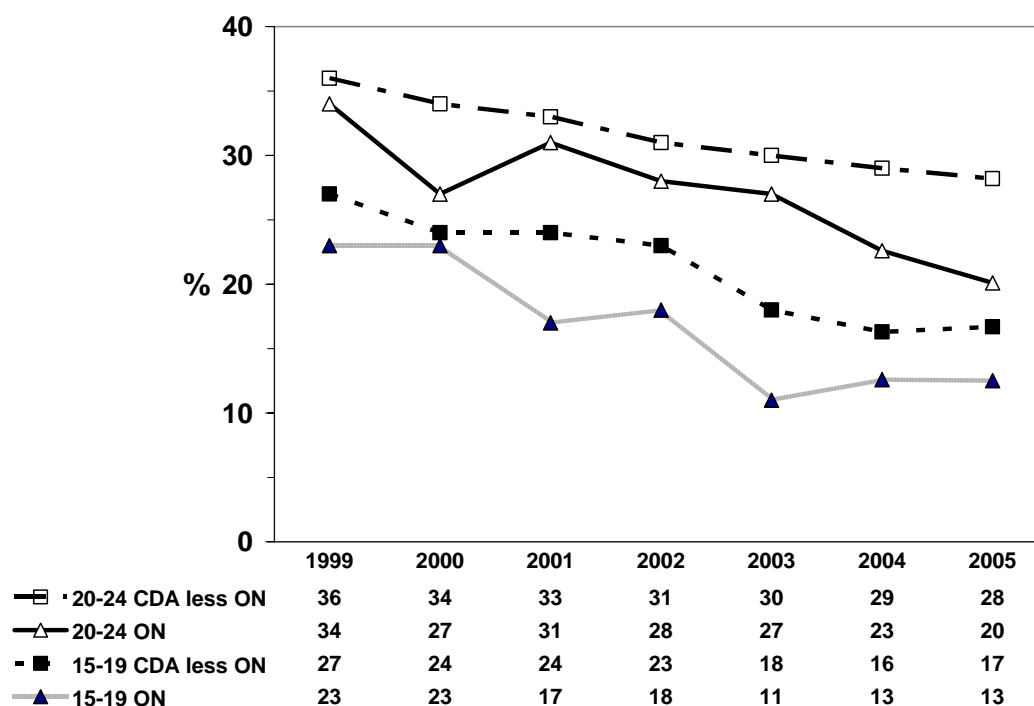
The prevalence of current smoking in the past 30 days among youth aged 15-19 in Ontario decreased significantly from 23% in 1999 to 13% in 2005 ( $p < .05$ ; Figure 2.5), but is unchanged since 2003. However, in 2005, the current smoking rate among 15-19 year olds in Ontario was significantly lower than that for youth of the same age in the rest of Canada (13% vs. 17%, respectively;  $p < .05$ ). A similar pattern held for Ontario youth aged 20-24 compared to young adults in the rest of Canada (20% vs. 28%).

### Current Smoking by Sex

According to the Canadian Community Health Survey (CCHS), there were no sex differences in current smoking among youth aged 15-17 or 18-19 (Figure 2.6). However, men aged 20-24 and 25-29 were more likely to be current smokers than women of the same age.

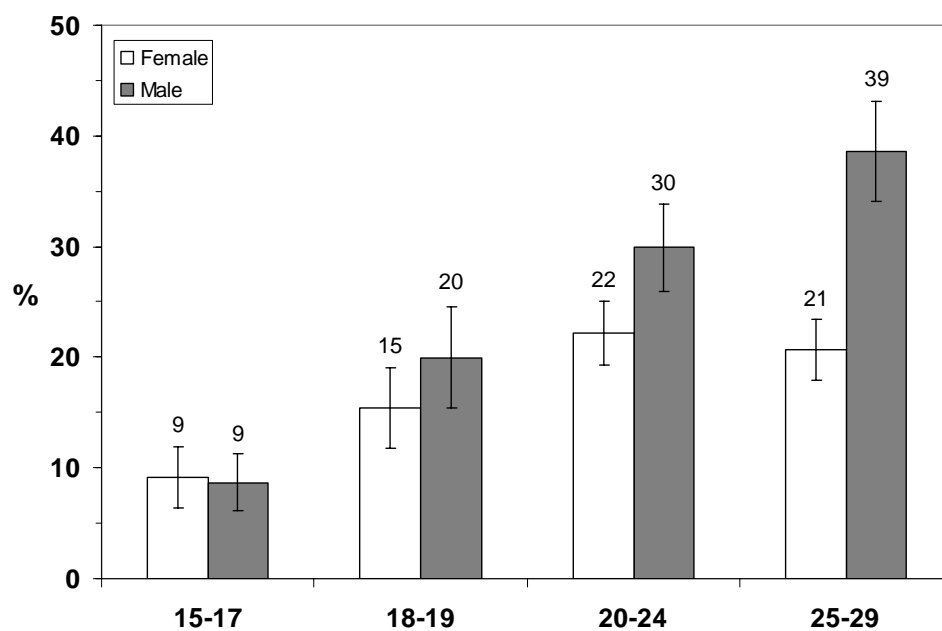


Figure 2.5: Current Smoking in Past 30 Days, by Ages 15-19 and 20-24, Ontario and Rest of Canada, 1999-2005



Source: CTUMS (Annual) 1999-2005.

Figure 2.6: Current Smoking among Youth and Young Adults, Ontario, 2005



Source: CCHS 3.1 (Share File).

## **Initiation**

In 2005, 7% of all Ontario students reported smoking their first cigarette in the 12 months prior to the school-based survey. There were no significant sex differences (OSDUS 2005, data not shown).

The prevalence of students beginning to smoke at an early age has steadily decreased over the years. Among Ontario students in grade 7, the onset of smoking their first whole cigarette in grade 4 or earlier has decreased from 16% in 1981 to only 2% in 2005 (OSDUS 2005).

Among Ontario students in grade 11 (the highest grade for which trend data were available), the average age for first smoking a whole cigarette increased from 11.9 years in 1981 to a high of 13.5 years in 2005 (OSDUS 2005).

## **Youth Access**

One intermediate objective of the Smoke-Free Ontario Strategy is to decrease youth access to tobacco products.

## **Retailer Compliance**

In the Spring of 2006, 88% of vendors in Ontario were in compliance with the prohibition on selling tobacco to underage youth.<sup>5</sup> Compliance ranged from 84% in the Eastern Tobacco Control Area Network to 95% in the North East Tobacco Control Area Network (differences not significant; Figure 2.7).

Eight in ten vendors (77%) requested proof of age identification when asked for cigarettes by a test shopper. A further 12% of vendors asked test shoppers how old they were. One in ten vendors (11%) did nothing to establish age. As expected, most cigarette sales to test shoppers occurred when vendors did not ask the test shopper's age and did not request proof of age (81% of sales). The remaining 19% of sales were completed despite the fact that vendors had asked the test shopper how old he or she was or had requested proof of age (Schwartz et al., 2006).

