



# **Formative Evaluation of the *Smoke-Free Ontario Act***

Comprehensive Report

Jolene Dubray, MSc  
Robert Schwartz, PhD

May 2010

Suggested Citation: Dubray, J., Schwartz, R. Formative Evaluation of the *Smoke-Free Ontario Act*: Comprehensive Report. Toronto, ON: Ontario Tobacco Research Unit, Special Report Series. May 2010.

## **Acknowledgements**

We would like to thank all public health unit enforcement staff who conducted the inspections for the compliance surveys and participated in the interviews.

# Table of Contents

Acknowledgements.....	iii
List of Tables.....	vi
List of Figures.....	vi
Executive Summary .....	1
Youth Access .....	1
Point-of-Sale Promotions.....	1
Smoke-Free Public Places.....	2
Public Health Unit Enforcement Strategy Management.....	2
Glossary.....	3
Introduction .....	4
Youth Access.....	4
Point-of-Sale Promotions.....	6
Smoke-Free Public Places.....	7
Methods .....	8
Design .....	8
Compliance Survey.....	8
Sample.....	8
Data Collection.....	9
Data Analysis .....	11
Interpretation of Results.....	11
Enforcement Strategy Interviews.....	11
Sample.....	11
Data Collection.....	12
Data Analysis .....	13
Supporting Evidence from Population Surveys.....	13
Risk-Factor Analysis for Premise Non-compliance with the <i>SFOA</i> .....	13
Data Analysis .....	13
Interpretation of Results.....	14
Results .....	15
Youth Access to Tobacco.....	15
Provincial Level Compliance .....	15
Risk-Factor Analysis .....	16
Example: Vendor Education Program to Improve Identification Requests .....	17
Test Shopper Characteristics .....	18
Scheduling of Inspections .....	18
Test Shopping Procedures .....	19
Effectiveness of Test Shopping as Practiced .....	21

Self-reported Youth Access to Tobacco.....	22
Tobacco Enforcement Officer and Test Shopper Safety.....	22
Action Taken.....	23
Challenges.....	23
TEO Recommendations for Test Shopping Protocol .....	25
Summary of Youth Access Key Findings.....	25
Point-of-Sale .....	26
Provincial Level Compliance.....	26
Scheduling of Inspections.....	27
Action Taken.....	27
Challenges.....	28
Tobacco Industry Promotional Funding.....	29
Summary of Key Point-of-Sale Findings .....	29
Smoke-Free Public Places .....	30
Provincial Level Compliance.....	30
Exposure to Secondhand Smoke in Workplaces and Public Places.....	31
Impact of Smoke-Free Ontario Act Restrictions on Restaurant and Bar Patios .....	32
Smoke-Free Restaurant and Bar Inspection Protocol.....	33
Scheduling of Inspections.....	33
Tobacco Enforcement Officer Safety .....	33
Action Taken.....	34
Challenges.....	35
Summary of Key Smoke-Free Public Places Findings .....	35
Enforcement Strategy Management .....	36
Staffing Levels.....	36
Hiring Enforcement Staff .....	36
Training and Obtaining Provincial Designation .....	37
Issues Related to Geographic Size.....	38
Issues Related to the Public Health Unit Location in Ontario.....	38
Location of Enforcement Program within the Public Health Unit.....	39
Process for Handling Public Complaints .....	40
Process for Handling Charges.....	40
Changes in Enforcement Strategy since the Tobacco Control Act (1994).....	41
Lessons Learned from Managing SFOA Enforcement Program.....	42
Evidence of Success .....	43
Enforcement Manager Recommendations.....	44
Summary of Key Enforcement Strategy Management Findings .....	46
Conclusion .....	47

Appendix A: Premise Exclusion Criteria .....	48
Appendix B: Tobacco Control Area Networks .....	49
Appendix C: Web Survey Questions .....	51
Appendix D: Enforcement Manager Interview Guide.....	54
Appendix E: Tobacco Enforcement Officer Interview Guide.....	56
Appendix F: Youth Access Inspection Observation Form.....	60
References .....	61

## List of Tables

Table 1: Tobacco Vendor Sample, by Survey Round, 2006 and 2007 .....	10
Table 2: Public Places Sample, by Survey Round, 2006 and 2007 .....	10
Table 3: Proportion of Vendors in Compliance with the Youth Access Stipulations, by Survey Round, 2006 and 2007 .....	15
Table 4: Proportion of Vendors in Compliance with the Required Signage Stipulations, by Survey Round, 2006 and 2007 .....	15
Table 5: Significant Risk-factors Associated with Vendor Non-compliance for Tobacco Sales to Underage Youth, Ontario .....	17
Table 6: Proportion of Vendors who did not Engage in Point-of-Sale Promotions, by Type of Promotion and Survey Round, 2006 and 2007 .....	27
Table 7: Proportion of Restaurants and Bars That Were Observed as Being Smoke-Free and Had the Required ‘No Smoking’ Signage Posted, by Survey Round, 2006 and 2007.....	30
Table 8: Exposure to Secondhand Smoke in Workplaces and Public Places in the Past 30 Days, Ontario, 2005-2007.....	31
Table 9: Support for a Total Ban on Smoking in Workplaces and Public Places, Ontario, 2005-2007 .....	32

## List of Figures

Figure 1: Tobacco Manufacturer Payments to Retailers to Display Tobacco Products and Signs, Canada, 2001-2007 .....	29
---	----

## **Executive Summary**

This is the fourth in a series of reports about the formative evaluation of the *Smoke-Free Ontario Act* (SFOA). The design of the formative evaluation of the *Smoke-Free Ontario Act* comprises four components that include a province-wide compliance survey of tobacco vendors and public places (restaurants and bars) conducted pre- and post-SFOA; a series of interviews that examine public health unit tobacco enforcement strategies; analysis from population surveys regarding self-reported exposure to secondhand smoke and youth access to tobacco in addition to an analysis of administrative data regarding tobacco industry promotional expenditures; and last, an assessment of risk-factors associated with premise non-compliance with the SFOA. This report presents the results of all four components of the formative evaluation.

## **Youth Access**

The SFOA strengthened existing prohibitions on selling tobacco products to youth under the age of 19 years by requiring vendors to request identification of purchasers who appear under the age of 25 years. Vendor compliance with the prohibition on selling tobacco to underage youth was consistent across the pre- and post-SFOA compliance surveys (88 - 90%). While close to 80% of vendors properly requested ID from test shoppers, the majority of sales occurred when the store clerk failed to ask the test shopper for ID. An examination of risk-factors revealed that failure to ask a test shopper for ID, younger store clerks (aged < 25 years), and older test shoppers (aged 16-18) were all significantly associated with vendor non-compliance. Interviews with tobacco enforcement staff revealed that test shopping procedures were consistently practiced across the province. However, the effectiveness of the test shopper protocol in capturing a true measure of vendor-non-compliance was questioned by enforcement staff.

## **Point-of-Sale Promotions**

On May 31, 2006 the SFOA introduced firm restrictions on tobacco point-of-sale promotions. Four months following the implementation of the SFOA, compliance with each of the 6 point-of-sale promotion restrictions exceeded 95% and remained high one year following implementation. Overall, 88% of vendors were compliant with all 6 point-of-sale promotion restrictions within the first year. Tobacco industry payments to tobacco vendors for the display of products and signs decreased in Ontario from \$39.9 million in 2006 to \$32.0 million in 2007 while payments to the rest of Canada continued to increase.

## **Smoke-Free Public Places**

The SFOA introduced a complete ban on indoor smoking in enclosed workplaces and public places and restricted smoking on patios and in smoking shelters with specific characteristics. Prior to SFOA implementation, 90% of Ontario's population was living in a community with an indoor smoke-free bylaw. Our baseline compliance survey found that 94% of restaurants and bars were smoke-free before the provincial ban took effect in May 2006. Compliance with the SFOA indoor smoking restrictions was near perfect (99.9%) four months following the SFOA and remained high one year following the SFOA (99%). Within the first year of SFOA implementation self-reported exposure to secondhand smoke decreased in both restaurants (from 22.1% to 8.6%) and bars (from 42.3% to 14.2%), yet remained the same in workplaces (from 34.5% to 33.3%). Self-reported exposure to secondhand smoke on restaurant and bar patios was quite high one year following the SFOA implementation (47.9% and 74.3%, respectively).

## **Public Health Unit Enforcement Strategy Management**

Success of the tobacco enforcement efforts is evidenced in the high level of premise compliance with the SFOA and in increased community awareness regarding the SFOA. Nevertheless, the majority of public health units report being understaffed to adequately enforce the SFOA. Hiring new enforcement staff has been a challenge for some public health units. Provincial training for TEOs has been well received by enforcement staff and management. Travel was a key issue due to the geographic size of some public health units and the costs associated with the extensive travel. Contraband tobacco was a province-wide issue. However the enforcement of contraband tobacco is beyond the jurisdiction of the public health unit. SFOA implementation resulted in the standardization of tobacco vendor enforcement across the province. Lessons learned while managing tobacco enforcement include constant and consistent enforcement to maintain premise compliance, and the importance of collaboration between tobacco control programs at the local and regional level.



## Glossary

<b>OR</b>	Odds ratio
<b>OTRU</b>	Ontario Tobacco Research Unit
<b>POS</b>	Point-of-sale
<b>RCMP</b>	Royal Canadian Mounted Police
<b>SFOA</b>	<i>Smoke-Free Ontario Act</i>
<b>SHS</b>	Secondhand smoke
<b>TCA</b>	<i>Tobacco Control Act</i>
<b>TCAN</b>	Tobacco Control Area Network. The 36 public health units in the province are divided into 7 geographic Tobacco Control Area Networks.
<b>TEO</b>	Tobacco Enforcement Officer

## Introduction

Tobacco control enforcement has been a fixture of Ontario public health since the *Tobacco Control Act* (TCA), implemented in 1994. At that time, provincial enforcement activities primarily focused on monitoring youth access to tobacco and smoking on school property. Several public health units also engaged in enforcement of municipal indoor smoke-free bylaws. Provincial enforcement activities expanded on May 31, 2006 with the implementation of the *Smoke-Free Ontario Act* (SFOA) and now include monitoring point-of-sale promotions and smoking in enclosed workplaces and public places. In addition, the SFOA strengthened existing youth access prohibitions by requiring that vendors request identification of purchasers who appear 25 years of age or less.

As part of the Ontario Tobacco Research Unit's (OTRU) responsibility for evaluation of the *Smoke-Free Ontario Strategy*, a formative evaluation of the activities and impacts of the *Smoke-Free Ontario Act* was conducted. The formative evaluation aims to provide policymakers and managers with timely information to inform program development and planning.

The success of tobacco control legislation is largely dependent on a successful enforcement and education strategy. Since the early 1990s, much has been published regarding tobacco enforcement strategies, both successful and unsuccessful. To provide a context for the results later discussed in this report, literature exploring effective enforcement strategies and compliance levels for each of the areas of tobacco enforcement is discussed.

## Youth Access

Youth access regulations aim to prevent youth from obtaining cigarettes from retail sources and, as a result, aim to reduce smoking initiation and current smoking among youth. Research conducted in the early years of youth access regulations suggested that compliance must reach at least 90% before the regulation has any significant impact on youth smoking.<sup>1,2</sup> Obtaining such a high level of compliance would require strong enforcement.<sup>3</sup> Later research has confirmed the finding that high compliance rates affect smoking rates among youth in grades 7 and 8, however smoking rates among older youth remain unchanged due to an increased reliance on social sources for cigarette acquisition.<sup>4,5</sup> This research demonstrates that there is still a need for enforcement of the youth access regulations – both to prevent smoking initiation among the younger kids and to continue to limit retailers as a source of cigarettes for underage youth.

DiFranza's<sup>6</sup> Best Practices for enforcing youth access laws suggest that high compliance rates are associated with: a legal framework that requires offenders to be prosecuted and pay fines; state level coordination and funding of enforcement activities; and combining strong education with strong enforcement. Interventions that combine community involvement, vendor education and active

enforcement have been significantly more effective in reducing illegal sales to underage youth than vendor education alone.<sup>7,8</sup> Neither passive enforcement (i.e., responding only to complaints)<sup>9</sup> nor a self-enforcement approach (i.e., voluntary compliance)<sup>10</sup> are recommended for youth access to tobacco legislation.

The frequency of enforcement checks necessary for achieving a high level of compliance is unclear. One study found that enforcement checks conducted at least every 4 months were effective in reducing the number of illegal sales of cigarettes to underage youth.<sup>11</sup> However, another study demonstrated that a high frequency of enforcement did not translate to higher levels of compliance. In this study, a state that inspected only 20% of its vendor population annually had a higher compliance rate than a state that inspected every vendor twice a year (92% in Florida vs. 82% in Massachusetts, respectively).<sup>6</sup> The difference was explained by the enforcement strategies. In Florida, all offenders were fined \$500 each. While in Massachusetts, offenders were either issued a warning or a fine up to \$100.

Few studies have looked at the relative benefits of the various penalties for dealing with non-compliance such as warnings, different levels of fines, and revoking business licenses. Warnings alone without fines have been shown to be ineffective as compliance rates drop quickly upon subsequent compliance checks.<sup>11</sup> In addition, issuing warnings for the first offence has not been associated with high compliance rates.<sup>6</sup>

Reported youth access compliance rates in Canada and the US vary depending on the timing of the assessment and the enforcement strategy employed. Initial attempts to estimate compliance in the early 1990s produced low retail compliance rates, between 37% and 55%.<sup>12,13</sup> In recent years, studies have reported compliance rates between 82% and 94%.<sup>14,15,16,17</sup>

Research has suggested a number of risk-factors associated with tobacco sales to underage youth. Age is the most consistently reported risk-factor associated with illegal tobacco sales to underage youth. In several studies youth aged 16 or 17 years were more likely to be sold cigarettes than youth under the age of 15 years.<sup>15,17,18,19,20,21,22,23</sup> Other risk-factors associated with an increased likelihood of tobacco sales to underage youth include sex of the underage youth, where females were more successful in purchase attempts than males;<sup>15,18-21,24</sup> sex of the retail clerk, where male clerks sold tobacco more often in purchase attempts than female clerks;<sup>18,20,21,25,26</sup> age of the retail clerk, where clerks under the age of 18 sold tobacco more often in purchase attempts than clerks over the age of 30 years;<sup>17</sup> clerks failing to request identification;<sup>15,18,19,22,24,25</sup> youths lying about their age;<sup>22</sup> compliance checks conducted later than 6 PM;<sup>19,27</sup> and compliance checks conducted on Tuesdays,<sup>17</sup> Wednesdays<sup>17</sup> or Saturdays.<sup>17,19</sup> The relationship between the type of retail tobacco outlet and sales to underage youth varied in the literature. Two studies found the type of retail outlet had no effect on the likelihood of selling tobacco products to underage youth,<sup>23,24</sup> while two other studies found gas

stations<sup>19</sup> and convenience stores located inside gas stations<sup>17</sup> were more likely to make illegal tobacco sales to underage youth.

## **Point-of-Sale Promotions**

Tobacco point-of-sale promotions have become quite common in the retail environment due to tobacco industry promotional funding. The prominence of point-of-sale promotions has been shown to have a detrimental effect on youth, particularly encouraging youth smoking.<sup>28,29,30</sup>

Legislation prohibiting retail point-of-sale promotions was first implemented in Iceland in 2001. Since that time, all 13 Canadian provinces/territories and six jurisdictions across the world (Iceland, Thailand, New Zealand, South Africa, Singapore, and Australia) have implemented similar legislation that either prohibits or restricts point-of-sale promotions. In 2006, the *Smoke-Free Ontario Act* established prohibitions on a number of point-of-sale promotions:

1. Countertop displays
2. Display that permits handling by a purchaser prior to purchase
3. Display of more than single cigarette packages (i.e., cartons)
4. Decorative or illuminated panels and /or promotional lighting
5. Three dimensional exhibits and/or other devices, instruments and enhancements
6. Outside promotional displays

Subsequently, on May 31, 2008 the *Smoke-Free Ontario Act* completely banned all point-of-sale promotions. Evaluation of the total display ban is not addressed in the current report.

To date, there is no literature describing enforcement strategies for this type of enforcement activity. Instead, the literature focuses primarily on the hazards of tobacco point-of-sale promotions to encourage other jurisdictions to pass similar legislation.

New Zealand is the only jurisdiction that has published compliance rates with regards to point-of-sale promotional restrictions. In that study, 64% of surveyed stores were non-compliant with at least one of the nine point-of-sale regulations three years after the regulations were put in place.<sup>31</sup> The three most commonly observed infractions were: failing to display a health warning sign (30%), point-of-sale displays visible from the outside (25%), and tobacco products displayed within one meter of children's products (24%). Lack of awareness regarding the point-of-sale promotional restrictions among tobacco vendors and the general public, in addition to a passive enforcement strategy where enforcement is only conducted in response to complaints were provided as possible explanations for the high levels of observed non-compliance.

## Smoke-Free Public Places

Exposure to secondhand smoke has been linked to lung cancer, coronary heart disease, and premature death.<sup>32</sup> The aim of smoke-free legislation is to eliminate the burden of chronic disease and premature mortality as a result of exposure to secondhand smoke.

The SFOA prohibits all indoor smoking in public places and placed restrictions on smoking on patios and in smoking shelters with specific characteristics. Prior to the implementation of the SFOA, approximately 90% of Ontario's population was covered under a smoke-free public place municipal bylaw.<sup>33</sup>

It has been suggested that a self-enforcement approach is sufficient for smoking restrictions in public places due to changing social norms regarding appropriate smoking behaviour.<sup>10</sup> Instead of a systematic enforcement approach, some jurisdictions have chosen to rely on a less resource-intensive, complaints-based approach.<sup>10</sup> Alternatively, a California study has suggested that a risk-based approach may be more appropriate to monitoring compliance among public places, whereby monitoring efforts are weighted toward higher likelihood of non-compliance (e.g., free-standing bars vs. bars located within restaurants).<sup>34</sup>

Few studies have evaluated the effectiveness of penalties for enforcing restrictions in smoke-free public places. In British Columbia, higher compliance was achieved by filing charges against the owner/operator of the premise, as opposed to the individual found smoking, and increasing the penalty from a \$100 fine to a civil injunction.<sup>35</sup> Another study suggested that issuing citations instead of warnings, and vigorous prosecution of violators, effectively increased compliance.<sup>34</sup>

Studies across jurisdictions have typically shown high levels of compliance with smoke-free public places legislation. An Australian study observed 100% compliance in restaurants in just 6 weeks following the implementation of a smoking ban.<sup>36</sup> Compliance in bars appears to be mixed. A study conducted in Boston reported 99% compliance 3 months following implementation.<sup>37</sup> However, a California study reported a discrepancy in compliance between free standing bars (75.8% compliance) and bars located in restaurants (98.5% compliance) seven years following implementation.<sup>34</sup>

## Methods

### Design

The design of the formative evaluation of the *Smoke-Free Ontario Act* comprises four components. The central component of the evaluation is a compliance survey of tobacco vendors and public places (restaurants and bars) conducted in three rounds: a baseline survey prior to SFOA implementation and two surveys to track post-implementation changes in compliance. The second component is a series of interviews with public health unit Enforcement Managers and Tobacco Enforcement Officers that examine tobacco enforcement strategies and challenges faced when enforcing the SFOA. In the third component, data from ongoing population surveys are analyzed to provide information on self-reported exposure to secondhand smoke and youth access to cigarettes, and administrative data are used to determine trends in tobacco industry expenditures on point-of-sale promotions. The final component of this evaluation is an assessment of risk-factors associated with premise non-compliance with the SFOA, the results of which will help inform future enforcement practices. This report synthesises information from these four components to provide a comprehensive overview of SFOA implementation and effects. For a more detailed description of the compliance survey methodology and results, please refer to our previous report.<sup>38</sup>

### Compliance Survey

#### *Sample*

Separate regionally-stratified random samples of tobacco vendors and public places were drawn for each of the baseline, first and second post-implementation surveys. Tobacco vendors were categorized by trade class, namely: chain convenience stores; independent convenience and discount stores; gas stations; and, grocery stores. In the baseline survey, restaurants were included as a fifth trade class of tobacco vendor. However, this vendor trade class was excluded from the first and second post-implementation surveys due to the declining number of restaurants selling tobacco products. For sampling purposes, public places (i.e., restaurants and bars) were grouped into one category because of the small number of premises listed as distinct bars in the premise inventory. For analytic purposes, tobacco enforcement personnel distinguished between restaurants and bars by noting the primary function of the premise as either eating or drinking alcoholic beverages at the time of inspection. Appendix A lists various types of vendors and public places excluded from the survey (e.g., gift shops and Royal Canadian Legions).

Both the tobacco vendor and public places samples were stratified at the Tobacco Control Area Network (TCAN) level (see Appendix B for map). In each TCAN, roughly 240 tobacco vendors and 240 restaurants and bars were randomly selected. The North West and North East TCANs were

collapsed into a single Northern area for sampling due to the small population size and geographic dispersion. Three hundred vendors were selected from the combined Northern area. Equal numbers of vendors were selected in each of the four vendor trade classes. In order to prevent undue burden on any public health unit, premises were also selected in numbers proportional to the total number of premises in each public health unit within each of the TCANs.

### **Data Collection**

Data for all three compliance surveys were collected by public health unit Tobacco Enforcement Officers as part of their routine responsibilities. Youth access to tobacco products was assessed using test shoppers (specially trained youth under the age of 18 years employed by public health units) who attempted to purchase cigarettes. Tobacco Enforcement Officers used standard data collection templates jointly developed by the Ministry of Health Promotion and OTRU. These standard data collection templates have been modified between each round of the survey. However, the core findings captured on the data collection template have remained constant throughout all three surveys.

Data for the baseline survey were collected between April 18 and May 9, 2006. Data for the first post-implementation survey were collected four months later, between September 18 and October 8, 2006. Data for the second post-implementation survey were collected one year following the implementation of the SFOA, between May 22 and June 11, 2007.

Completion rates for all three surveys were quite high, exceeding 88%. Tables 1 and 2 summarize the total number of premises, number of premises sampled and number of premises that were actually inspected in each trade class for vendors and public places respectively.

In all three surveys, the categorization of vendors changed slightly when the data were returned. In some cases, enforcement staff had categorized vendors differently than the OTRU vendor categorization. Where the vendor categorization differed, the categorization from the enforcement staff was adopted.

**Table 1: Tobacco Vendor Sample, by Survey Round, 2006 and 2007**

Trade Class	Total Number of Vendors	Number of Premises Sampled	Number of Premises Inspected
<b>Baseline (April-May, 2006)</b>			
Chain convenience	1339	318	321
Independent convenience and discount stores	6132	318	338
Gas stations	2371	320	302
Grocery stores	1298	320	254
Restaurants	3154	318	199
<b>Total</b>	<b>14,294</b>	<b>1594</b>	<b>1414</b>
<b>First Post-Implementation (September-October, 2006)</b>			
Chain convenience	1377	392	384
Independent convenience and discount stores	6180	395	395
Gas stations	2420	393	341
Grocery stores	1347	395	301
<b>Total</b>	<b>11,324</b>	<b>1575</b>	<b>1421</b>
<b>Second Post-Implementation (May – June, 2007)</b>			
Chain convenience	1493	394	402
Independent convenience and discount stores	6604	396	414
Gas stations	2603	392	384
Grocery stores	1601	394	307
<b>Total</b>	<b>12,301</b>	<b>1576</b>	<b>1507</b>

*Note:* Vendor population size does not represent the complete provincial vendor population as vendors listed as belonging to additional categories were excluded from the sample. Please refer to Appendix A for a list of the exclusion criteria.

*Note:* The number of premises sampled was based on OTRU's original vendor type categorization and the number of premises inspected was based on how the enforcement staff categorized the vendors when they conducted the inspection

**Table 2: Public Places Sample, by Survey Round, 2006 and 2007**

Trade Class	Total Number of Restaurants/Bars	Number of Premises Sampled	Number of Premises Inspected
<b>Baseline (April-May, 2006)</b>			
Restaurants and bars	18,222	1457	1430
<b>First Post-Implementation (September-October, 2006)</b>			
Restaurants and bars	18,368	1460	1415
<b>Second Post-Implementation (May – June, 2007)</b>			
Restaurants and bars	19,083	1457	1345

*Note:* Restaurant and bar population size does not represent the complete provincial restaurant and bar population contained in the premise inventory as various types of restaurants and bars were excluded from the sample. Please refer to Appendix A for a list of the exclusion criteria.



## **Data Analysis**

Estimates of compliance rates, by type of premise, were calculated taking into account the complex sampling design. Estimates were weighted using sampling probability weights. Variance estimates were obtained using a bootstrap method reflecting the complex sampling structure. Bootstrap is a rigorous analysis technique that creates 500 regionally-stratified sub-samples of the original survey sample, completes the analysis in each sub-sample and then reports the mean proportion and the mean variance from all 500 sub-samples. The resulting mean variance estimation is more robust to outliers and to sampling error than the variance estimation that was applied in the baseline report.

## **Interpretation of Results**

The purpose of the three compliance surveys was to provide provincial compliance estimates of tobacco vendors, restaurants and bars with regards to the SFOA before and after the implementation of the SFOA. All estimates presented in this report have been weighted to reflect the provincial vendor, restaurant and bar populations. These estimates all have sampling error associated with them.

Significant differences between the baseline and two post-implementation survey estimates are indicated in the text by a probability statement, such as  $p < .05$ . This means that the probability that the observed difference between the two estimates occurred by chance is less than 5%.

## **Enforcement Strategy Interviews**

### **Sample**

In March 2007, a web-survey was administered to all 36 public health unit Enforcement Managers<sup>i</sup> to solicit information about the basic characteristics of the enforcement structure and the management of inspection information within each public health unit (See Appendix C). Responses to the web-survey questions informed the enforcement strategy interview questions and selection of public health units for participation in the enforcement strategy interviews

Five criteria were used to select public health units in order to capture specific characteristics that may affect enforcement strategies: the number of enforcement staff, geographic dispersion of premises, history of conducting tobacco inspections, enforcement management structure and inspection

<sup>i</sup> The designation of the individual responsible for managing tobacco control enforcement varies from public health unit to public health unit (e.g., Tobacco Control Manager/Coordinator/Supervisor, Enforcement Manager/Supervisor, Environmental Health Manager/Supervisor, etc.). In this report, the term Enforcement Manager will be used to represent the individual responsible for managing tobacco enforcement activities.

strategies. At least one public health unit was selected from each TCAN. In total, 10 public health units were selected for interviews in order to capture expected variation in contexts and mechanisms. Enforcement Managers were contacted in each of the selected public health units to schedule a date for the interview. As one public health unit did not respond to the invitation to participate in the study, an alternative public health unit with similar characteristics of interest was selected.

In the majority of cases, the Enforcement Manager of the public health unit identified the Tobacco Enforcement Officer(s) to be personally interviewed for the study. Only in one case was a list of Tobacco Enforcement Officers provided from which OTRU selected the Tobacco Enforcement Officers to be interviewed. The number of Tobacco Enforcement Officers interviewed at each public health unit ranged from 1 to 3 depending on the type of inspections each enforcement staff routinely conducted.

### **Data Collection**

Separate interviews were conducted with Enforcement Managers and Tobacco Enforcement Officers. Prior to commencing the interview, participants were asked to read and sign a letter of consent that described the interview process and confirmed the confidentiality of their responses. The Enforcement Manager interview questions focused on enforcement strategies, complaint handling and charge procedures (see Appendix D). The Tobacco Enforcement Officer interview questions focused on the procedures used in each of the three types of *SFOA* inspections (youth access; display, promotion and handling; smoke-free workplaces and public places; see Appendix E). A greater proportion of questions were asked regarding the procedure used in the youth access inspections as this type of inspection employs a test shopper and variations in how the test shopper is instructed to purchase tobacco products might affect the outcome of an inspection. In general, questions were asked about the timing of the inspections, step-by-step procedure for conducting the inspections, what actions are taken when non-compliance is observed during an inspection, and perceptions about if and why the compliance survey may not be capturing vendor non-compliance with the prohibition on tobacco sales to underage youth. All interviews were digitally recorded and later transcribed.

While visiting five of the selected public health units, three or more youth access compliance check inspections were observed. Further observations were not scheduled due to saturation in the information that was being captured. Observation forms were used to record information regarding the timing of the inspection, precise behaviours (dress, mannerisms, interactions) of test shoppers and enforcement personnel, and the outcome of the inspection (see Appendix F).

A total of 10 Enforcement Management interviews, 12 Tobacco Enforcement Officer interviews and 18 youth access compliance check observations were conducted between October 15 and November 21, 2007. Where possible, interviews were conducted on site at the selected public health unit.

## **Data Analysis**

Transcripts were reviewed and a content analysis was conducted to examine patterns of enforcement, specifically exploring which patterns were perceived to work better under what contexts.

## **Supporting Evidence from Population Surveys**

Weighted estimates from three population surveys were included in this report: two surveys of Ontario adults (Ontario Tobacco Survey and Centre for Addiction and Mental Health Monitor) and one school-based survey (Ontario Student Drug Use and Health Survey).

Pre- and post-SFOA estimates of secondhand smoke exposure in restaurants, bars, workplaces and on patios were conducted using the Ontario Tobacco Survey 2005-2007<sup>39</sup> baseline data. The time periods were defined as July, 2005 – May, 2006 (pre-SFOA) and July, 2006 – May, 2007 (post-SFOA). Data from the month of June, 2006 was excluded from the post-SFOA analysis as the survey question referenced exposure to secondhand smoke in the past 30 days. Subsequently, data from the month of June, 2007 was also excluded from the analysis to balance the number of months included pre-SFOA and post-SFOA.

Public opinion regarding a total ban on smoking in restaurants, bars, workplaces and on patios was estimated using the CAMH Monitor 2005 – 2007<sup>40</sup> survey data.

Self-reported estimates for youth access to tobacco were calculated using the Ontario Student Drug Use and Health Survey 2005 and 2007 data.<sup>41,42</sup>

## **Risk-Factor Analysis for Premise Non-compliance with the SFOA**

### **Data Analysis**

#### **Youth Access**

Risk-factors for vendor non-compliance with the youth access stipulations were examined using combined data from all three compliance surveys. Potential risk-factors for vendor non-compliance with the youth access stipulations were selected from the administrative data collected for each inspection based on previously identified risk-factors in the published literature. The potential risk-factors in our analysis included: vendor trade class, TCAN, survey date, type of inspection, sex of test shopper, age of test shopper, sex of sales clerk, apparent age of sales clerk, request for identification, day of the week, time of day, and the posting of the health warning sign, age/ID sign, Operation ID signs, We Expect Id signs, and Not To Kids signs.

The analysis was conducted in three stages.<sup>ii</sup> First, weighted estimates of vendor non-compliance were calculated for each potential risk-factor. Second, logistic regression analyses were conducted to assess the association between each potential risk-factor and vendor non-compliance. Variables that were not significantly associated with vendor non-compliance (unadjusted OR  $p$ -value > 0.05) were excluded from further analyses. Third, multivariate logistic regression analyses were conducted to identify significant risk-factors for vendor non-compliance while controlling for vendor trade class, TCAN and survey date. A parsimonious multivariate logistic regression model that identified the key risk-factors associated with vendor non-compliance was achieved using a stepwise selection process.

### **Smoke-Free Restaurants and Bars**

Risk-factor analysis for restaurant and bar non-compliance with the smoke-free enclosed public places restriction could not be conducted due to the low level of non-compliance observed in the first and second follow-up surveys (<1%;  $n = 12$  non-compliant restaurants and bars). In addition, risk-factor analysis for restaurant and bar non-compliance with the smoke-free outdoor patio restriction could not be calculated due to the small number of patios observed with structures that would prohibit smoking under the SFOA ( $n = 236$ ) and the small number of people observed sitting on these patios ( $n = 71$ ).