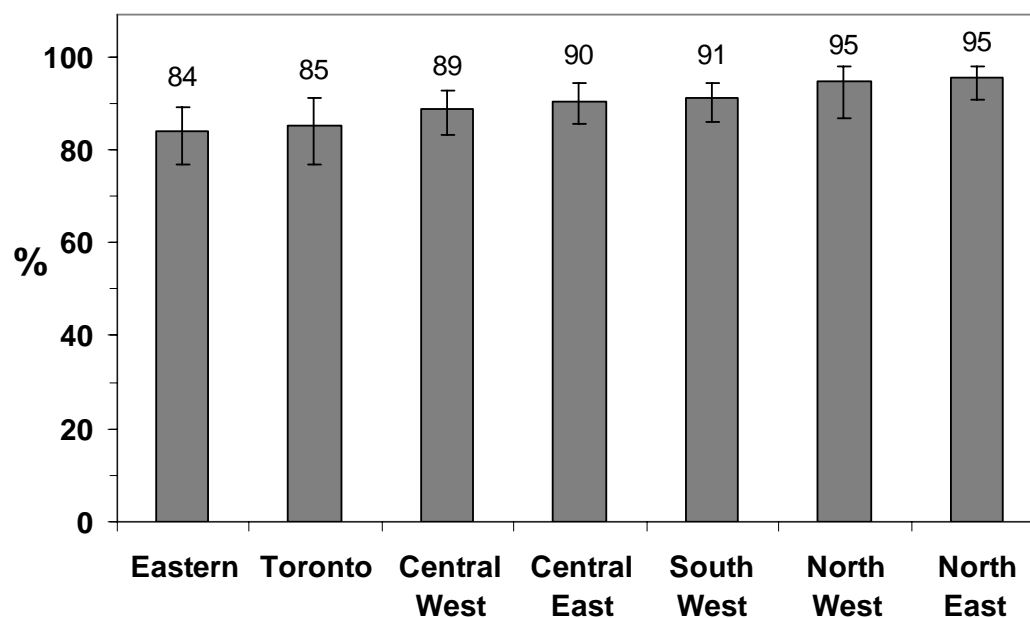
## **Point of Sale Promotions**

In the Spring of 2006 (prior to implementation of the *Smoke-Free Ontario Act*), there was a substantial presence of almost all types of point of sale promotions in Ontario.<sup>6</sup> Decorative/illuminated panels and/or promotional lighting were the most common types of promotion (46%), followed closely by three-dimensional exhibits and/or other devices, instruments and enhancements (40%). About one third of vendors had countertop displays and displayed cigarettes in units greater than a single cigarette package. Twenty-one percent (21%) of vendors promoted cigarette sales with signs outside of the store. A relatively small proportion of vendors (10%) displayed tobacco products in such a way as to permit handling by purchasers prior to purchase.

<sup>5</sup> Data from Schwartz, R, Dubray, J, Garcia, J, Bondy, S, Victor, JC. Formative Evaluation of the Smoke-Free Ontario Act: Summary of the Baseline Compliance Survey. Ontario Tobacco Research Unit, Special Report Series. Toronto, ON, October 2006.

<sup>6</sup> Data from Schwartz, R, Dubray, J, Garcia, J, Bondy, S, Victor, JC. Formative Evaluation of the Smoke-Free Ontario Act: Summary of the Baseline Compliance Survey. Ontario Tobacco Research Unit, Special Report Series. Toronto, ON, October 2006.

**Figure 2.7: Retailer Compliance with Sales Prohibition to Youth, by Tobacco Control Area Network, Ontario, 2006**



*Note:* Vertical lines represent 95% confidence intervals.

*Source:* Schwartz, R, Dubray, J, Garcia, J, Bondy, S, Victor, J.C. Formative Evaluation of the Smoke-Free Ontario Act: Summary of the Baseline Compliance Survey. Ontario Tobacco Research Unit, Special Report Series. Toronto, ON, October 2006.

### Source of Cigarettes

In 2005, almost half of all underage students (47%) in Ontario were most likely to have received their last cigarette from someone who gave it to them (outside of family members), whereas 16% bought their last cigarette themselves (Table 2.3). Males were more likely to have purchased their last cigarette than were females (20% vs. 11%, respectively;  $p < .05$ ; OSDUS 2005, data not shown). Buying cigarettes for oneself was the most common source for a current smoker's last cigarette (42%), whereas experimental and former smokers were most likely to have obtained their last cigarette from someone who gave it to them (54%). Three of 10 students in grades 7 and 8 obtained their last cigarette by taking it from someone without permission (28%) compared to 6% of students in grades 9, 10, 11, and 12.

In 2005, 57% of all students felt it was easy to obtain cigarettes, while 23% said it was difficult or impossible. Ease of obtaining cigarettes increased dramatically with age, ranging from 19% among students in grade 7 to 84% among students in grade 12 ( $p < .05$ ; OSDUS 2005).

**Table 2.3: Source of Cigarette Last Time Smoked, Grades 7-12 (Aged 18 or Less), Ontario, 2005**

Source	%
Someone else gave to me	47
Bought myself	16
Someone else bought for me	13
Took them without permission	9
Don't remember	9
Family member gave to me	4
Family member bought for me	3 <sup>?</sup>

? = This estimate must be interpreted with caution because of a moderate level of error associated with estimate—Coefficient of Variation (CV) between 16.6% and 33.3%.

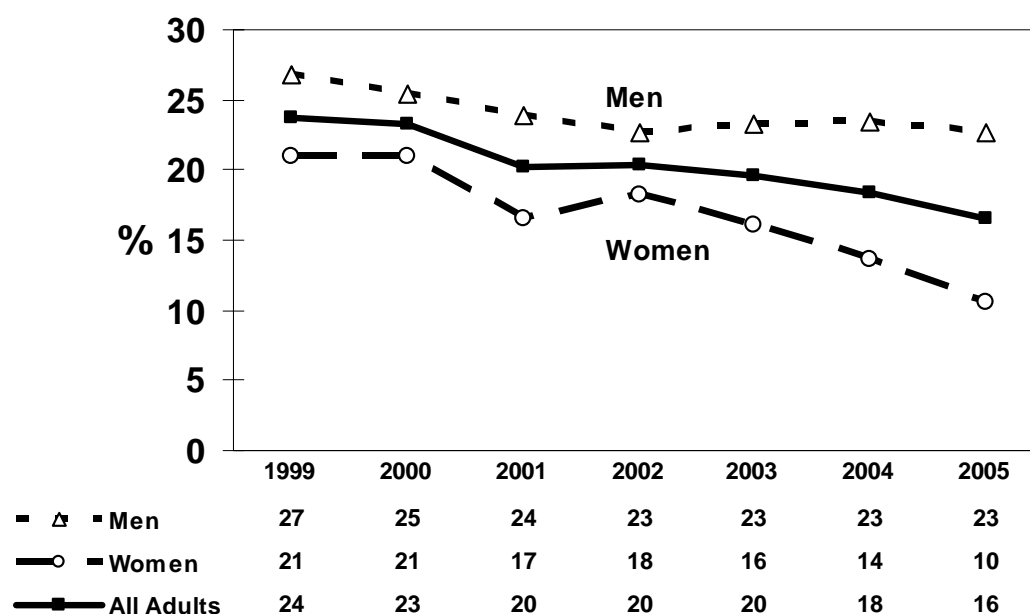
Source: OSDUS 2005.

## CESSATION

### Current Smoking

In 2005, 16% of Ontario adults aged 18 years and older were current smokers (i.e., smoked daily or occasionally in the past month and smoked at least 100 cigarettes in lifetime; Figure 2.8), which compares to 20% for the rest of Canada. As in previous years, the prevalence of current smoking was significantly higher among men than among women (23% vs. 10%, respectively). Since 1999, there has been a significant decline in current smoking prevalence among women (21% to 10%) but not among men.

**Figure 2.8: Current Smoking, by Sex, Ages 18+, Ontario, 1999-2005**

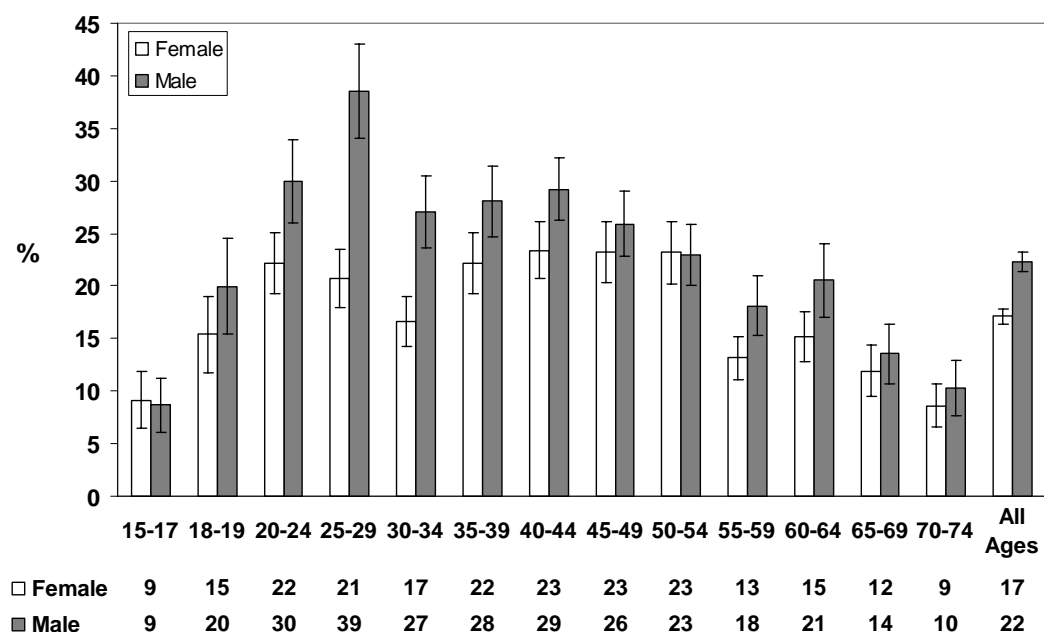


Source: CTUMS (Annual) 1999-2005.