### ***Interpretation of Results***

Results from the risk-factor analyses are presented as unadjusted and adjusted odds ratios (OR). An unadjusted OR describes the strength of the association between a variable of interest and the outcome. An adjusted OR describes the strength of association between a variable of interest and the outcome while controlling for all other variables of interest.

Each variable has one category that is known as the referent group and is identified by an OR=1.0. Odds ratios for the remaining variable categories should be interpreted as follows: an odds ratio over 1.0 indicates that the variable category increases the odds of vendor non-compliance by the magnitude of the OR compared to the reference group. For example, female test shoppers were 1.46 times more likely to be sold tobacco compared to male test shoppers. Similarly, an odds ratio below 1.0 indicates that the variable category decreases the odds of vendor non-compliance by the magnitude of the OR compared to the reference group. For example, vendors inspected during the second post-implementation survey were 0.55 times less likely to sell tobacco to a test shopper compared to vendors inspected during the baseline survey.

<sup>ii</sup>Restaurants that were inspected in the baseline survey ( $n = 199$ ) were excluded from the risk-factor analyses due to the small number of restaurants and bars that were non-compliant with the youth access stipulation ( $n = 17$ )

## Results

### Youth Access to Tobacco

#### *Provincial Level Compliance*

SFOA implementation did not produce significant change in the rate of compliance with youth access stipulations. The overall rate of province-wide compliance with the prohibition on selling tobacco to underage youth was 90% at the second post-implementation survey (hereafter referred to as the second follow-up survey), which is very similar to the rate observed at baseline and the first follow-up surveys (Table 3).

Despite the new requirement to do so, there was no significant change in the proportion of vendors who requested proof of age from test shoppers between the baseline, first and second follow-up surveys (77%, 80%, and 78%, respectively; Table 3). The vast majority of sales to underage youth (78%) occurred when vendors failed to request proof of age –similar to the 88% and 83% observed during the first follow-up and baseline surveys, respectively.

**Table 3: Proportion of Vendors in Compliance with the Youth Access Stipulations, by Survey Round, 2006 and 2007**

Stipulation	Baseline %	First Follow-up %	Second Follow-up %
Prohibition on tobacco sales to underage youth <sup>a</sup>	88	88	90
Proof of age request made by vendor <sup>b</sup>	77	80	78

<sup>a</sup> No change in the stipulation between the TCA and the SFOA.

<sup>b</sup> Stronger regulation in the SFOA compared to the TCA.

A significantly higher proportion of vendors displayed the required age identification sign during the second follow-up survey (95% vs. 87% at baseline;  $p < .05$ ; Table 4). Similarly, vendor compliance with the posting of the required health warning sign increased between baseline (79%) and the second follow-up survey (96%;  $p < .05$ ). There were no significant differences in the compliance with posting the age identification or health warning signs between the first and second follow-up survey. The sale of tobacco products to underage youth was not associated with posting of either required sign during any of the three surveys.

**Table 4: Proportion of Vendors in Compliance with the Required Signage Stipulations, by Survey Round, 2006 and 2007**

Stipulation	Baseline %	First Follow-up %	Second Follow-up %
Age identification required sign posted	87	92	95 <sup>†</sup>
Health warning sign posted	79	92 <sup>*</sup>	96 <sup>†</sup>

<sup>a</sup> Significant difference between baseline and first follow-up estimates,  $p < .05$

<sup>b</sup> Significant difference between baseline and second follow-up estimates,  $p < .05$

### **Risk-Factor Analysis**

Findings from the risk-factor analyses conducted on the combined data from all three SFOA compliance surveys concur with some of the findings in the published literature. While controlling for vendor trade class (type of retail outlet), TCAN and survey date, sales to underage youth in Ontario were significantly associated with four variables: failure to ask for ID; age of test shopper; age of store clerk; and TCAN (Table 5)

#### **Failure to Ask for ID**

Failure to ask the test shopper for ID was the strongest predictor of a sale to a test shopper (OR=36.6;  $p < .001$ ) in the multivariate analysis.

#### **Age of Test Shoppers**

Test shoppers who were 16 years of age (OR= 1.84) and 17 years of age or older (OR=2.34) were more likely to be sold tobacco compared to test shoppers who were 14 or 15 years of age ( $p < .001$ ).

#### **Age of Store Clerks**

Store clerks who appeared to be 25 years and under were more likely to sell tobacco products to test shoppers (OR= 2.76) compared to store clerks who appeared 26 years and older ( $p < .001$ ).

#### **TCAN**

Tobacco sales to test shoppers were more likely to occur in the Eastern TCAN (OR=2.02;  $p < .05$ ) and North West TCAN (OR=3.32;  $p < .001$ ) compared to the North East TCAN.

Other variables that were examined, but were not significantly associated with the likelihood of an illegal sale of a tobacco product to test shoppers included vendor trade class, type of inspection, sex of test shopper, sex of sales clerk, day of the week, time of day, and the posting of the health warning sign, age/ID sign, Operation ID signs, We Expect Id signs, and Not To Kids signs.

**Table 5: Significant Risk-factors Associated with Vendor Non-compliance for Tobacco Sales to Underage Youth, Ontario**

Variable	n	Weighted Estimates for Vendor Non-Compliance (%)	Adjusted Odds Ratio
<b>Overall sales to underage youth</b>	4084	11.5	
<b>Vendor trade class</b>			
Chain convenience	1090	9.7	1.0
Independent convenience & discount	1132	11.5	1.05
Gas station	1012	12.3	1.25
Grocery stores	850	11.8	1.00
<b>Region</b>			
North East	538	5.1 <sup>a</sup>	1.0
Eastern	643	13.2	2.02 <sup>b</sup>
Central East	676	11.0	1.59
Toronto	655	13.6	1.50
Central West	644	12.4	1.50
South West	690	8.9	1.53
North West	238	13.1 <sup>a</sup>	3.32 <sup>†</sup>
<b>Survey round</b>			
April-May, 2006	1200	12.6	1.0
September-October, 2006	1377	11.9	0.91
May-June, 2007	1507	10.2	0.55 <sup>c</sup>
<b>Age of test shopper</b>			
14 & 15	1172	6.5	1.0
16	1656	12.2	1.84 <sup>c</sup>
17 & 18	1210	14.7	2.34 <sup>c</sup>
<b>Apparent age of sales clerk</b>			
26 years and older	2790	9.2	1.0
25 years and under	1089	19.2	2.76 <sup>c</sup>
<b>Request for ID</b>			
Yes	3326	2.5	1.0
No	752	45.1	36.61 <sup>c</sup>

<sup>a</sup> Interpret with caution, moderate level of error associated with estimate – Coefficient of Variation (CV) between 16.6% and 33.3%

<sup>b</sup> Statistically significant at the  $p < .05$  level.

<sup>c</sup> Statistically significant at the  $p < .001$  level.

### **Example: Vendor Education Program to Improve Identification Requests**

Recognizing the importance of increasing vendor compliance with the request for identification, the Kingston, Frontenac and Lennox & Addington Public Health created a vendor education program in 2007 entitled “Who is 25?”<sup>43</sup> In this program, individuals aged 19 to 21 years (who appear under the age of 25 years) are sent into a store to purchase cigarettes. If the clerk asks for identification, the shopper hands them a green card indicating compliance. If the clerk fails to ask for identification, the shopper hands them a red card indicating non-compliance. Both cards remind vendors that the SFOA requires vendors to ask for identification from all tobacco purchasers who appear under the age of 25 years, while also providing a contact number at the public health unit. No charges are laid during these visits. Vendor education programs about the requirement to request ID could have a significant impact on decreasing vendor non-compliance since the failure to request identification was identified as the strongest predictor of illegal tobacco sales to underage youth in our risk-factor analysis.

### ***Test Shopper Characteristics***

The Ministry of Health Promotion's *Protocol for Determination of Tobacco Vendor Compliance* states that test shoppers hired by public health units must be between the ages of 15 and 17 years.<sup>44</sup> The majority of test shoppers working in each of the selected public health units were 16 or 17 years of age, while a smaller number of test shoppers were 15 years of age. One public health unit had a 14 year-old test shopper on staff. According to a Tobacco Enforcement Officer (TEO) at that particular public health unit, the 14-year-old test shopper was hired to avoid entrapment claims from the tobacco vendors and misrepresentation of the test shopper's apparent age in court. In fact, all of the selected public health units took precautions to avoid entrapment claims from tobacco vendors by assessing the apparent age of a test shopper prior to hiring. The assessment is conducted either by the TEO during the interview or by asking the test shopper to walk in front of a small number (4-5) of public health unit staff members so that the staff can assess the test shopper's apparent age.

Our findings, supported by previous studies, indicate that vendors are much more likely to sell to older test shoppers. This, together with the SFOA stipulation requiring vendors to now ask for identification from purchasers who appear to be under the age of 25 years, strongly suggests that using older test shoppers would improve the impacts of the SFOA on decreasing sale of tobacco to underage youth.

Roughly equal numbers of male and female test shoppers were employed at the selected public health units. All of the test shoppers were nonsmokers. In some public health units, being a nonsmoker was a condition for employment as a test shopper.

### ***Scheduling of Inspections***

Scheduling youth access compliance checks appears to vary across the province. Half of the TEOs ( $n=5/10$ ) revealed that youth access compliance checks were conducted Monday to Friday. The remaining TEOs conducted their youth access compliance checks on weekends only ( $n=2$ ), 7 days a week ( $n=2$ ) and Monday to Saturday ( $n=1$ ).

Since scheduling the youth access compliance checks is based on the test shopper availability, TEOs reported conducting the youth access compliance checks after school hours, usually between the hours of 3 PM and 8 PM. Weekend youth access compliance checks are usually conducted between the hours of 9 AM and 5 PM. In one public health unit, a couple of remote communities require extensive travel, resulting in longer working hours. For one community, the TEO and test shopper work a 15-hour day leaving at 7 AM and returning at 10 PM; whereas the other remote community requires an overnight stay in a hotel.



Although our risk-factor analysis found no association between the time of day and vendor non-compliance, an Alberta study found that youth access compliance rates drop significantly in later evening hours.<sup>45</sup> During daytime hours they found that youth access compliance was 86%. However, compliance with the youth access stipulations dropped to 52% between the hours of 8 PM and midnight, and further dropped to 36% between the hours of midnight and 4 AM. These findings suggest that the scheduling of youth access compliance checks should be carefully considered and possibly include the occasional late evening compliance check.

### ***Test Shopping Procedures***

The Ministry of Health Promotion's *Protocol for Determination of Tobacco Vendor Compliance* provides guidelines as to how the youth access compliance checks should be conducted.<sup>44</sup> During the course of the three SFOA compliance surveys that OTRU conducted in 2006-2007 there was an indication that the test shopping procedures varied slightly across public health units. Below is a summary of the findings from the interviews with the TEOs regarding the test shopping procedures.

#### **Test Shopper Appearance**

Test shoppers are instructed to dress casually, as they would for school. Heavy makeup, facial hair, facial piercings and hooded sweatshirts are not permitted as it may portray an image that is older than their actual age.

#### **Photo Taken of Test Shopper**

The majority of TEOs reported taking a photo of the test shopper at the start of each shift ( $n=6/10$ ). The other TEOs only took a photo of the test shopper if the test shopper successfully purchased a tobacco product from a vendor. These photos are used as evidence if the case goes to court.

#### **Type of Tobacco Product**

All the public health units test shop for cigarettes. However, one public health unit routinely included cigars (e.g., Old Ports) and three public health units had included smokeless tobacco in previous rounds of test shopping.

#### **Brand of Tobacco Product**

Prior to entering the store, the TEO and test shopper determine which brand of tobacco product the test shopper will attempt to purchase. The brand selection is determined by either brand popularity among local area youth, the cost of the tobacco product or the brand the test shopper is most comfortable asking for. The brand of cigarettes varied between public health units, including MacDonald's Lights, Player's Light, DuMaurier Light, Canadian Classics, Peter Jackson, and Podiums.

### **Purchase Additional Items**

None of test shoppers purchased anything in addition to the requested tobacco product.

### **Complete Sale**

In all cases, if the store clerk is willing to sell the tobacco product to the test shopper, then the test shopper pays for the tobacco product and leaves the store with the purchased tobacco product in hand.

### **Age Request and ID**

All test shoppers are instructed to respond truthfully when a store clerk asks for their age. Only one public health unit permitted test shoppers to use personal ID during a purchase attempt if the test shopper felt comfortable in doing so.

### **Number of TEOs Present**

In seven out of ten public health units, one TEO went out with the test shopper to conduct youth access compliance checks. Two TEOs went out with the test shopper in the remaining three public health units. Reasons provided for having two TEO present during the compliance checks included safety, gender of the test shopper and TEO, and public health unit protocol.

### **Number of Test Shoppers Present**

The majority of TEOs conducted youth access compliance checks with only one test shopper. However, for safety reasons, a couple of the public health units send out two test shoppers with a TEO to conduct youth access compliance checks. Both test shoppers enter the store, though only one test shopper will attempt to purchase cigarettes.

### **Location of TEO During Purchase Attempt**

While the test shopper is in the store attempting to purchase a tobacco product, the TEO remains in the car or just outside the store if the store happens to be located inside a mall. In almost all instances, the TEO can see the test shopper enter and exit a store. However, store displays or promotional signage often obstruct the view inside the store and prevents the TEO from seeing the test shopper during the actual purchase attempt.

### **Actions Following Purchase Attempt**

The test shopper returns to the vehicle to inform the TEO of the outcome of the purchase attempt – whether they were asked for ID, purchased a tobacco product and if the required signs were posted. Both the TEO and test shopper write notes in their notebooks describing the details of the purchase attempt. If the test shopper was sold a tobacco product or if the store clerk failed to ask for ID, then the TEO would enter the store to talk with the store clerk. Two public health units required that the test shopper also return to the store to identify the store clerk who sold the tobacco product.

Otherwise the test shopper remained in the locked vehicle until the TEO returned from the store. If no tobacco was sold to a test shopper, the majority of the TEOs ( $n=8/10$ ) would continue on to the next store. Only in two public health units did the TEO return to the store to inform the store clerk that a test shopper was just in the store and that the store was found to be in compliance with the SFOA.

From the small sample of public health units that were selected for interviews, it appears that similar test shopping procedures are being employed across the province despite previous indications. This may or may not be the case for the remaining 26 public health units across Ontario.

### ***Effectiveness of Test Shopping as Practiced***

During the course of the three SFOA compliance surveys that OTRU conducted in 2006-2007, there was an indication that the SFOA compliance survey may not be capturing a valid estimate of compliance. Since the only difference between the SFOA compliance survey and routine compliance checks was the selection and the number of vendors to check, this led to questions regarding the effectiveness of the compliance check protocol. When asked if the compliance check protocol accurately captures vendor non-compliance, the majority of TEOs interviewed ( $n=6/10$ ) reported that the compliance check protocol did not accurately capture vendor non-compliance. TEOs reported that the compliance check protocol was not realistic enough to capture vendor non-compliance since test shoppers can't lie about their age, they are strangers to store clerks, and sometimes the test shopper does not fit in with the area's ethnic culture. For these reasons, it has been difficult for some TEOs to catch a vendor selling tobacco to the test shopper when the vendor is known to sell tobacco to underage youth.

Recent research has questioned the validity of compliance check protocols, citing some of the same issues that were mentioned by the TEOs. One study compared the standard compliance checking protocol to a 'smoker' protocol that captured the typical tobacco purchasing actions of an underage smoker.<sup>46</sup> In this study, the 'smoker' protocol allowed the underage youth to dress as they chose, purchase other items with the tobacco product, lie about their age, and present their own valid ID if requested. The results indicate that the 'smoker' protocol was nearly six times more likely to result in a completed tobacco purchase in comparison to the standard protocol ( $OR = 5.7; p < .05$ ). In a similar study, Landrine and Klonoff<sup>47</sup> compared the familiarity effect of underage youth purchasing tobacco products to the standard protocol. In the familiarity protocol, underage youth entered a retail tobacco outlet four times over the course of 6 to 8 days at the same time of day and sought to purchase a non-tobacco product from the same retail clerk. Tobacco purchase attempts were conducted upon the fifth visit to the retail tobacco outlet. Findings from this study indicate that the familiarity protocol was almost six times more likely to result in a successful tobacco purchase attempt in comparison to the standard protocol ( $OR = 5.5; p < .05$ ). These findings reflect a more realistic purchasing pattern of young smokers and suggest that the standard protocol may underestimate the ability of young smokers to purchase tobacco in their own communities.

### ***Self-reported Youth Access to Tobacco***

Underage youth (<19 years) in Ontario who smoked more than one cigarette in the past year were most likely to have obtained their last cigarette from social sources, such as friends and family, in 2005 and 2007 (66% and 67%, respectively; OSDUS 2005, OSDUHS 2007). Fewer underage smokers reported buying their last cigarette from a store in 2005 (16%; OSDUS 2005), which decreased to 11% in 2007 ( $p < .05$ ; OSDUHS 2007).

Contrary to the high rates of youth access compliance in this report, underage smokers who attempted to buy cigarettes reported being refused the sale of cigarettes in stores only 41% of the time in the month prior to the 2005 survey (OSDUS 2005). A similar proportion of refused cigarettes sales was reported in 2007 (39%; OSDUHS 2007). These findings suggest that the test shopping protocol may not be capturing the true proportion of vendors who do not sell tobacco products to youth under the age of 19 years.

### ***Tobacco Enforcement Officer and Test Shopper Safety***

Overall, TEOs encountered very few situations where they were concerned about their own or their test shopper's safety during the course of a youth access compliance check. Three types of incidents were reported during the TEO interviews, they include: 1) the store clerk or store manager following the test shopper back to the vehicle and banging on the vehicle window, 2) the store clerk coming out and blocking the vehicle until the store manager could come out to yell at the TEO and test shopper, and 3) a group of young men harassing a female test shopper upon her exit of the store (one-time incident).

Public health units have a policy where the test shopper will not be sent into a premise if the premise appears unsafe. In addition, most TEOs reported that they monitor the length of time a test shopper is in a store. If the test shopper does not return to the vehicle within a reasonable amount of time (e.g., 5 minutes), the TEO will enter the store to check on the situation. One public health unit has gone as far as having the test shopper carry a two-way radio so that the test shopper can alert the TEO if the situation becomes unsafe.

One particular safety issue that was raised in a number of TEO interviews is that the majority of TEOs use their personal vehicle when conducting inspections. Many store clerks recognize the vehicle, which may impact the outcome of the purchase attempt if the vehicle is recognized prior to the test shopper entering the store. Moreover, some store clerks or managers have written down the license plates of the TEO vehicle. Vehicles were supplied by the public health unit for the purpose of conducting inspections in only two out of the ten public health units where TEOs were interviewed.

**Action Taken**

The Ministry of Health Promotion's *Protocol for Determination of Tobacco Vendor Compliance* applies a continuum of progressive enforcement to help achieve compliance with the SFOA.<sup>44</sup> In this model, a vendor who exhibits non-compliance upon an initial inspection (compliance check) will be issued a warning as the first step on the continuum. A subsequent re-inspection (enforcement check) is scheduled within 3 months. If a vendor continues to exhibit non-compliance upon re-inspection, the next step is to issue a charge.

Upon the first offence, the majority of TEOs ( $n=7/10$ ) reported that they would issue a written warning for selling a tobacco product to the test shopper. Three TEOs reported that they would issue a charge for the first offence since their public health unit had a zero tolerance policy with regards to tobacco sales to underage youth. The individual who was charged as a result of selling a tobacco product to a test shopper varied depending on the situation. If the store owner had demonstrated due diligence by training the clerk regarding the SFOA requirements, the clerk would be charged. If training had not been provided to the clerk, the owner would be charged. Some public health units would charge both the store clerk and owner if there was a history of selling tobacco to a test shopper.

During the three compliance surveys, 458 out of 4283 vendors sold tobacco to a test shopper at the time of the compliance check. Eighty-seven of these non-compliant vendors were issued a verbal warning, 139 were issued written warnings, and 201 were charged. The proportion of non-compliant vendors to whom warning letters or charges were issued was similar across all three surveys. Most of the action taken against non-compliant vendors occurred when a vendor sold tobacco to an underage youth at the time of the inspection. Non-compliance with proof of age and signage requirements did not generally lead to issuing warning letters or to the laying of charges.

For a description of the educational activities related to youth access enforcement, please refer to our previous report.<sup>38</sup>

**Challenges**

Although youth access compliance checks have been conducted for as many as 13 years in some public health units, Tobacco Enforcement Officers (TEO) still report encountering a number of challenges. These challenges include:

**Travel**

The geographic area that public health units must enforce ranges from 630 km<sup>2</sup> within the Toronto Public Health to 277,075 km<sup>2</sup> within the Porcupine Health Unit. Large geographic areas present a particular challenge when scheduling test shoppers. Test shoppers are frequently taken to areas

outside of their own community to conduct compliance checks. Driving to some remote communities may take between 1 and 5 hours, so careful scheduling must be undertaken to maximize the number of stores that can be checked in one day. However, if one store sells a tobacco product to the test shopper then the TEO must make a second trip to just that one store to conduct an enforcement check. In some cases, the TEO and test shopper arrive at a remote store only to find that the store is closed. Weather is also a factor in the length of time it takes to travel to a store since bad weather can close a roadway in the winter. In some remote areas, there is only one major roadway into the area. When that road is closed, the TEO and test shopper are stranded until the road re-opens.

### **Language Barrier**

Often the store owner does not speak English as a first language and this is a challenge for TEOs when they are explaining the outcome of a compliance check or the requirements of the SFOA. One TEO suggested that some store clerks may even use the language barrier as an excuse for non-compliance.

### **Visibility of Test Shopper**

Depending on the structure of the store, the TEO cannot always see the test shopper enter/exit the store or see inside a store during the purchase attempt.

### **Entrapment**

Some store owners view the compliance check procedure (i.e., sending in an underage test shopper to purchase a tobacco product) as entrapment. As such, entrapment has been used by vendors as a defense against a charge in court with limited success.

### **Responding to Complaints**

When a complaint has been filed that a store is selling tobacco to underage youth, the TEO must take a test shopper to conduct an enforcement check before a charge can be laid. Sometimes it can take multiple visits to the store before the store sells a tobacco product to the test shopper.

### **Store Clerk ID**

TEOs need to verify the identity of the person before issuing a charge, yet some store clerks do not carry ID. In the case where a store clerk does not have ID at the time, the TEO must return to the store at another time to verify the clerk's identity.

### **Hiring Test Shoppers**

TEOs expressed difficulty in hiring test shoppers for remote areas due to the nature of a small community where everyone knows each other. Therefore, TEOs must hire test shoppers from another community so that the store clerk isn't familiar with the test shopper or the actual age of the

test shopper. Also, TEOs expressed difficulty in hiring test shoppers with an ethnic diversity that matches the communities that they enforce.

### **Signage**

The required SFOA signage is in a sticker format which is typically affixed to the cash register or on the front of the counter. Often the signage gets covered up or removed from the store when tobacco vendors renovate or replace their tobacco displays. TEOs must keep an eye out for these situations and re-issue the proper signage.

### ***TEO Recommendations for Test Shopping Protocol***

TEOs had the following recommendations for the improving the test shopping protocol.

#### **Remove Warnings from the Protocol**

The prohibition to sell tobacco to an underage youth has been in place in Ontario since 1994. As a result, some public health units no longer issue warnings to vendors who sell tobacco to a test shopper. For consistency across the province, some TEOs recommended that warnings be removed from the test shopper protocol.

#### **Increase the Number of Compliance Checks Required**

Some TEOs felt that increasing the number of required compliance checks per year might keep vendors on their toes and increase compliance. It may also assist in making the test shopper appear more as a regular customer. Already two public health units are conducting more than the required two compliance checks per vendor per year.

#### **Allow Test Shoppers to Lie About Their Age**

Allowing test shoppers to lie about their age would be more realistic since underage smokers are not likely to tell the truth about their age when attempting to purchase cigarettes.

### ***Summary of Youth Access Key Findings***

The prohibition on selling tobacco to underage youth has been in place in Ontario since the 1994 *Tobacco Control Act*. Vendor compliance remained consistently high across the three compliance surveys, 88% at baseline and 90% at second follow-up. The SFOA strengthened existing youth access legislation by requiring all vendors to request identification of purchasers who appear under the age of 25 years. However, compliance with the request for identification did not change between baseline and two follow-up surveys: 77% at baseline, 80% at first follow-up, and 78% at second follow-up. Similarly, there was no change in self-reported rates of refused cigarettes sales among underage smokers (41% in 2005 vs. 39% in 2007). The majority of tobacco sales to underage youth occurred when the sales clerk failed to ask the test shopper for identification. These findings suggest that fewer

sales to under age youth would occur if more vendors properly requested identification as required in the SFOA.

Non-compliance with sales to underage youth was significantly associated with the failure to request identification from test shoppers, younger store clerks (< 25 years), and older test shoppers (16-18 years). Failure to request identification from test shoppers was the greatest risk-factor for sales to underage youth, which suggests that increased vendor education regarding the requirement to request proof of age may have the greatest impact on compliance with sales to underage youth.

Test shopping procedures appear to be practiced quite consistently across the province despite an earlier claim that there was variability in the test shopping procedures across public health units. This is an encouraging finding since consistent test shopping procedures are necessary for the comparison of compliance rates.

Research suggests that the standard test shopping protocol is not a realistic measure of vendor compliance. Many of the TEOs that were interviewed agreed and recommended allowing test shoppers to lie about their age as a means to make the test shopper protocol more realistic.

Given the long enforcement history for youth access legislation, TEOs recommend removing warning letters from the test shopping protocol. This recommendation is consistent with published best practices for youth access enforcement.<sup>6</sup>

## **Point-of-Sale**

### ***Provincial Level Compliance***

The proportion of vendors who did not engage in each of the six point-of-sale promotions at baseline ranged from 54% to 90% (Table 6). Compliance rates for both the first and second follow-up surveys sharply contrast with baseline data, where compliance for each of the six point-of-sale promotion prohibitions ranged from 96% to 100% in the first follow-up survey and 95% to 100% in the second follow-up survey.

Eighty-eight percent (88%) of vendors were compliant with all six point-of-sale promotion prohibitions in the second follow-up survey, similar to the 89% compliance observed in the first follow-up survey and up from the 32% of vendors that did not engage in any of the six point-of-sale promotions at baseline. There was no change in the rates of vendor compliance with the six point-of-sale promotion prohibitions between the first and second follow-up surveys.



## Scheduling of Inspections

Scheduling point-of-sale inspections appears to be consistent across the province. Interviews with Tobacco Enforcement Officers (TEO) revealed that point-of-sale inspections are scheduled based on a master list of vendors in which each TEO is responsible for a geographic area. Complaints are given priority, otherwise vendors are inspected systematically throughout the year. Inspections are conducted Monday to Friday during business hours, such as 9 AM to 5 PM. As one TEO stated, this was the best time to catch the manager or owner in the store and talk with them directly since it would be the manager or owner who would be liable for any charges related to point-of-sale promotions.

Point-of-sale inspections are typically conducted separately from the youth access compliance checks. The few exceptions to this generalization occur when the premise is in an extremely remote area or if the youth access compliance check resulted in a sale.

**Table 6: Proportion of Vendors who did not Engage in Point-of-Sale Promotions, by Type of Promotion and Survey Round, 2006 and 2007**

Promotion Type	Baseline %	First Follow-up %	Second Follow-up %
Decorative/illuminated panels and/or promotional lighting	54	98 <sup>a</sup>	100 <sup>b</sup>
Three dimensional exhibits and/or other devices, instruments and enhancements	60	97 <sup>a</sup>	98 <sup>b</sup>
Display of more than single cigarette packages	67	96 <sup>a</sup>	95 <sup>b</sup>
Countertop displays	67	99 <sup>a</sup>	97 <sup>b</sup>
Outside promotional displays	79	96 <sup>a</sup>	99 <sup>b</sup>
Display permits handling by purchaser prior to purchase	90 <sup>iii</sup>	100 <sup>a</sup>	99 <sup>b</sup>

<sup>a</sup> Significant difference between baseline and first follow-up estimates,  $p < .05$

<sup>b</sup> Significant difference between baseline and second follow-up estimates,  $p < .05$

## Action Taken

The Ministry of Health Promotion's *Protocol for Tobacco Vendor and Manufacturer Inspections* applies a continuum of progressive enforcement to help achieve compliance with the SFOA.<sup>48</sup> In this model, a vendor who exhibits non-compliance upon the initial inspection following the implementation of the SFOA will be issued a warning as the initial step on the continuum of increasingly stringent enforcement options. A subsequent re-inspection is scheduled within 5 working days. If a vendor continues to exhibit non-compliance upon re-inspection, the next step on the continuum is to issue a charge.

<sup>iii</sup> At the time of the baseline survey, handling tobacco products prior to completing the purchase was prohibited under the Federal *Tobacco Act*. Enforcement staff did not lay any charges for these observed violations.

Upon a first offence, the majority of TEOs stated that they would issue a verbal warning to a non-compliant vendor. However if the contravention were more serious (e.g., tobacco is accessible prior to purchase) or the contravention could not be corrected during the course of the inspection, the TEO would issue a written warning.

During the two follow-up compliance surveys, 252 out of 2928 vendors were non-compliant with one or more of the point-of-sale promotion prohibitions. One-hundred and twenty-nine non-compliant vendors were issued verbal warnings, 17 vendors were issued written warnings and four non-compliant vendors were charged during the three surveys. The proportion of non-compliant vendors to whom verbal warnings or charges were issued was similar across all three surveys. Written warnings were issued only during the third compliance survey.

For a description of the educational activities related to point-of-sale promotions enforcement, please refer to our previous report.<sup>38</sup>

## **Challenges**

Within the first 18 months of enforcing the SFOA point-of-sale restrictions, TEOs reported encountering the following challenges:

### **Timely Information from Ministry**

Some TEOs felt that prior to the implementation of the SFOA in 2006 guidance regarding interpretation of the Act was lacking from the Ministry. As a result, some TEOs provided misinformation in response to vendor questions regarding point-of-sale promotions. TEOs later had to go back and correct the misinformation.

### **Tobacco Industry Representatives**

During regular visits to tobacco vendors, representatives from various tobacco manufacturers provide advice on how to promote their products. Some of the promotional advice may contravene the SFOA point-of-sale restrictions. In one case, a TEO reported that tobacco industry representatives altered the interpretation of a Ministry memo to suit their promotional needs. TEOs are frustrated that tobacco vendors are taking advice from the tobacco representatives and changing their tobacco displays without checking with the public health unit first.