### Sex Differences by Age

In 2005, males aged 25-29 had the highest prevalence of current smoking at 39%, almost double that of their female counterpart (21%; Figure 2.9). Males aged 20-24, 25-29, 30-34, 40-44 and 55-59 had a significantly higher rate of smoking than females in the corresponding age categories. For females ranging in age from 20-24 through to 50-54, the prevalence of current smoking surpassed 20%, with the exception of females aged 30-34 (17%). Across older female age categories, the rate of smoking generally decreased (ranging from 9% to 15%).

Figure 2.9: Current Smoking, by Sex and Age Grouping (Ages 15-74), Ontario, 2005



Source: CCHS 3.1 (Share File).

### Geographical Differences: Public Health Unit

In 2005, current smoking for Ontarians aged 12 years and older ranged from a low of 15% in York to a high of 29% in both Haldimand-Norfolk and Porcupine (Table 2.4). The Ontario average was 20% (Canadian Community Health Survey 3.1).

**Table 2.4: Current Smoking, by Public Health Unit, Ages 12+, Ontario, 2005**

Public Health Unit	Current Smoking (%)	Population
York	15	116,907
Middlesex-London	17	62,155
City of Toronto	17	382,809
Ottawa	17	121,789
Halton	18	65,735
Peel	18	180,386
Waterloo	19	75,241
Peterborough	20	23,125
Grey Bruce	20	28,092
Wellington-Dufferin-Guelph	21	44,845
Huron/Perth	21	24,375
Haliburton-Kawartha-Pine Ridge	21	31,928
Northwestern	21	10,710
Kingston-Frontenac-Lennox & Addington	22	34,416
Niagara	22	81,613
Hamilton	22	97,438
Simcoe Muskoka	23	90,979
Windsor-Essex	23	77,164
Algoma	23	22,973
Oxford	23	20,102
Chatham-Kent	24	21,663
Sudbury	24	39,042
Durham	24	116,245
Leeds-Grenville-Lanark	24	34,929
Lambton	24	26,915
Brant	25	27,813
Hastings and Prince Edward	26	35,304
North Bay Parry Sound/Timiskaming	26	34,893
Thunder Bay	26	34,144
Eastern Ontario	26	44,373
Elgin-St. Thomas	26	19,146
Renfrew	27	21,972
Haldimand-Norfolk	29	27,243
Porcupine	29	20,863
ONTARIO average	20	2,097,327

Source: CCHS 3.1 (Public Use Data File).

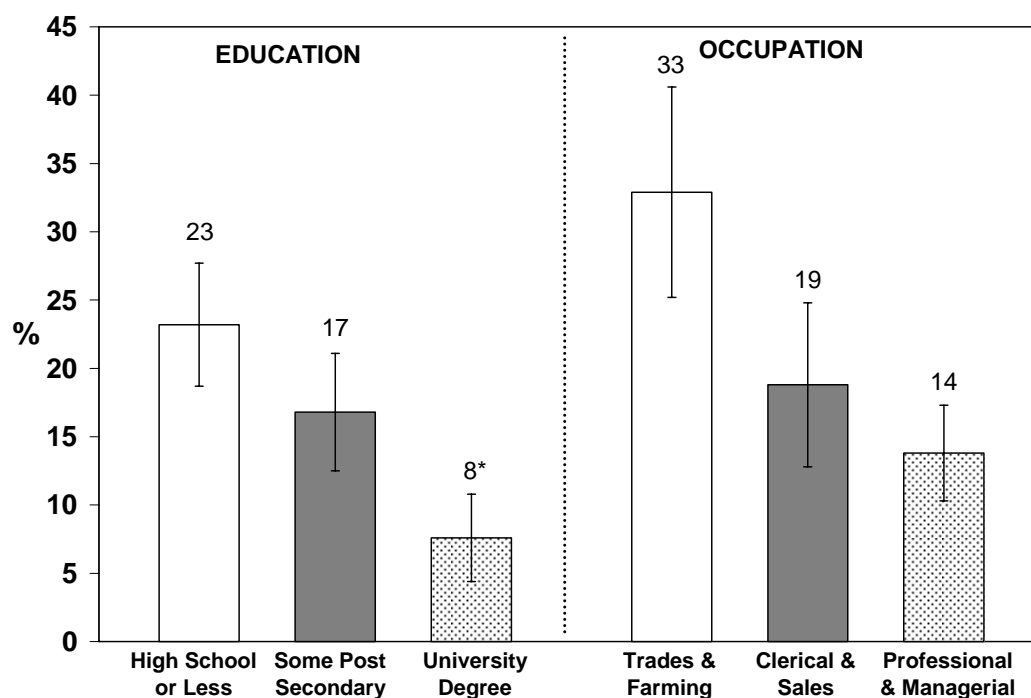
## Education

In 2005, Ontario adults with a university degree were significantly less likely to be current smokers than those with less education (Figure 2.10). There was no significant difference in current smoking rates between those with high school or less and those with some postsecondary education but no degree. With a 23% current smoking prevalence, those adults with a high school education or less represent over half of all adults in the province (52%).

## Occupation

In 2005, both professional/managerial and clerical/sales workers were significantly less likely to be current smokers than those employed in trades and farming (14% and 19% vs. 33%; Figure 2.10). This is significant given that trade and farm workers comprise close to 4 in 10 workers (37%), according to CTUMS.

**Figure 2.10: Current Smoking, by Education and by Occupation, Ages 18+, Ontario, 2005**



\*This estimate must be interpreted with caution because of a moderate level of error associated with estimate—Coefficient of Variation (CV) between 16.6% and 33.3%.

Note: Vertical lines represent 95% confidence intervals.

Source: CTUMS (Annual) 2005.

## Pregnancy and Smoking

In 2005, 10% of mothers in Ontario (aged 20–44) who gave birth in the past five years had smoked during their most recent pregnancy (CCHS 3.1), with 5% having smoked daily and 5% having smoked occasionally. There was no statistically significant decline in current smoking among these mothers from 2003 to 2005 (12% to 10%).

## Daily and Occasional Smoking

In Ontario, the prevalence of current smoking among adults aged 18 or older in 2005 was 16%. Among current smokers, 14% were daily smokers and about 3% were occasional smokers<sup>7</sup> (daily and occasional smoking do not add to current smoking due to rounding; CTUMS 2005).

<sup>7</sup> This estimate must be interpreted with caution because of a moderate level of error associated with estimate—Coefficient of Variation (CV) between 16.6% and 33.3%.

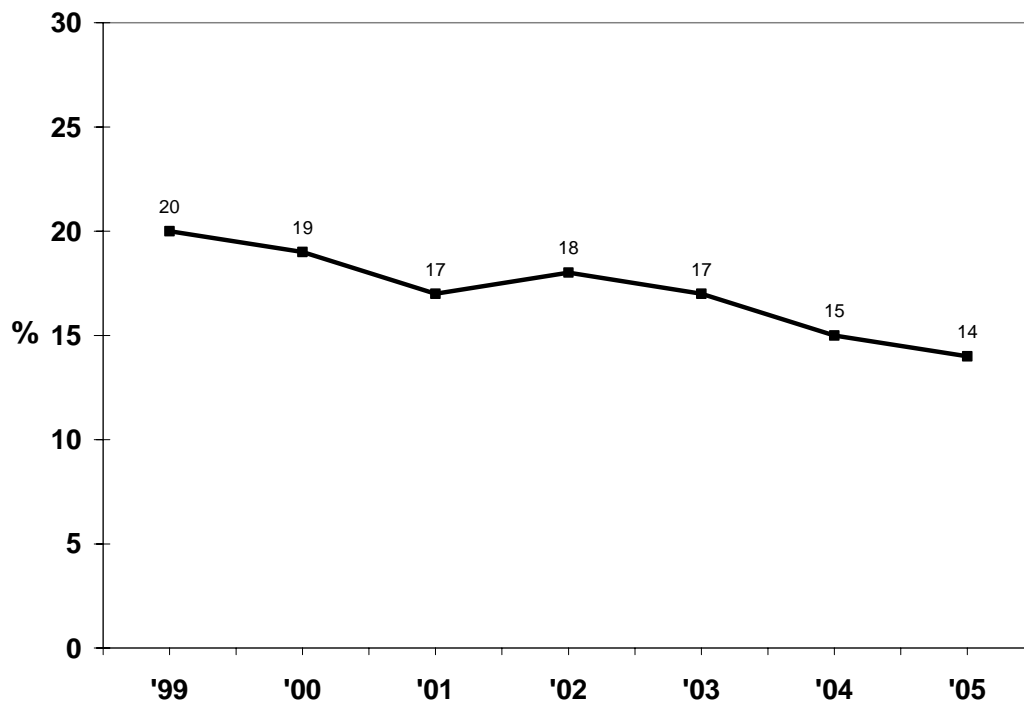


Daily smoking among Ontario adults has steadily decreased over time from 20% in 1999 to 14% in 2005 (Figure 2.11).

Trend data also indicate that the proportion of current smokers who smoke daily has changed over the years (Figure 2.12). In 1991, almost 100% of current smokers were daily smokers, whereas in 2005, 79% of current smokers were daily smokers. Since about 2000, this proportion appears to have levelled off. There were no sex differences in daily smoking as a proportion of current smoking.

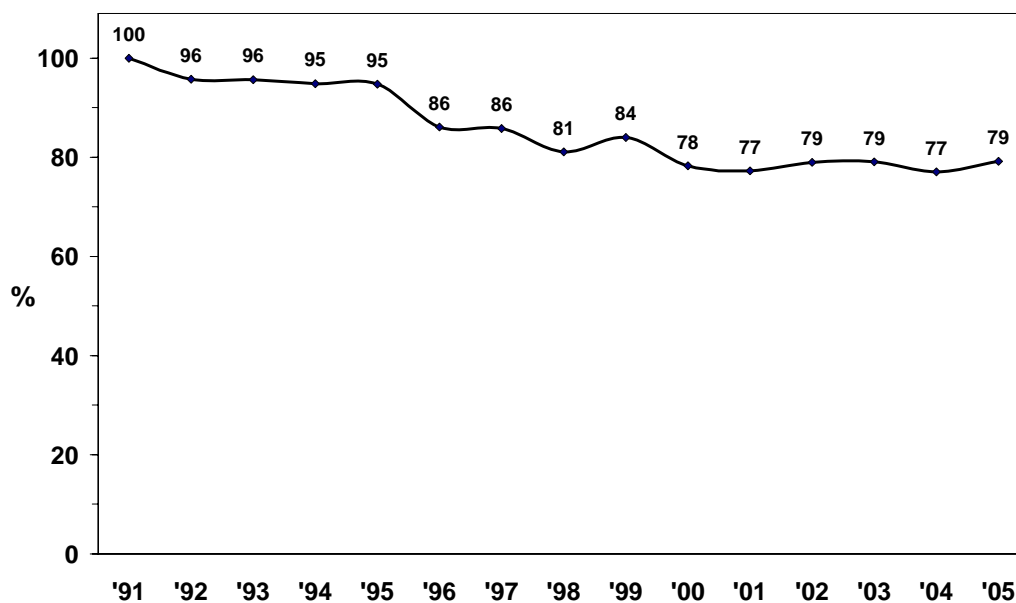
Across Canada in 2005, the rate of daily smoking ranged from a low of 11% in British Columbia to a high of 20% in Québec (Figure 2.13). Ontario had a significantly lower daily smoking rate than New Brunswick, Saskatchewan, and Québec (14% vs. 19%, 19%, and 20%). Only British Columbia had a daily smoking rate significantly lower than that of Ontario (11% vs. 14%).

**Figure 2.11: Daily Smoking, Ages 18+, Ontario, 1999-2005**



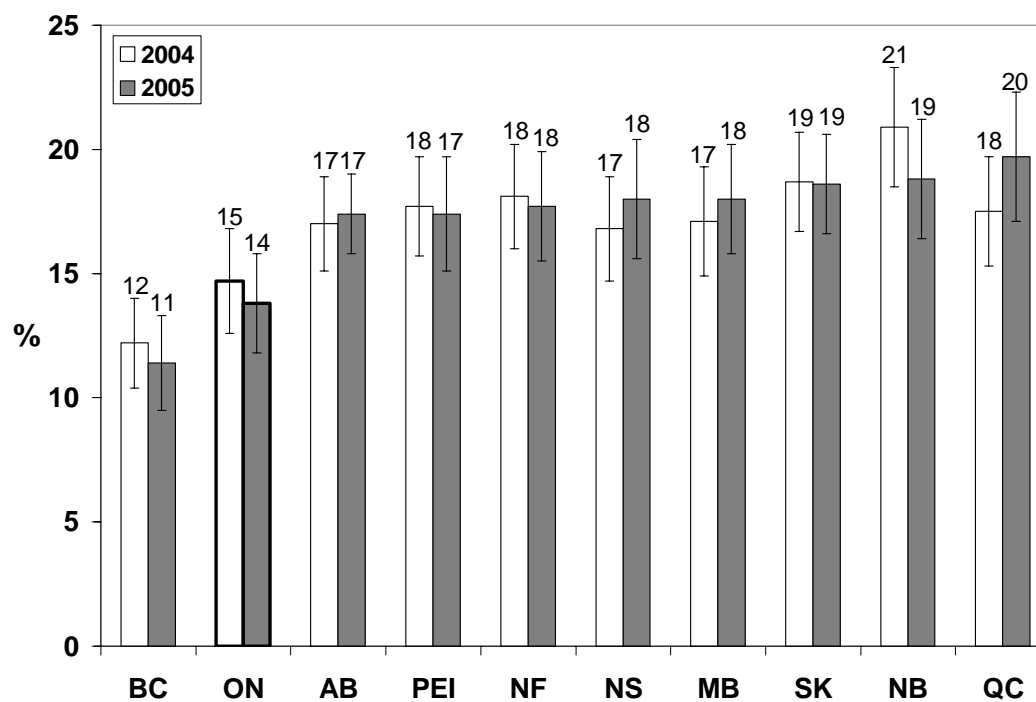
Source: CTUMS (Annual) 1999-2005.

Figure 2.12: Daily Smoking as a Proportion of Current Smoking, Ages 18+, Ontario, 1991-2005



Source: CAMH Monitor, 1991-2005.