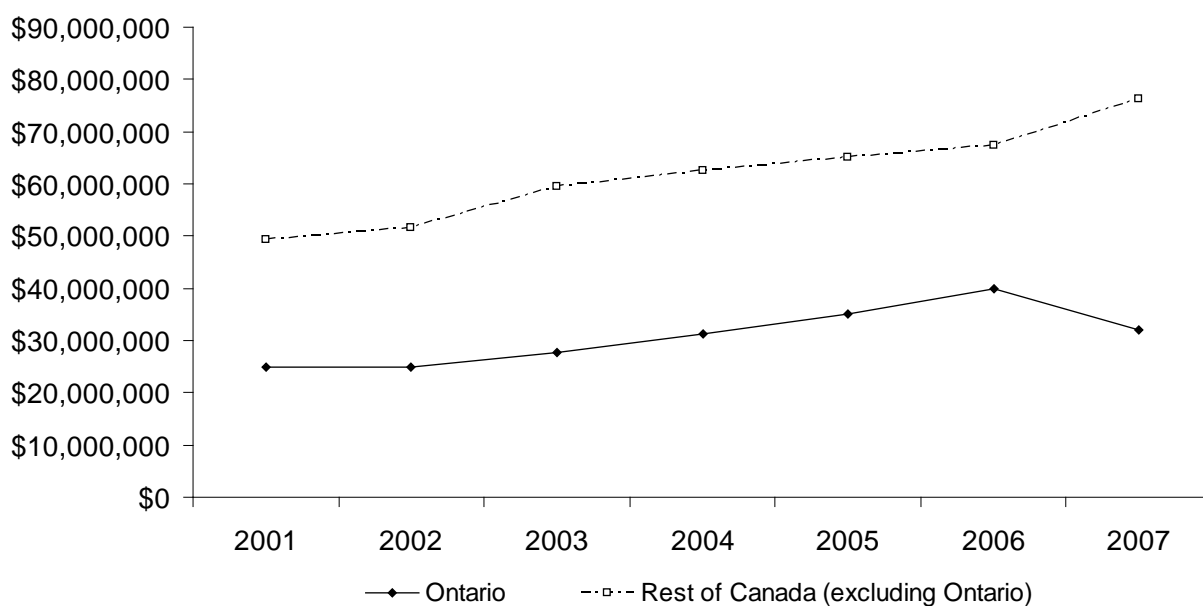
### **Language Barrier**

Explaining the SFOA point-of-sale restrictions to store owners has been difficult for some TEOs since many store owners do not speak English as a first language. In some cases, relatives of store owners have had to translate. Furthermore, the initial educational materials from the Ministry explaining the SFOA point-of-sale restrictions were only available in English and French. Information regarding the SFOA is now available in 21 languages.

### ***Tobacco Industry Promotional Funding***

Under the federal Tobacco Reporting Regulations,<sup>49</sup> tobacco manufacturers are required to report the payments that they provide to tobacco retailers for displaying tobacco products and signs. Payments to tobacco retailers have steadily increased in both Ontario and the rest of Canada since 2002 (Figure 1). Despite the implementation of point-of-sale restrictions on May 31, 2006 Ontario tobacco retailers saw a slight increase in payments from tobacco manufacturers between January-June, 2006 (\$19.6 million) to July-December, 2006 (\$20.3 million; data not shown). By 2007, payments to Ontario tobacco vendors had decreased to \$32.0 million from \$39.9 million in 2006, while payments to the rest of Canada's tobacco vendors continued to increase. Although payments to Ontario tobacco vendors decreased in 2007, the tobacco industry still paid a considerable amount of money to tobacco vendors to promote their products in the retail environment in light of the point-of-sale promotions restrictions.

**Figure 1: Tobacco Manufacturer Payments to Retailers to Display Tobacco Products and Signs, Canada, 2001-2007**



Source: Tobacco Reporting Regulations, paragraph 22(b); data supplied by Health Canada, 2008.

### ***Summary of Key Point-of-Sale Findings***

The implementation of point-of-sale promotion prohibitions appears to have been successful. Compliance with each of the 6 point-of-sale prohibitions exceeded 95% in just four months and remained high one year after implementation. These compliance results suggest that tobacco vendors are aware of the point-of-sale promotions prohibitions. Further exploration should be conducted to assess the required frequency of point-of-sale enforcement in light of the high levels of compliance.

Tobacco industry promotional payments to Ontario vendors decreased from \$39.9 million in 2006 to \$32.0 million in 2007 as a result of the point-of-sale promotion prohibitions.

## Smoke-Free Public Places

### Provincial Level Compliance

#### Indoor Smoking

At baseline, 94% of restaurants and bars were observed as being completely smoke-free indoors, including both designated and non-designated smoking areas ( $p < .05$ ; Table 7).<sup>iv</sup> While 96% of restaurants and bars were observed as being smoke-free at baseline when designated smoking rooms were excluded. Compliance with the prohibition on indoor smoking in restaurants and bars reached a near perfect 99.9% during the first follow-up survey and remained the same during the second follow-up survey (99%).

**Table 7: Proportion of Restaurants and Bars That Were Observed as Being Smoke-Free and Had the Required 'No Smoking' Signage Posted, by Survey Round, 2006 and 2007**

Stipulation	Baseline %	First Follow-up %	Second Follow-up %
No smoking observed	94	99.9 <sup>a</sup>	99 <sup>b</sup>
No ashtrays present	94	99 <sup>a</sup>	99 <sup>b</sup>
'No smoking' signs posted (combined)	67	76 <sup>a</sup>	90 <sup>b,c</sup>
'No smoking' signs posted at entrances and exits	N/A	N/A	85
'No smoking' signs posted in washrooms	N/A	N/A	72
'No smoking' signs posted in seating area	N/A	N/A	64

N/A Data for this infraction was not captured in the baseline and first follow-up survey

<sup>a</sup> Significant difference between baseline and first follow-up estimates,  $p < .05$

<sup>b</sup> Significant difference between baseline and second follow-up estimates,  $p < .05$

<sup>c</sup> Restaurants and bars that had 'no smoking' signs posted in one or more of the three required locations (i.e., entrances/exits, washrooms, and seating areas)

#### Outdoor smoking

Compliance with smoking restrictions on patios was substantially lower than with indoor smoking restrictions. At the time of inspection, people were sitting outside on 43% of restaurant and bar patios where the structure would prohibit smoking under the SFOA. Overall, compliance with the smoking prohibition on patios where the structure prohibited smoking under the SFOA regulations increased (although statistically non-significant) between the first follow-up survey (62%) and

<sup>iv</sup> At the time of the baseline survey, there were an estimated 500-600 restaurants and bars in the province with DSRs,<sup>55</sup> comprising less than 5% of all restaurants and bars in the province. In addition, 92% of the Ontario population was living in a community with a smoke-free restaurant bylaw and 89% was living in a community with a smoke-free bars bylaw.<sup>56</sup>

second follow-up survey (73%). There was no difference in restaurant and bar compliance with the prohibition of ashtrays on patios between the first and second follow-up surveys (86% vs. 82%, respectively). Similarly, restaurants and bars did not differ in their compliance with posting the required 'no smoking' sign on patios between the first and second follow-up surveys (52% vs. 56%, respectively). Comparable estimates from the baseline survey were too small to report.

### ***Exposure to Secondhand Smoke in Workplaces and Public Places***

The SFOA appears to have had a positive impact on exposure to secondhand smoke (SHS) among Ontario's population, particularly in restaurants and bars. In the year following the implementation of the SFOA, 14.2% of individuals who went to a bar reported being exposed to SHS indoors, down significantly from 42.3% in the year prior to the SFOA implementation ( $p < .05$ ; OTS 2005-2007; see Table 8). Similarly, there was a decrease in the reported exposure to SHS inside restaurants, from 22.1% in the year prior to the SFOA to 8.6% in the year following the SFOA ( $p < .05$ ; OTS 2005-2007). In contrast, high rates of exposure to SHS on restaurant and bar patios were reported in the year following the SFOA (47.9% and 74.3%, respectively; OTS 2005-2007). It cannot be determined if implementation of the SFOA had an effect on the level of SHS exposure on restaurant and bar patios due to the lack of data from the year prior to the SFOA.

In the first half of 2007, 8% of all Ontario workers reported being exposed to secondhand smoke while indoors at work demonstrating a high level of compliance with the prohibition on smoking inside enclosed workplaces (CAMH Monitor 2007; see Table 8). However, the OTS indicates that approximately one-third of workers who work outside of the home reported being exposed to SHS at work both pre- and post-SFOA (34.5% and 33.3%, respectively; OTS 2005-2007). The higher estimates of secondhand smoke exposure from the OTS data are due to the difference in survey question wording where the OTS survey question is likely capturing both indoor and outdoor exposure to secondhand smoke at the workplace. Despite the difference in estimates, the OTS data demonstrate that there is still a significant level of secondhand smoke exposure occurring at the workplace, most likely in outdoor spaces such as entranceways and parking lots.

**Table 8: Exposure to Secondhand Smoke in Workplaces and Public Places in the Past 30 Days, Ontario, 2005-2007**

<b>Location</b>	<b>Pre-SFOA %</b>	<b>Post-SFOA %</b>
Inside a restaurant	22.1	8.6 <sup>a</sup>
Outside on a restaurant patio	N/A	47.9
Inside a bar	42.3	14.2 <sup>a</sup>
Outside on a bar patio	N/A	74.3
At the workplace (inside and outside)	34.5	33.3
Inside the workplace	N/A	8.0

N/A Data was not captured prior to the SFOA implementation

<sup>a</sup>Significant difference between pre- and post-SFOA estimates,  $p < .05$

Source: Ontario Tobacco Survey, 2005-2007 and CAMH Monitor 2007

Public support for smoke-free policies has increased since 2005. The proportion of individuals who believe that smoking should not be allowed in any section of a restaurant increased from 57% in 2005 to 69.1% in 2007 ( $p < .05$ ; CAMH Monitor 2005-2007; see Table 9). Public support also increased for banning smoking in bars (from 37.2% in 2005 to 49.4% in 2007;  $p < .05$ ; CAMH Monitor 2005-2007) and workplaces (from 57.8% in 2005 to 65.7% in 2007;  $p < .05$ ; CAMH Monitor 2005-2007). Future smoke-free policy such as smoke-free restaurant and bar patios has also shown an increase in support in recent years, from 52.6% in 2005 to 62.1% in 2007 ( $p < .05$ ; CAMH Monitor 2005-2007). There were no significant differences in public support between 2006 and 2007.

**Table 9: Support for a Total Ban on Smoking in Workplaces and Public Places, Ontario, 2005-2007**

Location	2005 %	2006 %	2007 %
Smoking should not be allowed in any section of a restaurant	57.0	66.3 <sup>a</sup>	69.1 <sup>b</sup>
Smoking should not be allowed in any section of a bar	37.2	45.3 <sup>a</sup>	49.4 <sup>b</sup>
Smoking should not be allowed in any section of a workplace	57.8	62.1	65.7 <sup>b</sup>
Smoking should not be allowed on restaurant and bar patios	52.6	66.2 <sup>a</sup>	62.1 <sup>b</sup>

<sup>a</sup> Significant difference between 2005 and 2006 estimates,  $p < .05$

<sup>b</sup> Significant difference between 2005 and 2007 estimates,  $p < .05$

Source: CAMH Monitor, 2005-2007

### ***Impact of Smoke-Free Ontario Act Restrictions on Restaurant and Bar Patios***

Under the SFOA, smoking is prohibited on restaurant and bar patios that are covered by a roof. On May 31, 2006 many restaurants and bars were faced with a decision to either ban smoking on their patio or physically change the structure of the patio to allow smoking under the SFOA. A telephone survey of 442 restaurant and bar operators in four clustered regions of Ontario (Toronto, Southwestern Ontario, Rural Ontario, and Northern Ontario) was conducted by Kennedy et al (2007).<sup>50</sup> This study found that the majority of the surveyed restaurants and bars (75%) continued to allow smoking on patios following the implementation of the SFOA. However, the prevalence of smoke-free patios among surveyed establishments increased from 5% pre-SFOA to 25% post-SFOA. Only restaurant operators reported having a smoke-free patio either pre- or post-SFOA. Prior to the SFOA, approximately 42% of the surveyed establishments had a roof-like structure that would prohibit smoking under the SFOA. Approximately half of these establishments decided to go smoke-free, while the remaining establishments decided to make physical changes to their patio to allow smoking under the SFOA. Reasons for deciding to go smoke-free included the cost to make physical changes, physical limitations to changing the patio structure, “it was the right thing to do”, and customer preference.

### ***Smoke-Free Restaurant and Bar Inspection Protocol***

The majority of Tobacco Enforcement Officers (TEO) reported conducting restaurant and bar inspections by themselves. Three public health units sent out two TEOs to conduct bar inspections due to safety issues, including the location of the bar, drunk patrons, and late working hours. All TEOs reported dressing in plain clothes or business casual attire when conducting restaurant and bar inspections. The majority of TEOs reported identifying themselves to the restaurant or bar management when conducting an inspection.

### ***Scheduling of Inspections***

Scheduling restaurant and bar inspections appears to be consistent across the province. Interviews with TEOs revealed that the majority of restaurant and bar inspections are scheduled based on a master list of premises in which each TEO is responsible for a geographic area. Complaints are given priority, otherwise premises are inspected systematically throughout the year. One public health unit schedules their restaurant inspections in a slightly different manner. In this public health unit, Public Health Inspectors conduct the restaurant inspections using the public health unit's food risk-assessment where higher risk restaurants are given priority.

Inspections are typically conducted Monday to Friday with the occasional weekend surveillance or inspection. Only two public health units conduct their inspections seven days a week. The timing of the inspections appears to vary by public health unit. About half of the TEOs reported conducting the restaurant and bar inspection only during business hours (e.g., 9 AM - 5 PM) unless a complaint required a later inspection time. Four other public health units conducted their restaurant and bar inspections in the afternoon and evening hours (e.g., 2 – 10 PM). One public health unit conducted restaurant inspections during business hours, while bar inspections were conducted in the evening hours. Of those public health units that conduct their inspections during daytime hours, surveillance is conducted later at night.

### ***Tobacco Enforcement Officer Safety***

Very few of the TEOs reported encountering specific situations where they were concerned about their safety while conducting a restaurant or bar inspection. In general, drunken patrons or angry bar operators can be problematic. Half of the TEOs that were interviewed ( $n=5/10$ ) had a police background and were experienced in handling difficult situations. The remaining TEOs relied on their TEO training to help recognize and handle difficult situations. As one TEO put it "How you approach the situation is key."

## **Action Taken**

The Ministry of Health Promotion's *Protocol for Smoke-Free Inspection for Enclosed Workplaces and Public Places* applies a continuum of progressive enforcement actions—starting with education and progressing from warnings to increasingly more serious charges to match the nature and frequency of contraventions under the Act.<sup>51</sup> In this model, a restaurant or bar that exhibits non-compliance with the signage stipulations upon the completion of the initial inspection following the implementation of the SFOA will be issued a warning as the initial step on the continuum of progressive enforcement. A subsequent re-inspection is scheduled within 5 working days. If a restaurant or bar continues to exhibit non-compliance with the signage stipulations upon re-inspection, the next step in the continuum is to issue a charge. In contrast, if a restaurant or bar exhibits non-compliance with the indoor or outdoor smoking restrictions upon the completion of the first inspection following the implementation of the SFOA, either the proprietor or person smoking will be charged.

The type of warning issued upon a first offence in restaurants and bars varied: four of the TEOs reported issuing verbal warning for a first offence; one TEO reported issuing written warnings for a first offence; another TEO reported that they did not issue warnings for first offences anymore; and the remaining four TEOs reported that the type of warning depended on the severity of the infraction (e.g., signage vs. smoking indoors) and the response from the owner when they were notified of the infraction. Similarly, who got charged also depended on the situation. The majority of TEOs reported that they would charge the patron if the owner had shown due diligence, whereas the owner would be charged if they failed to show due diligence. Other public health units charged only the owner ( $n=1/10$ ), only the patron after a warning was issued to the owner ( $n=1/10$ ), or both the patron/employee and the owner ( $n=1/10$ ).

During the two follow-up surveys, 1,103 out of 2,760 restaurants and bars were non-compliant with one or more of the indoor smoking and outdoor patio stipulations. Most of the observed non-compliance was related to the posting of the indoor no smoking signs. Three-hundred and twenty-one of these non-compliant restaurants and bars were issued verbal warnings. Written warning letters were issued to only 23 of non-compliant restaurants and bars. Four restaurant and bar owners and 3 patrons were charged as a result of non-compliance. The proportion of non-compliant vendors to whom verbal warnings were issued significantly dropped from the first follow-up survey to the second follow-up survey (48% to 24%;  $p < .05$ ), whereas the proportion of non-compliance vendors to whom charges were issued was similar across the two follow-up surveys.