Figure 2.13: Daily Smoking, by Province, Ages 18+, Canada, 2004 and 2005



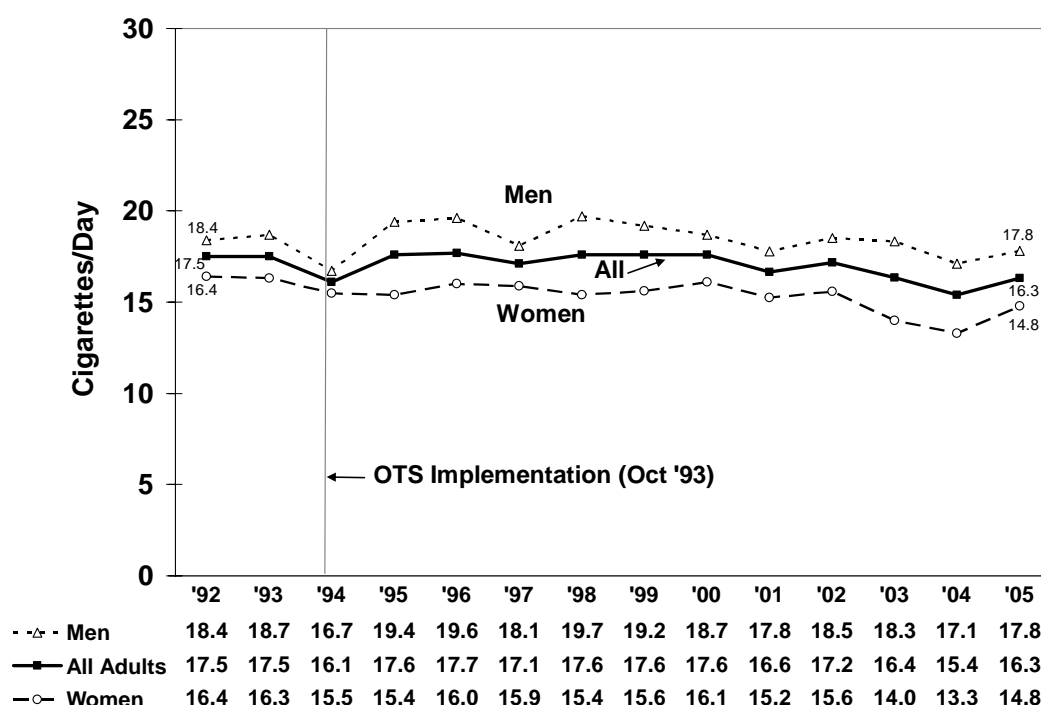
Note: Vertical lines represent 95% confidence intervals.

Source: CTUMS (Annual) 2004 & 2005.

## Level of Use

In addition to reducing the prevalence of smoking, an intermediate goal of the Strategy is to reduce the number of cigarettes smoked per day (consumption) among those who continue to smoke. In 2005, the mean number of cigarettes smoked per day by daily smokers was 16.3 (Figure 2.14). Men smoked significantly more cigarettes per day in 2005 than women (17.8 vs. 14.8), a pattern consistent with previous survey years.

Figure 2.14: Mean Number of Cigarettes Smoked Daily, by Sex, Daily Smokers, Ages 18+, Ontario, 1992-2005



Source: CAMH Monitor 1992-2005.

## Dependence

The Heaviness of Smoking Index<sup>8</sup> is a scale combining time to first cigarette each morning and number of cigarettes smoked per day. A score of 0-2 indicates low dependence, 3-4 indicates moderate dependence, and 5-6 indicates high dependence. Overall, about half (49%) of daily smokers had a low dependence on cigarettes, 39% had a moderate dependence, and 12% had a high dependence (Ontario Tobacco Survey, 2005). There was no difference between the proportion of men and women having low (48% vs. 50%), moderate (39% vs. 40%), and high<sup>9</sup> (14% vs. 11%) levels of cigarette dependence. Sixty-three percent (63%) of daily smokers under 35 years of age have a low dependence on cigarettes, whereas 41% of daily smokers aged 35 years or over have a low dependence.

<sup>8</sup> Heatherton, T.F., Kozlowski, L., Frecker, R.C., Rickert, W. and 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>9</sup> This estimate must be interpreted with caution because of a moderate level of error associated with estimate—Coefficient of Variation (CV) between 16.6% and 33.3%.

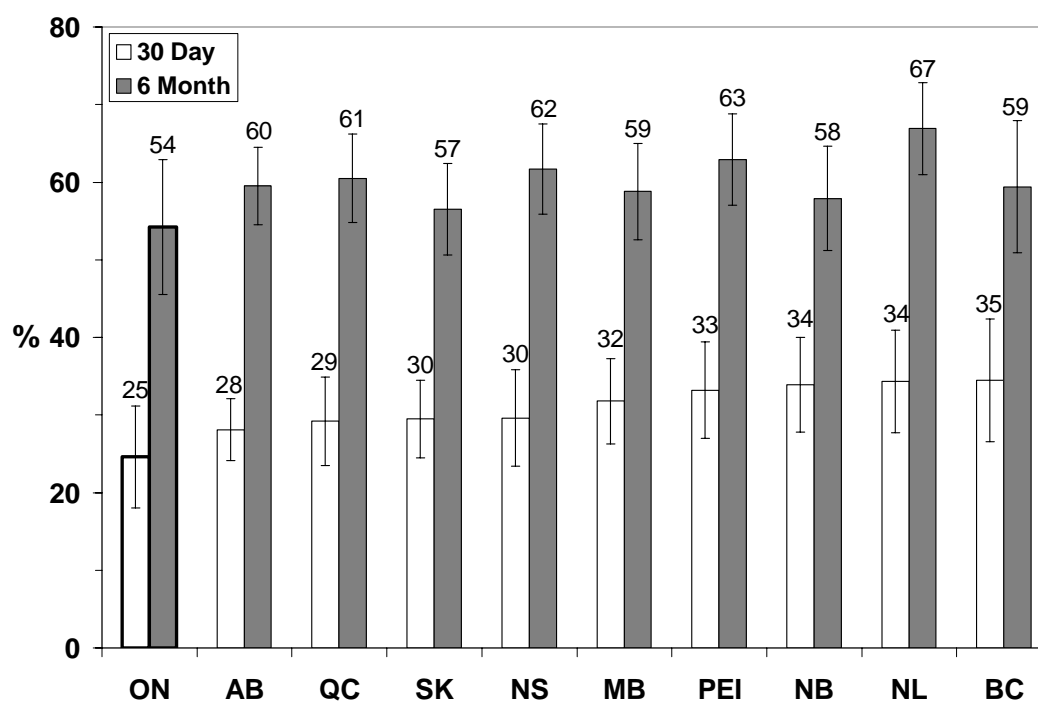
## Smoking Cessation

One objective of the Strategy is to increase smoking cessation among adults and youth. In working toward this goal, a desired outcome is to increase the proportion of smokers intending to quit and to increase the number of quit attempts by smokers. It is also desirable to have greater numbers of quit attempts earlier in the lifetime of smokers.

### Intentions to Quit

According to CTUMS 2005, over half (54%) of Ontario current smokers expressed an intention to quit smoking within six months of their interview; one-quarter indicated a serious intention to quit within 30 days (Figure 2.15). Newfoundland had the highest proportion of six-month quit intentions (67%), and British Columbia had one of the highest proportions of next 30-day quit intentions (35%). Ontarians were least likely to express intentions to quit smoking within 30 days or six months.

**Figure 2.15: Intentions to Quit Smoking within Next 30 Days and Next 6 Months, by Province, Current Smokers, Ages 15+, Canada, 2005**



*Note:* Ordered by prevalence of 30-day quit intentions. Vertical lines represent 95% confidence intervals.  
*Source:* CTUMS (Annual) 2005.

### Quit Attempts

Close to half of all current smokers (46%) in Ontario made a serious attempt to quit smoking at least once in the 12 months prior to their interview. Among smokers making a quit attempt, half made a single attempt (48%) and half (52%) made two or more quit attempts (CAMH Monitor 2005).

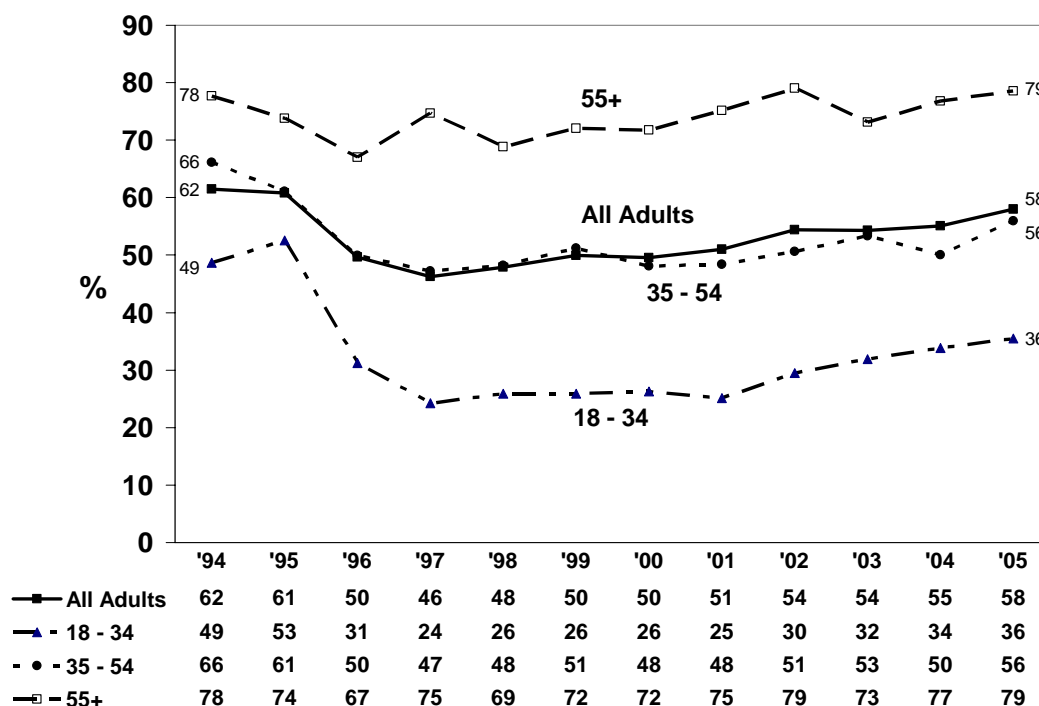
### Quit Duration and Former Smoking

Among ex-smokers, 12% reported quitting within the last 12 months, 21% quit between one and five years

ago, and 67% quit more than five years ago (CAMH Monitor 2005).

In 2005, 58% of Ontarians who had ever smoked had quit at least one year previously (Figure 2.16). Older adults aged 55 and over had the highest rate of trying to quit (79%); adults aged between 18 and 34 had the lowest quit rate (36%).

Figure 2.16: Quit Rate (Former Smokers as a Proportion of Ever Smokers), by Age, Ontario, 1994-2005



Source: CAMH Monitor 1994-2005.

## Health Professional Advice

Among current smokers aged 15 or older who had visited a doctor in the past 12 months, the prevalence of being asked by a doctor to quit smoking ranged from a high of 59% in Ontario to a low of 43% in Québec. In Ontario, 44% of current smokers who had visited a dentist in the past year said they were advised to quit smoking by their dentist (CTUMS 2005).

## Quit Aids

Of those current and former smokers in Ontario who tried to quit in the past two years, about 80% tried to quit on their own without special preparation or help, 25% made a deal with a friend or family member, 29% tried the nicotine patch, 17% used a product like Zyban,<sup>10</sup> and 17% used nicotine gum (CTUMS 2005).<sup>11</sup> (Proportions do not add to 100% because data represent more than one quit attempt.)

<sup>10</sup> This estimate must be interpreted with caution because of a moderate level of error associated with estimate—Coefficient of Variation (CV) between 16.6% and 33.3%.

<sup>11</sup> This estimate must be interpreted with caution because of a moderate level of error associated with estimate—Coefficient of Variation (CV) between 16.6% and 33.3%.

## PROTECTION

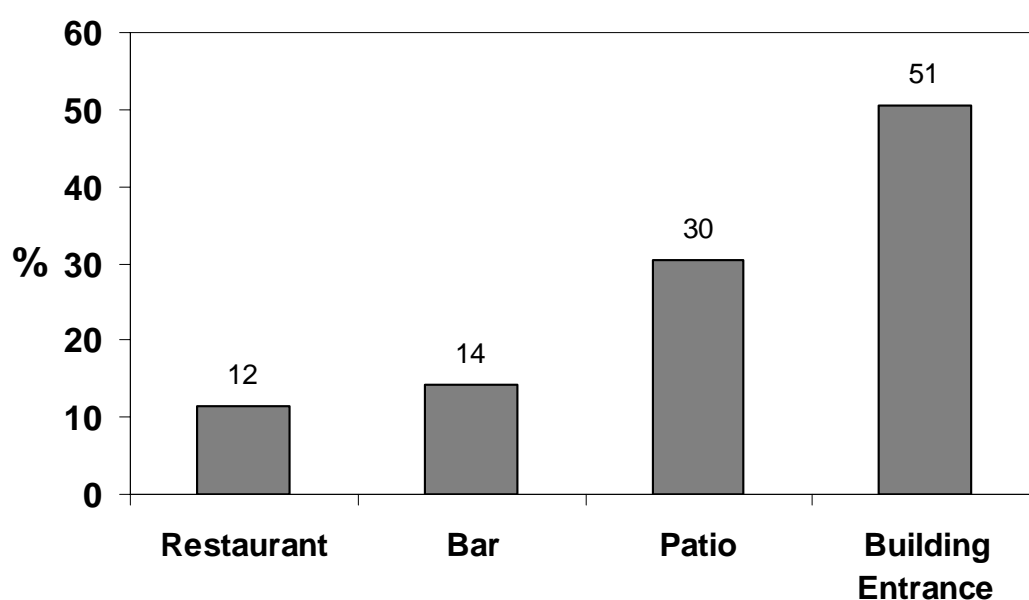
### Secondhand Smoke in Public Places and Workplaces

Reducing exposure to secondhand smoke in public places and enclosed workplaces is an objective of the Smoke-Free Ontario Strategy.

#### Exposure in Public Places

In 2005, 12% of Ontarians aged 15 years and older reported exposure to secondhand smoke in restaurants, 14% reported exposure in bars, and 30% said they were exposed to secondhand smoke on patios (Figure 2.17).<sup>12</sup> About half of all Ontarians (51%) were exposed to secondhand smoke at entrances to buildings.

Figure 2.17: Exposure to Secondhand Smoke in Public Places, Ages 15+, Ontario, 2005



Source: CTUMS (Annual) 2005.

#### Compliance with Smoke-Free Laws

In the Spring of 2006, prior to the implementation of the *Smoke-Free Ontario Act*, 4% of restaurants and bars in Ontario were observed to have people smoking indoors.<sup>13</sup> Bars were significantly more likely to have indoor smoking on their premises than restaurants (16% vs. 2%). Among the one quarter of bars and restaurants that had patios, 30% of the patios were in use. Of the patios in use, 26% were observed to have people smoking (47% of bar patios and 16% of restaurant patios).

<sup>12</sup> The smoke-free provisions of the *Smoke-Free Ontario Act* came into force May 31, 2006. The data on exposure to secondhand smoke presented in this section are from the previous calendar year (2005) as these are the most recent data available.