For a description of the educational activities related to smoke-free public places enforcement, please refer to our previous report.<sup>38</sup>



## **Challenges**

Within the first 18 months of enforcing the SFOA smoke-free public places, Tobacco Enforcement Officers (TEO) reported encountering the following challenges:

### **Patios**

Patios remain a challenge for TEOs, especially since the ruling in favor of a Niagara Region restaurant whose L-shaped patio allowed smoking on one side and was smoke-free on the other side.<sup>52</sup> This ruling has prompted many questions regarding patio structure.

### **Getting a Hold of the Owner or Operator**

When an infraction is observed, a TEO must speak to the person in charge to inform them of the infraction. If the owner or operator is not on site, the TEO may end up speaking to the floor manager, cashier, bartender or doorman - none of whom may be fully aware of the SFOA requirements or have the authority to do something in response to the observed infraction.

### **Drunk Patrons**

Handling drunk patrons can be a challenge for TEOs when they enter a bar to assess compliance with the SFOA.

### **Hours of Operation**

Gaining access to certain premises can be difficult due to the premise's hours of operation. In one case, a TEO avoided restaurants during the lunch and dinner hours because restaurant staff were too busy. Bars also present a challenge in gaining access to due to the later operating hours that fall outside of the typical working hours of the TEOs.

### **Staff Smoking After Hours**

There is a misperception among some individuals that the SFOA smoking restrictions only apply to a premise when the premise is open for business.

## **Summary of Key Smoke-Free Public Places Findings**

Near perfect compliance (99%) with the indoor smoking prohibition in restaurants and bars one year following the implementation of the SFOA suggests a smooth transition into smoke-free enclosed public places. The high level of compliance is not surprising given the large number of Ontario municipalities that had smoke-free bylaws in place prior to the SFOA. Compliance with smoking restrictions on covered outdoor patios is lower (73%).

Exposure to secondhand smoke (SHS) in restaurants and bars has dropped following the implementation of the SFOA. In contrast, high rates of SHS exposure on restaurant and bar patios

were reported in the year following the SFOA. Exposure to SHS inside workplaces was low (8%) one year following the implementation of the SFOA. However, 33% of workers reported being exposed to SHS smoke at the workplace (indoors and outdoors) following the implementation of the SFOA.

## **Enforcement Strategy Management**

### ***Staffing Levels***

Public health units across Ontario vary in the composition and number of staff hired to enforce the SFOA. In some public health units there is a team of Public Health Inspectors (PHI) who conduct all the public health mandated inspections where tobacco only plays a small role in their list of enforcement responsibilities. While other public health units only have Tobacco Enforcement Officers (TEO) on staff and their sole responsibility is to enforce the SFOA. Furthermore, some public health units have a mixture of both PHI and TEOs on staff, where the PHIs and TEOs enforce different aspects of the SFOA (e.g., PHIs conduct restaurant and workplace inspections, while TEOs conduct tobacco vendor inspections).

Interviews with public health unit enforcement managers revealed that the majority ( $n=6/10$ ) felt that they did not have sufficient staff to adequately enforce the SFOA. The number of enforcement staff assigned to SFOA enforcement within each public health unit ranged from one to 22. The majority of enforcement managers stated that they would require one or two additional staff to fulfil their enforcement requirement. Reasons for the additional staff included: understaffed to adequately cover required workload, officer safety, TEO supervision and/or legal coordination, large geographic area, data entry, total display ban, rapid growth in the area of tobacco vendors, and allowing the TEOs to be more proactive by going out and doing additional education and policy development.

### ***Hiring Enforcement Staff***

Hiring enforcement staff appears to be difficult for half of the enforcement managers. The category of staff (PHI vs. TEO) accounts for some of the difficulties encountered when hiring new enforcement staff. There is a short supply of PHIs available for hire due in part to the high failure rate on the semi-annual certification exam. One public health unit had found a couple of good candidates for their PHI vacancies and started training the candidates. However, neither candidate was successful in passing the PHI certification exam. Another public health unit has stopped hiring PHIs because of these difficulties.

Some enforcement managers have had to post the position multiple times to obtain qualified applicants. Many public health units seek out applicants who are either retired police officers or have Ontario Police College training due to their knowledge regarding enforcement and court

proceedings. Though, at least one public health unit chooses not to hire former police officers due to their resistance to training and willingness to work with premise operators to achieve compliance.

Other difficulties that enforcement managers have encountered when hiring new staff were due to the position itself. In one public health unit, the Board of Health did not want to offer a contract exceeding one year in length for fear that funding would be cut short and as a result the enforcement staff would have to be laid off. The contract status of the position did not attract many applicants for the position. They have since changed the posting to permanent full-time. Similarly another public health unit had difficulty hiring new enforcement staff because the position was only part-time. Applicants for part-time positions were typically either young or had recently retired from police work. The younger applicants see the TEO position as a stepping stone to a career in police work, but they may have another part-time position elsewhere that would limit their availability. The retired police officer applicants see the TEO position as police-type work, but they may not want to work as many evenings and weekends. Unfortunately, the part-time status of the position cannot be changed as the public health unit's policy requires two enforcement staff for all inspections due to safety concerns. Consequently, maintaining staff is difficult.

Concern was also expressed over the inequality of pay across public health units. Some public health units have lost enforcement staff to neighbouring public health units due to better salary or benefits.

### ***Training and Obtaining Provincial Designation***

Training new enforcement staff and obtaining the necessary provincial designation to enforce the SFOA was not an issue for the majority of enforcement managers. Many of the public health units do in-house training for new enforcement staff, while some public health units send new staff out to courses, such as those offered by the Municipal Law Enforcement Association of Ontario. In 2007, the Ministry of Health Promotion developed a 5 day training program for SFOA enforcement staff. Enforcement managers who had sent staff to attend these sessions reported that the training was very helpful. Concern was raised at the frequency of which the sessions were offered especially if the Ministry training becomes a requirement for enforcement of the SFOA.

In Ontario, a designation signed by the Minister of Health Promotion is required for an enforcement staff to issue charges under the Provincial Offences Act. The majority of enforcement managers reported having no issues with obtaining the necessary provincial designation for new enforcement staff. Two enforcement managers stated that they had to wait up to 2 months before provincial designation was delivered. In both those cases, the new enforcement staff could not do any active enforcement. Instead, the new enforcement staff occupied their time by doing in-house training, the OTRU on-line training modules, job-shadowing and delivering the Not to Kids! binders to tobacco vendors.

### ***Issues Related to Geographic Size***

Travel was the most commonly reported issue related to the size of the geographic area a public health unit must enforce. The distance that must be traveled to reach some premises varies between public health units with some only having to travel an hour to reach the furthest premise, while others may have to travel up to 4 hours to reach the further premise. Costs associated with such extensive travel include mileage, unproductive staff time driving in a car, overtime, meals and even overnight stays in a hotel. These costs limit the overall enforcement program activity. As a result, public health units primarily schedule inspections by geographic area to maximize staff time and minimize the amount of travel required. Alternatively, some public health units have staff located in various offices across the region to minimize the amount of travel required.

Responding to complaints within 24 hours or conducting a re-inspection (enforcement check) at a specific premise presents a problem with scheduling. Either a new schedule is created to include inspections at other premises in the same area or the TEO drives out to that one premise and returns to the office. In one public health unit with a particularly large geographic area, complaints are not responded to within 24 hours. Instead complaints are investigated when the TEO is next scheduled to visit to a particular community, which may be weeks away. Advanced scheduling of an inspection may take away the impromptu nature of inspections in the more remote areas.

Another complication with travel is scheduling test shoppers due to their limited availability. Consequently, TEO's have to schedule as many compliance checks as possible during the hours that test shoppers are available to work. Weather is also a factor where extensive travel is required, either due to the increased time it may take to reach a community or road closures.

On the other end of the spectrum, one public health unit has a small geographic area with a high density of premises to inspect. This, too, can be problematic in that word spreads to surrounding premises that the TEO is in the area conducting inspections, which may result in higher levels of compliance being observed.

### ***Issues Related to the Public Health Unit Location in Ontario***

Contraband tobacco is an issue that was repeatedly reported across the province. The availability of cheaper tobacco on close-by First Nations reserves has many tobacco vendors seeing a loss in business and complaining to TEOs regarding the enforcement inequity. Research has shown that First Nation or Native brand cigarettes account for 26% of cigarettes smoked among daily smokers in grades 9-12<sup>53</sup> and 14% of adult smokers in Ontario.<sup>54</sup> The popularity of contraband cigarettes is likely due to the lower cost and the ease in accessibility. First Nations cigarettes have also been reportedly sold off-reserve, such as in vehicles or in one case by a high school student whose mother obtained the cigarettes from a First Nations reserve.

TEOs do not have jurisdiction to enforce the SFOA on First Nations reserves. Accordingly, public health units reported various strategies to handle the contraband issue. Some defer to the provincial or federal governments to resolve the issue. Others pass on contraband-related complaints to Health Canada Tobacco Enforcement staff, the Ontario Ministry of Revenue, or the RCMP. One enforcement manager suggested that the SFOA should be enforced on First Nation reserves like other provincial legislation, such as gaming and alcohol legislation. In the eastern section of the province, a joint agency has been established to collaborate and share information with the purpose of tackling the contraband issue and includes members from the RCMP, Ontario Provincial Police, multiple public health units, and municipal staff. This joint agency allows for better communication and cooperation between agencies regarding the contraband issue.

Other issues that were raised due to the location in the province included proximity to other public health units, where operators who owned establishments in multiple jurisdictions were commenting on differences in the enforcement practices between jurisdictions and were complaining that it was not consistent. The noted differences in enforcement practices were related to enforced local bylaws that were more restrictive than the SFOA and confusion in the early days of SFOA enforcement where one jurisdiction chose to enforce smoking under entranceway awnings and overhangs while other public health units did not enforce these areas. Isolation is an issue for at least one public health unit since there is no other public health unit in close proximity to work in conjunction with. A high proportion of seasonal premises is also an issue due to the difficulty in conducting the required two youth access compliance checks to all seasonal premises within the short operating season.

### ***Location of Enforcement Program within the Public Health Unit***

The enforcement of the SFOA is managed under various departments within the 36 public health units, including a tobacco-focused unit, Chronic Disease Prevention, Health Promotion, and Environmental Health. In a few cases, SFOA enforcement may not be managed by the public health unit at all, instead it is managed by the municipal bylaw offices or licensing and regulatory services. Only four out of the 10 public health units that were interviewed housed the SFOA enforcement program within the same department as the other SFO programs (i.e., prevention, protection and cessation). These enforcement managers believed the set up was effective due to the information sharing between programs. For example, a TEO who conducts an inspection in a workplace due to a complaint can pass on information regarding upcoming cessation programs to individuals who express interest in quitting smoking. Other public health units housed the SFOA enforcement program in a general enforcement department along with other public health enforcement programs, such as food and water, where SFOA enforcement only played a small role. These enforcement managers believed the set up was also effective due to their collaborations and information sharing between the other SFO programs or more notably due to their sole focus on enforcement issues.

### ***Process for Handling Public Complaints***

All of the public health units follow a similar process for handling complaints. It begins with the complaint coming in via a telephone intake line, tobacco hotline or e-mail. Information is taken regarding the incident and registered on a complaint form or inputted into an information system. The complaint is then forwarded to the appropriate TEO according to geographic area and type of inspection (i.e., youth access vs. workplaces or public places). The complaint is addressed either by a telephone call to the complainant or an inspection to the premise generally within 24 hours or the next business day. However, in some cases the response may be delayed beyond 24 hours due to the TEO's schedule, travel required to reach the premise, or test shopper availability to conduct a youth access compliance check.

If the premise is found to be non-compliant, a warning is issued and education is provided. A charge might be laid depending on previous enforcement history. If a premise is compliant, another inspection may be conducted at a later point in time to verify the premise's continued compliance since the offender who instigated the complaint may not have been present during the first inspection.

After a complaint has been serviced, the TEO will inform the complainant of the outcome. In some cases, public health units will only address complaints where individuals identify themselves. Alternatively, one public health unit has set up an arrangement with Crime Stoppers to receive complaints from the public regarding the SFOA. The complaint information is then passed on to the public health unit without identifying the complainant. The anonymity of using Crime Stoppers allows vendors to report other vendors, or employees to report employers.

### ***Process for Handling Charges***

Charges related to the SFOA are issued in two formats, Part I and Part III. The severity and frequency of the contravention dictates which format of the charge is issued. Part I tickets carry a maximum fine of \$500 and only go to court if the offender chooses to challenge the charge. Part III charges carry a maximum fine of \$10,000 and require a court appearance by the offender.

Some of the public health units have issued primarily Part I tickets. Once a charge is issued by the TEO, the TEO must file the ticket at the Provincial Offences office. Part III charges must be sworn in before a Justice of the Peace after they have been issued to the offender. One public health unit has an agreement with a local OPP court officer who processes the SFOA tickets on behalf of the public health unit. If a charge is taken to court, TEOs are responsible for preparing the necessary documents and meeting with the prosecutor prior to the court date. Two public health units reported that their standard practice is to allow the offender an opportunity to review the evidence assembled

by the TEO in order to make an informed decision about whether they want to take the case to trial, and if so what plea they will enter in court.

One public health unit has a unique practice for resolving charges. At the time of the inspection, all educational materials that were issued to the vendor by the public health unit, including signs, are confiscated as evidence for trial. New education materials are issued at that time. First appearance court dates are preset for the public health unit, therefore no time is wasted trying to set up a court date. Fines were often mitigated for offenders. For example, if vendors agree to attend vendor training and pay for their staff to attend another training session, the resulting fine could be reduced. For sales clerks, if they agree to complete 12-14 hours of community service managed by the public health unit and they attend more training, then the fine might be dropped completely. For a large corporation, the fine might be reduced if they agree to make a donation of a couple of thousand dollars to Crime Stoppers. Last, youth under the age of 16 years who are caught smoking on school property are sent to a special cessation program offered at a local Health Centre and are required to complete 8-12 hours of community service.

### ***Changes in Enforcement Strategy since the Tobacco Control Act (1994)***

The implementation of the *Smoke-Free Ontario Act* in 2006 marked a change not only in the legislation that was enforced, but the structure of the tobacco program itself. In some public health units, tobacco enforcement was transferred from the Health Protection or Environmental Health departments and placed into a newly created or pre-existing tobacco control department along with other SFO programs such as cessation and prevention. This movement unified the tobacco control programs and in some cases enforcement staff became strictly dedicated to enforcing the SFOA rather than working only a fraction of time on tobacco enforcement. On the contrary, one public health unit saw their TEOs leave the tobacco control unit and move over to a department that specialized in enforcement while still maintaining the TEO's dedication to tobacco enforcement.

Under the *Tobacco Control Act* (TCA), enforcement was focused only on tobacco vendors and schools. Many public health units hired additional staff to handle the increased scope of tobacco enforcement under the SFOA. A few public health units moved away from hiring PHIs at that time and instead hired only TEOs. The additional staff enabled public health units to conduct more inspections, thereby increasing the level of contact with premises (e.g., schools) and providing a better service to the community.

In 2006, the Ministry of Health Promotion changed the required number of tobacco vendor compliance/enforcement checks that were to be conducted per year. Previously, public health units were required to inspect only a percentage of vendors per year; whereas now they are required to conduct a compliance/enforcement checks for each vendor twice a year. The increased number of compliance/enforcement checks has essentially leveled the playing field among vendors and as a

result vendors can no longer complain that they are being targeted. In addition, the change in the number of required compliance/enforcement checks per year ensured a standardized enforcement program across the province since that was not the case prior to 2006. For example, one public health unit had not conducted routine tobacco vendor compliance/enforcement checks in close to seven years because the local Board of Health did not support that activity.

The change in legislation and subsequent enforcement activity has also had an impact on the legal system. One public health unit reported that the Justices of the Peace were more receptive to charges under the SFOA compared to the TCA. Previously, Justices of the Peace were not too familiar with the TCA due in part to the lower frequency in which TEOs were in court resulting in fine reductions (e.g., \$25 instead of \$300). TEOs are now conducting more compliance/enforcement checks and inspections under the SFOA, which has led to more frequent appearances in court. As a result, the Justices of the Peace have become more familiar and receptive to the charges.

### ***Lessons Learned from Managing SFOA Enforcement Program***

The experience of managing the SFOA enforcement program since May 31, 2006 has taught enforcement managers across the province a variety of lessons. These include:

#### **Enforcement Frequency**

Constant and consistent enforcement is required to maintain higher levels of compliance with the SFOA. If the public health units decrease the frequency in which they conduct inspections, then levels of non-compliance would return to previously observed levels. The constant presence of enforcement staff in the community increases awareness among operators that the SFOA is being seriously enforced, which in turn has encouraged and maintained compliance.

#### **Hiring**

Hiring specialized officers for the purpose of enforcement is important, especially for enforcing the SFOA in restaurants and bars. Some enforcement managers reported that Public Health Inspectors simply do not have the experience or training to handle the situations that may arise during a late night restaurant or bar inspection (e.g., drunk patrons). For this reason, some public health units prefer to hire former police officers or individuals with an enforcement background.

It is also important to hire dedicated staff for enforcing the SFOA. For example, one public health unit employed Public Health Inspectors (PHI) to conduct the SFOA enforcement. These same PHIs are also responsible for other public health enforcement areas (e.g., food and water) and normally work 8:30 AM to 4:30 PM, Monday to Friday. Conducting SFOA enforcement outside of their normal working hours results in PHIs taking time off during the day in lieu of the evening hours that they worked while conducting SFOA enforcement, which then affects the time being devoted to other public health enforcement activities.



### **Collaboration**

Enforcement staff working together as a team within a large geographic area, such as mailing a Part III ticket to an officer in a remote community to file at the local court office improves the efficiency of the team. At the regional level, working together in the TCANs has been beneficial in meeting Ministry requirements or reducing expenditures (e.g., by ordering new signage in bulk).

### **Trial and Error**

One public health unit reported that the best way to deliver the enforcement program was through trial and error. Their prosecution strategy was modified as they went along. They are now better able to prosecute SFOA cases due to their enforcement experience and their education of the court system. Similarly with education, they visited all vendors and high risk establishments prior to the implementation of the SFOA in 2006 to educate premises regarding the SFOA requirements. Responses from this education campaign were used to devise different educational tools and materials.

### **TEO Safety**

After hours, many situations can arise that can compromise a TEO's safety, whether it be an ecstasy operation or illegal gambling occurring in the back of a store or drunk patrons defending a non-compliant bar operator. One public health unit's strategy to protect its TEOs is to schedule each TEO with a partner, working the same hours and in relatively the same area. Both TEOs work independently, however they can call on each other for assistance if necessary. A good relationship has also been developed with the police where the TEOs can call in a situation on the police radio and the police respond quickly.

### **Non-compliance**

In some cases it has been surprising to see how far individuals will go to try to avoid compliance. According to one public health unit, a few select nightclub operators have been permitting smoking indoors to keep a competitive edge over other nightclubs in the area. These nightclubs have the capacity to hold up to 3,000 people indoors and charge \$10-20 per person for entry. A \$10,000 charge under the SFOA is viewed as simply the cost of doing business.

### **Evidence of Success**

A high level of compliance is the best indicator of success. Some public health units are seeing compliance rates in excess of 90% for all sections of the SFOA. Others report rarely coming across someone smoking inside a restaurant or bar. There appears to be acceptance in the community that the SFOA is being routinely enforced by the public health unit and that enforcement is being conducted fairly, which could lead to higher levels of compliance.

With regards to charges, one public health unit reported a 99.9% conviction rate and very few challenges by operators. The majority of individuals charged chose to go to court and plead guilty to get the fine reduced.

Regularly checking schools to see if students are smoking on school property has had a positive effect within just a couple of months. TEOs have been encouraging students to move off property to smoke and diligently warning students who continue to smoke on school property. Repeat offenders were issued written warnings, which got the attention of the youth. This seems to have been effective in getting respect from youth and encouraging the youth to smoke off school property.

Community awareness has increased regarding the SFOA and the role that the public health unit plays in SFO programming and enforcement. This is evident by the increased number workplaces who have taken the initiative to invite the TEOs to give an education session on smoking in work vehicles to encourage compliance among staff. Also, a number of larger workplaces in the community had contacted one public health unit to develop smoke-free workplace policies that go above and beyond the SFOA.

### ***Enforcement Manager Recommendations***

The following are recommendations from enforcement managers across the province for the SFOA enforcement strategy.

#### **Increase Funding to Public Health Units**

Many enforcement managers reported that they require additional funds to adequately enforce the SFOA. Additional funds would provide enforcement managers with the opportunity to hire additional staff, cover the cost of travel required to enforce the geographic area, be more proactive in remote communities rather than simply responding to complaints, and conduct advertising campaigns. Alternatively, if funding cannot be increased, perhaps there could be more flexibility with the funds that the public health unit receives, such as transferring unused funds from another SFO program over to enforcement.

#### **Increase Communication and Transparency between Public Health Units**

The opportunity to regularly share successes, struggles, challenges and prosecutions regarding SFOA enforcement among all public health units would be beneficial. Moreover, transparency between public health units' enforcement strategies for benchmarking purposes, including activities and compliance rates, would provide a context for the provincial compliance levels and an opportunity to share best practices. Both could be accomplished through a secure website.

### **Create a Province-wide Coordination or Strategy for Prosecution**

Identify knowledgeable prosecutors who know the SFOA and either retain them as consultants or hire them so that public health units could contract them when they had a case. This would provide consistency in prosecution across the province.

### **Minimize Required Reporting**

The number of reports and the short time period to submit the reports is taxing on enforcement managers, particularly those who manage more than the SFOA enforcement program. If possible, reduce the number of reports or ask only necessary information or develop a way to link all the necessary information from the inspection forms.

### **Provide More Provincial Education Campaigns**

If the Ministry of Health Promotion took the lead in developing education campaigns (e.g., for the total display ban), then the campaign would be consistent across the province in terms of style and messaging. The public health units could then coordinate local activities with the campaign, such as vendor workshops or seminars. In addition, the cost for the campaign would not fall onto the public health unit.

### **Increase Opportunities for Teleconferencing or Video Conferencing**

This would help minimize the amount of time and costs associated with travelling to centrally located meetings.

### **Increase Frequency of TEO Training**

Feedback from the provincial TEO training program has been quite positive, especially if the training will be used as part of obtaining provincial designation. Enforcement managers would like to see this program offered more frequently, such as every 6 months, so that new staff do not have to wait too long for training.

### **Continue Annual Enforcement Conference**

This has become a good place to share ideas.

### **Future Smoke-free Policies**

Based on their experience in managing the SFOA enforcement program, enforcement managers recommended additional smoke-free policies that should be added to the SFOA, such as smoke-free patios and a 9 m rule outside all building entrances. These are the two issues that frequently generate complaints and are most often confused in the public's eye. TEOs have spent a lot of time discussing and debating these issues.

### ***Summary of Key Enforcement Strategy Management Findings***

Interviews with enforcement managers revealed that the majority felt that they were short 1 – 2 TEOs to adequately enforce the SFOA. Hiring new enforcement staff has been a challenge for some public health units either due to the type of staff being hired (PHI vs. TEO) or the required qualifications for the position. The 5-day Ministry of Health Promotion training program for TEOs has been well received by staff and enforcement management. However there is a concern over the frequency in which this training is offered and how this may affect newly hired TEOs if the training becomes a requirement for conducting SFOA enforcement. Very few of the public health units reported experiencing problems with obtaining the proper designation for new TEOs to begin enforcing the SFOA.

Travel was a key issue for many enforcement managers due to the geographic size of the public health unit. Consequently, the cost of the travel required to enforce the SFOA has restricted enforcement program activity.

Contraband tobacco appears to be an issue across the province. Many public health units have developed strategies to handle this issue since it is beyond the jurisdiction of the public health unit. These strategies include referring the complaint to Health Canada's Tobacco Enforcement staff, Ministry of Revenue or the RCMP. A joint agency has been struck in the eastern part of the province where the public health unit enforcement staff work collaboratively with the RCMP, local police, and the Ministry of Revenue.

The process for handling complaints and charges is consistent across the province. One public health unit has taken the initiative to provide vendor training and community service as a means to reduce the fine.

Changes have occurred in the public health units' enforcement strategy as a result of the implementation of the SFOA. Some public health units unified all tobacco control programs into one department. Increased number of required vendor inspections not only leveled the playing field among vendors, but it also standardized the enforcement practice across all public health units.

Over the 13 years that tobacco enforcement has been practiced in Ontario, enforcement managers have learned that constant and consistent enforcement is required to maintain premise compliance. Also, the collaboration between public health unit tobacco control programs and regional collaboration at the TCAN level are beneficial to the management of the enforcement program. Success of the tobacco enforcement efforts is reflective in the high level of premise compliance with the SFOA and the increase in community awareness regarding the SFOA.

Enforcement managers' key recommendations for improving the tobacco enforcement program include increased funding to permit the hiring of new staff and to cover travel costs, increased communication and transparency between public health units, and the creation of a province-wide prosecution strategy.

## Conclusion

This report provides a comprehensive look at compliance with the *Smoke-Free Ontario Act* (SFOA) pre-and post-implementation, as well as the enforcement strategies employed by public health units across the province.

Overall, high levels of compliance observed four months and one year following implementation for each of the youth access, point-of-sale and enclosed workplaces and public places stipulations suggest a successful implementation of the SFOA. Compliance with the proof of age request remained the same one year following implementation despite the new requirement in the SFOA for vendors to request identification from all purchasers who appear under the age of 25 years. Increased vendor education regarding the requirement to request proof of age from purchasers should be considered since the failure to check identification was shown to be the greatest risk-factor for vendor non-compliance.

A second measure of successful implementation is the reduction in the population's exposure to secondhand smoke. Inside restaurants and bars, secondhand smoke exposure has significantly decreased since the implementation of the SFOA. Similarly, a low rate of secondhand exposure inside workplaces was reported one year following the implementation of the SFOA. However, work still needs to be done in the area of workplace exposure to secondhand smoke due to the significant rate of secondhand exposure reported at the workplace (indoors and outdoors) both pre- and post-SFOA.

Finally, consistent enforcement strategies applied across the province enabled a successful implementation of the SFOA. This was achieved, in part, through standardized inspection forms and protocols.

Strong education and enforcement contributed to high levels of premise compliance within the first year of SFOA implementation. The level of enforcement that should be employed from this point forward, whether it is a universal or risk-based targeted system, remains unclear. Further research should be conducted to assess the necessary frequency to enforce youth access, point-of-sale promotion and smoke-free enclosed workplaces and public places restrictions.

## Appendix A: Premise Exclusion Criteria

**Table A1: Types of Premises Excluded from Survey**

<b>Tobacco Vendors</b>	<b>Public Places</b>
Adult entertainment facilities	Arcades
Banquet facilities	Banquet facilities
Bars	Bed and Breakfasts
Bingo halls	Bingo Halls
Bowling centers	Bowling centers
Bulk food stores	Cafeterias
Campgrounds	Campgrounds
Caterers	Caterers
Department stores (e.g., K-Mart, Zeller's, etc.)	Dinner theatres
Duty-free stores	Fast food restaurants/food court vendors
First Nations	Ice cream parlours (e.g., Dairy Queen)
Gift shops	Movie theatres
Hotels/Motels/Inns	Private Clubs (e.g., Canadian Legions, and Golf and Country Clubs)
Hospitals/Institutions	Racetracks
Meat/butcher shops	Resorts
Mobile catering (e.g., chip wagons)	Submarine sandwich shops
Private Clubs (e.g., Canadian Legions, and Golf and Country Clubs)	
Racetracks	
Resorts	
Shopping centre kiosks	
Snack bars/refreshment stands/canteens	
Trailer parks	
Water parks	
Wholesale stores (e.g., Costco, Sam's, etc.)	

## Appendix B: Tobacco Control Area Networks



\* Lead Health Unit



\* Lead Health Unit



## Appendix C: Web Survey Questions

### Part I: General enforcement characteristics of public health unit

1. For how many years has your public health unit been conducting routine Youth Access compliance/enforcement checks?
2. On average approximately how many Youth Access compliance/enforcement checks were conducted by your public health unit per year during the period 2000 to 2005?
3. In what department is the enforcement of the SFOA managed from (e.g., Smoke-Free Ontario Unit, Healthy Environments, etc.)?
4. Under what umbrella organization does this department operate?
  - Public Health Unit
  - Municipal Government
  - Other (please describe)
5. In general, how would you describe the focus of the enforcement activities at your health unit?
  - We are generally an enforcement oriented health unit
  - We are generally an education oriented health unit
  - We focus on both education and enforcement
6. How many Tobacco Enforcement Officers on your staff have been actively involved in enforcing the SFOA in the past 6 months?
7. Additional comments on characteristics of your PHU enforcement efforts:

### Part II: Management of inspection information

8. What is your present medium for data collection?
  - Single copy paper forms
  - NCR/Carbon forms
  - Scannable forms
  - Tablets/electronic device
  - Other (please describe)

9. What technology (application/software) is presently capturing your health units' tobacco inspection data?
- CISS
  - Hedgehog
  - THEIS
  - Access
  - TIS web only
  - Other (please describe)
10. Do you currently have access to on-site information technology (IT) support?
- Yes
  - No
11. On average, how long would it take for the on-site IT support to respond to your initial call for assistance?
- Less than 1 hour
  - 1-4 hours
  - One day
  - A week
  - Other (please describe)
  - N/A
12. What technological training does your on-site IT support have?
- Degree in computer science
  - Diploma in computer technical support/computer systems technician
  - Workshops/courses
  - No formal training, just a lot of computer experience
  - Other (please describe)
  - N/A
13. When required to provide information regarding the status of charges laid, how is this information collected?
- On-site ICON
  - Attend provincial offences court house for clerk to search ICON
  - Manual archives/files not captured in ICON
  - Other (please describe)

14. Presently, who enters the inspection data into TIS at your health unit?

Administrative staff

Tobacco Enforcement Officers

Both administrative staff and Tobacco Enforcement Officers

Other (please describe)

15. On average, how many hours a week does this person (or these people) dedicate to entering the tobacco inspection data into TIS and other databases?

Less than 5 hours

5-10 hours

11-20 hours

21-30 hours

More than 31 hours

16. Additional comments

## **Appendix D: Enforcement Manager Interview Guide**

### **Formative Evaluation of the *Smoke-Free Ontario Act*: Review of Public Health Unit Tobacco Enforcement Strategies**

#### **Enforcement Manager Interview**

1. Do you feel you have adequate enforcement staff to enforce the SFOA?  
  
If no, what would be an optimal number of staff to have enforcing the SFOA within your public health unit?
2. Are there difficulties in hiring enforcement staff?  
  
If yes, what are the difficulties?
3. Are there difficulties in getting new enforcement staff trained and provincially designated?  
  
If yes, what are the difficulties?
4. What issues does your public health unit encounter due to the geographic size of your public health unit when enforcing the SFOA?
5. How could some of these issues be resolved?
6. Do you feel that the location of the SFOA enforcement program within the Public Health Unit is effective?  
  
If no, what would improve its effectiveness?
7. What is the process for handling public complaints regarding non-compliance with the Smoke-Free Ontario Act?
8. What is the process for handling charges related to the Smoke-Free Ontario Act?
9. Does the public health unit employ a lawyer to work specifically on SFOA-related charges?
10. How long have you been a tobacco control coordinator/manager?

11. What changes have occurred in the enforcement strategy within your public health unit over the past 13 year since the Tobacco Control Act (TCA) was implemented and especially since the implementation of the SFOA in May 2006?
12. What lessons have you learned from your experience in managing the TCA/SFOA enforcement program over the years?
13. To what extent to you think that public health unit enforcement efforts are succeeding in achieving compliance with SFOA?
14. What changes would you recommend to improve success?