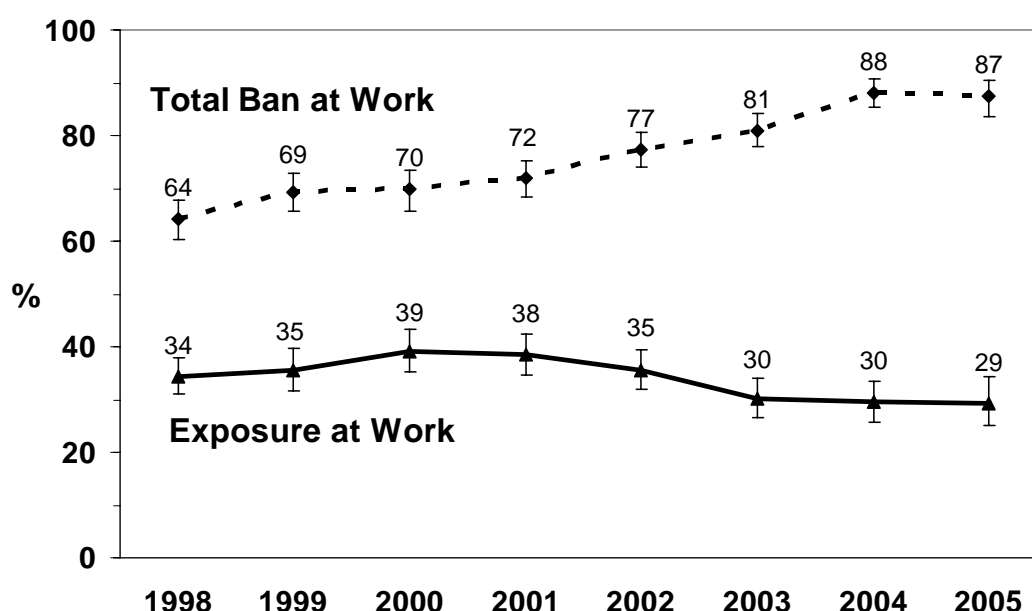
<sup>13</sup> Data from Schwartz, R, Dubray, J, Garcia, J, Bondy, S, Victor, JC. Formative Evaluation of the Smoke-Free Ontario Act: Summary of the Baseline Compliance Survey. Ontario Tobacco Research Unit, Special Report Series. Toronto, ON, October 2006.

## Exposure at Work

The proportion of Ontario workers covered by a total smoking ban in the workplace increased from 64% in 1997 to 87% in 2005 (Figure 2.18). Even among trade and farm workers, 78% worked in settings with total smoking bans (CAMH Monitor 2005, data not shown). Despite significant year-over-year increases in total smoking bans in the workplace, 29% of all workers and 24% of nonsmokers reported some workplace exposure to secondhand smoke in 2005 (i.e., for five or more minutes at least once in the past five days). Trade and farm workers were nearly twice as likely to be exposed to secondhand smoke at work compared to professional/managerial workers (43% vs. 22%).

Increased compliance with smoke-free legislation in the workplace is an important objective of the Strategy. Among workers whose employers only allowed smoking outside or not at all, 25% reported some exposure to secondhand smoke at work.

**Figure 2.18: Workplace Rules and Secondhand Smoke Exposure at Work, Workers Aged 18+, Ontario, 1998-2005**



*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 1998-2005.

## Secondhand Smoke in Homes and Cars

Reduction of secondhand smoke exposure in homes and vehicles is a long-term objective of the Smoke-Free Ontario Strategy.

### Household Exposure

In 2005, more than 600,000 Ontarians (7.3%) 12 years and older were exposed every day or almost every day to secondhand smoke at home. Exposure varied across Ontario’s public health units, ranging from 5% in Toronto and York to 13% in Eastern Ontario, Elgin-St. Thomas, and Leeds-Grenville-Lanark (Table 2.5).

A short-term objective of the Strategy is to increase the adoption of voluntary policies to make homes smoke-free. In Ontario, 88% of households with no regular smokers prohibited cigarette smoking in the home (households with smokers were not asked the survey question; CTUMS 2005). Among those households where smoking was allowed but restricted, 73% allowed smoking in certain rooms only, 37% restricted smoking in the presence of children, and 47% allowed smoking only if windows were open or with some other type of ventilation (CTUMS 2005).

Sixty-eight percent (68%) of Ontario adults, including half (49%) of all current smokers, support a law prohibiting parents from smoking inside a home where children are living (CAMH Monitor 2005).

### **Vehicular Secondhand Smoke Exposure**

In 2005, about 8% of Ontarians (12 years and older) were exposed to secondhand smoke while in vehicles. This is almost 650,000 Ontarians. Exposure ranged from 5% in Toronto to 13% in Algoma, North Bay-Parry Sound, and Porcupine public health units (Table 2.5). Among Ontario adults 18 years or older, 78% support a legal ban on smoking in cars while children are present, with about two thirds (66%) of current smokers expressing support (CAMH Monitor 2005).



**Table 2.5: Reported Exposure to Secondhand Smoke at Home and in Private Vehicles (Every Day or Almost Every Day), by Public Health Unit, Ages 12+, Ontario, 2005**

Public Health Unit	Home		Vehicle	
	%	Population	%	Population
Toronto	4.7	84,279	4.7	85,145
York	5.4	34,564	6.4	41,476
Ottawa	5.5	31,187	7.0	39,823
Waterloo	5.8	19,049	6.8	22,075
Halton	6.4	19,280	6.1	18,315
Grey-Bruce	6.5 <sup>?</sup>	7,091	8.8	9,603
Perth	7.0 <sup>?</sup>	3,649	8.6 <sup>?</sup>	4,447
Simcoe-Muskoka	7.0	21,595	9.2	28,269
Peel	7.3	59,197	9.9	79,684
Wellington-Dufferin-Guelph	7.3	12,365	9.8	16,694
Middlesex-London	7.6	22,977	6.7	20,287
Durham	8.0	28,828	8.0	28,640
Brant	8.2	6,661	10.4	8,397
Kingston-Frontenac-Lennox & Addington	8.4	10,240	7.9	9,586
Windsor-Essex	8.5	21,893	9.1	23,301
Niagara	9.1	25,927	9.0	25,645
Huron	9.2 <sup>?</sup>	3,632	10.5	4,146
Peterborough	9.4	8,473	12.1	10,882
Oxford	9.7 <sup>?</sup>	6,377	8.9	5,838
Hamilton	9.8	33,069	9.9	33,358
Hastings and Prince Edward	9.8	9,805	8.7 <sup>?</sup>	8,704
Haldimand-Norfolk	10.1	6,666	8.4 <sup>?</sup>	5,553
Chatham-Kent	10.2	6,948	10.7	7,284
Lambton	10.3	8,546	8.3 <sup>?</sup>	6,879
Renfrew	10.9	6,404	9.2 <sup>?</sup>	5,403
Timiskaming	11.4	2,524	8.8 <sup>?</sup>	1,939
Algoma	11.5	8,686	12.8	9,732
North Bay-Parry Sound	11.9	9,115	13.0	9,936
Haliburton-Kawartha-Pine Ridge	11.9	14,021	9.9	11,640
Thunder Bay	12.0	11,468	12.2	11,717
Northwestern	12.0 <sup>?</sup>	4,670	10.1 <sup>?</sup>	3,903
Porcupine	12.1	5,896	13.4	6,550
Sudbury	12.2	15,019	10.5	12,951
Eastern Ontario	12.5	15,406	12.2	14,934
Elgin-St Thomas	12.7 <sup>?</sup>	6,801	9.6 <sup>?</sup>	5,104
Leeds-Grenville-Lanark	13.0	14,060	9.8	10,568
<b>ONTARIO average</b>	<b>7.3</b>	<b>606,367</b>	<b>7.8</b>	<b>648,408</b>

? = This estimate must be interpreted with caution because of a moderate level of error associated with estimate—Coefficient of Variation (CV) between 16.6% and 33.3%.

*Note:* Ordered by percent exposure to secondhand smoke in home (lowest to highest).

*Source:* Canadian Community Health Survey, 3.1 (Statistics Canada – Catalogue no. 82-221, Vol. 2006 No. 1; Health Indicators, June 2006).



## CONCLUDING NOTE TO REPORT TWO

The Ontario Tobacco Research Unit (OTRU) has been monitoring tobacco-related knowledge, attitudes and behaviour in Ontario for twelve years and reporting results in the annual Monitoring and Evaluation Series. The second report in the 2005-2006 series summarizes the most recent quantitative data available, which are relevant to this ongoing monitoring activity. As evident from the chapters on Macro Indicators of the Smoke-Free Ontario Strategy Prevention, Cessation, and Protection, progress has been made in tobacco control in Ontario. For example, lifetime abstinence from smoking among Ontario students has increased from 57% in 2003 to 67% in 2005, and nine in ten tobacco vendors in Ontario (88%) are in compliance with the prohibition on selling tobacco to underage youth. However, the work of the Smoke-Free Ontario Strategy is not yet finished. For example, the current rate of smoking among young adult males aged 25-29 is 39%, and more than 600,000 Ontarians are exposed every day or almost every day to secondhand smoke at home and while in vehicles.