## **Appendix E: Tobacco Enforcement Officer Interview Guide**

### **Formative Evaluation of the *Smoke-Free Ontario Act*: Review of Public Health Unit Tobacco Enforcement Strategies**

#### **Tobacco Enforcement Officer Interview**

##### **Youth Access Protocol**

1. How many test shoppers are employed at the Health Unit specifically for conducting compliance/enforcement checks?
2. How old is each test shopper?
3. How are test shoppers “age-tested” to determine their apparent age?
4. What sex are test shoppers employed at the Health Unit?
5. What is the smoking status of the test shoppers?
6. How are test shoppers recruited?
7. How are test shoppers trained?
8. How are test shoppers instructed to dress when conducting compliance/enforcement checks?
9. Is a photo taken of the test shopper on the day of the compliance/enforcement check?
10. What time of day is a compliance/enforcement check typically conducted?
11. What days of the week are compliance/enforcement checks typically conducted?
12. How does the test shopper ask to purchase a tobacco product (i.e., is there a script)?
13. What type of tobacco product does the test shopper normally attempt to purchase (cigarettes, cigars, smokeless tobacco)?
14. Is the test shopper instructed to request a particular brand and size of tobacco?

15. Does the test shopper ask to buy anything in addition to the tobacco product (e.g., gum)?
16. Does the test shopper pay for the tobacco product in the event that the store clerk is willing to sell?
17. If asked for their age, how is the test shopper instructed to respond?
18. Are test shopper's expected to carry ID when conducting compliance checks?
19. If asked for ID, is the test shopper expected to show ID?
20. If showing ID, what form of ID do the test shoppers use (e.g., Government or school)?
21. How many TEOs are typically present during a compliance/enforcement check?
22. Where is the TEO when a test shopper is attempting to purchase tobacco products?
23. Does the TEO enter the store immediately following a successful tobacco purchase attempt, or at another time?
24. Where is the test shopper when the TEO enters the store to follow-up after a compliance check?
25. If the vendor is non-compliant:
  - a. Does the TEO give a verbal/letter of warning for the first offence?
  - b. Does the TEO charge the clerk, owner or both?
26. What are the three most difficult challenges when conducting compliance/enforcement checks?

**Display, Promotion and Handling Protocol**

27. What time of day is an inspection for tobacco display, promotion and handling typically conducted?
28. What days of the week are the inspections typically conducted?
29. How is the list of premises to be inspected generated (e.g., in response to complaint, routine inspection, etc.)?

30. Are the inspections conducted at the same time as the compliance/enforcement checks?
31. If the vendor is non-compliant:
  - a. Does the TEO note the non-compliance on the form if the vendor corrects the contravention during the course of the inspection?
  - b. Does the TEO give a verbal/letter of warning for the first offence?
32. What are the three most difficult challenges when conducting display, promotion and handling inspections?

**Smoke-Free Workplaces and Public Places Protocol**

33. What time of day are the inspections typically conducted?
34. What days of the week are the inspections typically conducted?
35. How is the list of premises to be inspected generated (e.g., in response to complaint, routine inspection, etc.)?
36. How many TEOs are typically present during an inspection?
37. How does the TEO dress when conducting an inspection (e.g., uniform/jacket or plain clothes)?
38. If the premise is non-compliant:
  - a. Does the TEO note the non-compliance on the form if the vendor corrects the contravention during the course of the inspection?
  - b. Does the TEO give a verbal/letter of warning for the first offence
  - c. Does the TEO charge the employee, owner or both?
39. What are the three most difficult challenges when conducting the enclosed smoke-free workplace and public place inspections?

**Non-compliance with Youth Access Stipulations**

40. Do you feel the compliance survey is accurately capturing vendor non-compliance with the youth access stipulations?



41. If no, why not?
42. Are there tobacco vendors in your area that are known to sell tobacco to underage youth?
43. What are the common characteristics of these stores (i.e., location, type of vendor, etc.)?
44. Have these stores ever sold tobacco to a test shopper?
45. If no, why do you think that they haven't sold to a test shopper?
46. If the youth access protocol could be improved, how do you think the compliance checks could be conducted differently in order to more accurately capture vendor non-compliance with regard to youth access stipulations?

## Appendix F: Youth Access Inspection Observation Form

### Formative Evaluation of the *Smoke-Free Ontario Act*: Review of Public Health Unit Tobacco Enforcement Strategies

Inspection Observation Form
Public Health Unit
Date of inspection
Start time
End time
Name of Tobacco Enforcement Officer
Sex of test shopper
Age of test shopper
Test shopper's appearance
Location where vehicle is parked in relation to the store (e.g., in front, behind)

Description of test shopper's tobacco purchase attempt

Were other individuals in the store at the time of purchase attempt

Tobacco Enforcement Officer activity following a purchase attempt

Interaction between Tobacco Enforcement Officer and test shopper

Other observations

## References

- <sup>1</sup> Jason LA, Ji PY, Anes MD, Birkhead SH. Active enforcement of cigarette control laws in the prevention of cigarette sales to minors. *Journal of the American Medical Association* 1991;266(22):3159-3161.
- <sup>2</sup> DiFranza JR, Carlson RP, Caisse RE. Reducing youth access to tobacco. *Tobacco Control* 1992;1(2):58.
- <sup>3</sup> Levy DT, Chaloupka F, Slater S. Expert opinions on optimal enforcement of minimum purchase age laws for tobacco. *Journal of Public Health Management and Practice* 2000;6(3):107-114.
- <sup>4</sup> Altman DG, Wheelis AY, McFarlane M, Lee HR, Fortmann SP. The relationship between tobacco access and use among adolescents: A four community study. *Social Science and Medicine* 1999;48(6):759-775.
- <sup>5</sup> Dent C, Biglan A. Relation between access to tobacco and adolescent smoking. *Tobacco Control* 2004;13(4):334-338.
- <sup>6</sup> DiFranza JR. Best practices for enforcing state laws prohibiting the sale of tobacco to minors. *Journal of Public Health Management and Practice* 2005;11(6):559-565.
- <sup>7</sup> Feighery E, Altman DG, Shaffer G. The effects of combining education and enforcement to reduce tobacco sales to minors. A study of four northern California communities. *Journal of the American Medical Association* 1991;266(22):3168-3171.
- <sup>8</sup> Levy DT, Friend KB. Strategies for reducing youth access to tobacco: A framework for understanding empirical findings on youth access policies. *Drugs-Education Prevention and Policy*. 2002;9(3):285-303.
- <sup>9</sup> Blewden MB, Spinola C. Controlling youth access to tobacco: A review of the literature and reflections on the New Zealand programme of controlled purchasing operations. *Drug and Alcohol Review* 1999;18(1):83-91.
- <sup>10</sup> Jacobson PD, Wasserman J. The implementation and enforcement of tobacco control laws: Policy implications for activists and the industry. *Journal of Health Politics Policy and Law* 1999;24(3):567-598.
- <sup>11</sup> Jason L, Billows W, Schnopp Wyatt D, King C. Reducing the illegal sales of cigarettes to minors: Analysis of alternative enforcement schedules. *Journal of Applied Behavior Analysis* 1996;29(3):333-344.
- <sup>12</sup> AC Nielsen Company of Canada, Marino T. *Measurement of Retailer Compliance with Respect to Tobacco Sales-To-Minors Legislation and Restrictions on Tobacco Advertising: Report of Findings: Wave 1 Results*. Toronto, ON:1995.
- <sup>13</sup> Minors' access to tobacco-Missouri, 1992, and Texas, 1993. *MMWR Morbidity and Mortality Weekly Report* 1993;42(7):125-18.
- <sup>14</sup> Corporate Research Group. *Evaluation of Retailers' Behaviour Towards Certain Youth Access-To-Tobacco Restrictions: Final Report Findings: 2006*. Ottawa, ON:2007:122.
- <sup>15</sup> Corporate Research Group. *Evaluation of Retailers' Behaviour Towards Certain Youth Access-To-Tobacco Restrictions: Final Report Findings: 2007*. Ottawa, ON:2008.
- <sup>16</sup> Glanz K, Jarrette AD, Wilson EA, O'Riordan DL, Jacob Arriola KR. Reducing minors' access to tobacco: Eight years' experience in Hawaii. *Preventive Medicine* 2007;44(1):55-58.
- <sup>17</sup> Pearson DC, Song L, Valdez RB, Angulo AS. Youth tobacco sales in a metropolitan county: Factors associated with compliance. *American Journal of Preventive Medicine* 2007;33(2):91-97.
- <sup>18</sup> DiFranza JR, Savageau JA, Aisquith BF. Youth access to tobacco: The effects of age, gender, vending machine locks, and "It's the law" programs. *American Journal of Public Health* 1996;86(2):221-224.
- <sup>19</sup> Clark PI, Natanblut SL, Schmitt CL, Wolters C, Iachan R. Factors associated with tobacco sales to minors - lessons learned from the FDA compliance checks. *Journal of the American Medical Association* 2000;284(6):729-734.
- <sup>20</sup> DiFranza JR, Coleman M. Sources of tobacco for youths in communities with strong enforcement of youth access laws. *Tobacco Control* 2001;10(4):323-328.
- <sup>21</sup> Klonoff EA, Landrine H, Alcaraz R. An experimental analysis of sociocultural variables in sales of cigarettes to minors. *American Journal of Public Health* 1997;87(5):823-826.
- <sup>22</sup> Klonoff EA, Landrine H. Predicting youth access to tobacco: The role of youth versus store-clerk behavior and issues of ecological validity. *Health Psychology*. 2004;23(5):517-524.
- <sup>23</sup> O'Grady B, Asbridge M, Abernathy T. Analysis of factors related to illegal tobacco sales to young people in Ontario. *Tobacco Control* 1999;8(3):301-305.

- <sup>24</sup> Arday DR, Klevens RM, Nelson DE, Huang P, Giovino GA, Mowery P. Predictors of tobacco sales to minors. *Preventive Medicine* 1997;26(1):8-13.
- <sup>25</sup> DiFranza JR, Celebucki CC, Mowery PD. Measuring statewide merchant compliance with tobacco minimum age laws: The Massachusetts experience. *American Journal of Public Health* 2001;91(7):1124-1125.
- <sup>26</sup> Corporate Research Group. *Evaluation of Retailers' Behaviour Towards Certain Youth Access-To-Tobacco Restrictions: Final Report Findings:2005*. Ottawa,ON:2006.
- <sup>27</sup> O'Grady W, Asbridge M, Abernathy T. Illegal tobacco sales to youth: A view from rational choice theory. *Canadian Journal of Criminology* 2000;42(1):1-20.
- <sup>28</sup> Feighery EC, Henriksen L, Wang Y, Schleicher NC, Fortmann SP. An evaluation of four measures of adolescents' exposure to cigarette marketing in stores. *Nicotine Tobacco Research* 2006;8(6):751-759.
- <sup>29</sup> Henriksen L, Feighery EC, Wang Y, Fortmann SP. Association of retail tobacco marketing with adolescent smoking. *American Journal of Public Health* 2004;94(12):2081-2083.
- <sup>30</sup> Slater SJ, Chaloupka FJ, Wakefield M, Johnston LD, O'malley PM. The impact of retail cigarette marketing practices on youth smoking uptake. *Archives of Pediatric and Adolescent Medicine* 2007;161(5):440-445.
- <sup>31</sup> Quedley M, Ng B, Sapre N, et al. In sight, in mind: Retailer compliance with legislation on limiting retail tobacco displays. *Nicotine Tobacco Research* 2008;10(8):1347-1354.
- <sup>32</sup> United States. Public Health Service. Office of the Surgeon General. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*. Rockville, MD: U.S. Dept. of Health and Human Services, Public Health Service, Office of the Surgeon General; 2006.
- <sup>33</sup> Non-Smokers' Rights Association (NSRA). *Compendium of 100% smoke-free public place municipal by-laws*. 2005.
- <sup>34</sup> Weber MD, Bagwell DAS, Fielding JE, Glantz SA. Long term compliance with California's smoke-free workplace law among bars and restaurants in Los Angeles County. *Tobacco Control* 2003;12(3):269-273.
- <sup>35</sup> Drope J, Glantz S. British Columbia Capital Regional District 100% smoke-free bylaw: A successful public health campaign despite industry opposition. *Tobacco Control* 2003;12(3):264-268.
- <sup>36</sup> Chapman S, Borland R, Lal A. Has the ban on smoking in New South Wales restaurants worked? A comparison of restaurants in Sydney and Melbourne. *Medical Journal of Australia* 2001;174(10):512-515.
- <sup>37</sup> Skeer MMSW, Land ML, Cheng DM, Siegel MB. Smoking in Boston bars before and after a 100% smoke-free regulation: An assessment of early compliance. *Journal of Public Health Management and Practice* 2004;10(6):501-507.
- <sup>38</sup> Dubray J, Schwartz R, Garcia J, Bondy S, Victor JC. *Formative evaluation of the Smoke-Free Ontario Act: Comparison of baseline and two post-SFOA measurements*. Toronto, ON: Ontario Tobacco Research Unit, Special Report Series; 2007.
- <sup>39</sup> Ontario Tobacco Research Unit. Ontario Tobacco Survey (OTS). 2005-2007.
- <sup>40</sup> Centre for Addiction and Mental Health. Centre for Addiction and Mental Health Monitor (CAMH monitor). 2005-2007.
- <sup>41</sup> Centre for Addiction and Mental Health. Ontario Student Drug Use Survey (OSDUS). 2005.
- <sup>42</sup> Centre for Addiction and Mental Health. Ontario Student Drug Use and Health Survey (OSDUHS). 2007.
- <sup>43</sup> More retailers asking for smokers' ID. *The Whig-Standard*. September 3, 2008: page 6.
- <sup>44</sup> Ministry of Health Promotion. *Protocol for Determination of Tobacco Vendor Compliance Government of Ontario*; 2006.
- <sup>45</sup> Pura D, Smith J, Vanderleest M. Midnight run: Rethinking compliance regarding the tobacco act and sales to youth. Presentation at the 5<sup>th</sup> National Conference on Tobacco or Health. Edmonton, AB; 2007.
- <sup>46</sup> DiFranza JR, Savageau JA, Bouchard J. Is the standard compliance check protocol a valid measure of the accessibility of tobacco to underage smokers? *Tobacco Control* 2001;10(3):227-232.
- <sup>47</sup> Landrine H, Klonoff EA. Validity of assessments of youth access to tobacco: The familiarity effect. *American Journal of Public Health* 2003;93(11):1883-1886.
- <sup>48</sup> Ministry of Health Promotion. *Protocol for Tobacco Vendor and Manufacturer Inspections. Government of Ontario*; 2006.

<sup>49</sup> Health Canada. Tobacco Reporting Regulations 22(b). 2002:22b.

<sup>50</sup> Kennedy RD, Elton-Marshall T, Mutti S, Dubray J, Fong GT. Understanding the impact of the Smoke-free Ontario Act on hospitality establishments' outdoor environments: A survey of restaurants and bars. *Tobacco Control* 2010;19(2):165-167.

<sup>51</sup> Ministry of Health Promotion. *Protocol for Smoke-Free Inspections for Enclosed Workplaces and Public Places*. Government Of Ontario; 2006.

<sup>52</sup> Walter K. Patrons can keep puffing on port pub's patio. *The Standard*. February 26, 2008 2008;page A1.

<sup>53</sup> Callaghan RC, Veldhuizen S, Leatherdale S, Murnaghan D, Manske S. Use of contraband cigarettes among adolescent daily smokers in Canada. *Canadian Medical Association Journal* 2009;181(6-7):384-386.

<sup>54</sup> Luk R, Cohen JE, Ferrence R, McDonald PW, Schwartz R, Bondy SJ. Prevalence and correlates of purchasing contraband cigarettes on first nations reserves in Ontario, Canada. *Addiction* 2009;104(3):488-495.

<sup>55</sup> Tobacco Control Statute Law Amendment Act, 2005: Designated smoking rooms.

<sup>56</sup> Ontario Tobacco Research Unit. *Monitoring and Evaluation Series [vol 10, no.3]: Indicators of OTS progress*. Toronto, ON: Ontario Tobacco Research Unit; 2004.