The next report in the 2005-2006 Monitoring and Evaluation Series, *Smoke-Free Ontario Progress and Implications*, will interpret and discuss implications of the findings from Report One (*The Tobacco Control Environment: Ontario and Beyond*) and Report Two (*Indicators of Smoke-Free Ontario Progress*).



## APPENDIX 2-A: MONITORING METHODS

### Data Sources

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

Health Canada's Canadian Tobacco Use Monitoring Survey is an ongoing cross-sectional nationwide, tobacco-specific, random telephone survey, conducted every year since 1999.<sup>14</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 49,726 households (79.2% response rate) and 20,840 individuals (84.1% response rate) who participated in the 2005 survey. In Ontario, 1,757 individuals participated in the survey, representing an 81.2% response rate. All survey estimates were weighted, and variance estimates were calculated based on procedures outlined in the 2005 CTUMS technical documentation.

#### Canadian Community Health Survey (CCHS)

The Canadian Community Health Survey is an ongoing cross-sectional population survey that collects information related to health status, health care utilization and health determinants every second year starting from 2000.<sup>15</sup> It operates on a two-year collection cycle. Cycle 1 in the first year is a large-sample general population health survey, designed to provide reliable estimates at the health region level. Cycle 2 in the second year is a smaller survey designed to provide provincial level results on specific focused health topics. The CCHS samples persons aged 12 years or older who are living in private dwellings in the ten provinces and the three territories, which covers approximately 98% of the Canadian population aged 12 or older. People living on Indian reserves or Crown lands, residents of institutions, full-time members of the Canadian Forces and residents of certain remote regions are excluded from the survey. The CCHS uses the same sampling frame as the Canadian Labour Force Survey, which is a multistage stratified cluster design, where the dwelling is the final sampling unit. In this report, the 2005 CCHS (Cycle 3.1) data were used, which were collected between January 2005 and December 2005, for 122 health regions, covering all provinces and territories. Altogether 143,076 households (84.9% response rate) and 132,947 individuals (response rate 92.9%) participated in the 2005 CCHS survey. In Ontario, 45,280 households and 41,766 individuals (with a combined response rate of 77%) participated. All survey estimates were weighted, and variance estimates were calculated based on procedures outlined in the 2005 CCHS 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>16</sup> Administered by the Institute for Social Research at York University, this ongoing monthly survey has a two-stage probability selection design. In 2005, the survey sample of 2,445 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 61%.

<sup>14</sup> Health Canada. *Microdata User Guide: Canadian Tobacco Use Monitoring Survey (CTUMS): Annual: February to December 2005*. Ottawa, ON: Health Canada, 2006.

<sup>15</sup> Statistics Canada, Health Statistics Division. *Canadian Community Health Survey (CCHS) Cycle 3.1 (2005)*. Public Use Microdata File (PUMF) User Guide. Ottawa June 2006.

<sup>16</sup> Adlaf, E.M. and Ialomiteanu, A. *CAMH Monitor. Technical Guide 2005*. Toronto, ON: Centre for Addiction and Mental Health, 2006.

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>17</sup> first implemented in 1977 and conducted every two years (in the spring) by the Institute for Social Research at York University. The 2005 survey used a two-stage (school, class) cluster sample design and sampled 7,726 students from 42 public and Catholic school boards; 137 schools, and 445 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.

### **Ontario Tobacco Research Unit (OTRU) Monitoring and Evaluation Series**

In the 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 those previously reported. If these data are not presented in the text, it should be understood that previously reported data refer to those found in past Annual Monitoring Reports released by the Ontario Tobacco Research Unit.

### **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 lengthy period over which the CAMH surveys have been conducted, since 1977 for OSDUS and since 1991 for the CAMH Monitor, trend data on provincial smoking behaviour are unsurpassed. Additionally, OSDUS and the CAMH Monitor provide sub-provincial (i.e., regional) estimates. The AC Nielsen survey previously and the current CRG survey provide estimates of compliance among various types of retailers; however, the precision of these estimates is unknown. Although CTUMS is a fairly new survey (1999), its strengths include breadth of tobacco-specific questions and the opportunity it affords to make inter-provincial comparisons. CTUMS includes information on use of cigarettes and alternative forms of tobacco, age of initiation, access to cigarettes, cessation (including reasons and incentives), use of cessation aids, readiness to quit, secondhand smoke exposure, restrictions on smoking at home, attitudes toward tobacco control policies, beliefs about "light" cigarettes and awareness of tobacco-industry sponsorship activity. Its monthly data collection allows for more precise assessment of specific changes and a larger number of data points for more powerful analyses. The CCHS includes information on type of smoker, amount smoked, cessation, age of initiation, use of other tobacco products, workplace restrictions and secondhand smoke exposure. The CCHS is an important addition to the surveillance arsenal, but what it provides in the way of consistency and robustness will probably be offset by its lack of flexibility and timeliness. The strength of CCHS is its large sample size and geographic coverage. However, the reliability of CCHS with regard to youth data in the smaller sample years will be less than that of CTUMS.<sup>18</sup>

<sup>17</sup> Adlaf, E.M. and Paglia, A. *Drug use among Ontario students 1977-2005: Detailed OSDUS Findings*. CAMH Research Document Series No. 16. Toronto, ON: Centre for Addiction and Mental Health, 2005.

<sup>18</sup> Ferrence R, Stephens T. Commentary Monitoring Tobacco Use in Canada: The Need for a Surveillance Strategy. *Chronic Disease in Canada* 2001;21:50-3.

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) as well as purpose and response rates of 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 smoking 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 if samples of the same size are drawn repeatedly from a population and a confidence interval is calculated from each sample, 95% of these intervals will contain the true value of the quantity being estimated in the population. For instance, if the prevalence of current smoking among Ontario adults on Survey A is 25% and the 95% confidence interval is 22% to 28%, we are 95% confident that this interval (22% and 28%) will cover the true value in the population.

It is equally true that an estimate of 20% ( $\pm 3$ ) from Survey A is not statistically 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, which 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 exercise caution in interpreting trend data (e.g., differences in yearly estimates) and comparisons between two or more estimates (e.g., men and women). 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 a question mark (?), meaning "interpret with caution" due to the moderate level of error associated with estimate — Coefficient of Variation (CV) between 16.6% and 33.3%.

## **Smoking Status Definitions**

Definitions are given only for 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 currently 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. The definition of current smoker in CTUMS is defined as a person who currently smokes cigarettes daily or occasionally.)
- 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 currently smokes daily.
- CTUMS - Someone who has smoked at least 100 cigarettes in his or her life and smoked daily within the past 30 days. (Health Canada does not use the 100-cigarette criterion. The definition of daily smoker in CTUMS is defined as a person who currently smokes cigarettes everyday.)

### **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 currently does not smoke everyday. (Health Canada does not use the 100-cigarette criterion. The definition of occasional smoker (non-daily smoker) in CTUMS is defined as a person who currently smokes cigarettes, but not everyday.)

### **Experimental Smoker**

- OSDUS - Someone who has smoked more than one and less than 100 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. (Health Canada does not use the one-year nonsmoking criterion. The definition of former smoker in CTUMS is defined as a person who has smoked at least 100 cigarettes in his or her life, but currently does not smoke.)
- OSDUS – Someone who has smoked at least 100 cigarettes in his or her life, but none in the last month.



### Ever Smoker

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

### Nonsmoker

- CAMH Monitor – Someone who has not smoked in the past 30 days (i.e., not a current smoker).
- CTUMS – Someone who has not smoked in the past 30 days (i.e., not a current smoker).

### Never Smoker

- CAMH Monitor – Someone who has never smoked 100 cigarettes or more in his or her life.
- CTUMS – Someone who has never smoked 100 cigarettes or more in his or her life.

### Abstinence

- OSDUS – Someone who has never smoked cigarettes, not even one puff in his or her life.