

## Smoking in Vehicles

### A. RRFSS Provincial Sample Pilot Project (PSPP)

The RRFSS PSPP is intended to provide reliable and representative estimates for 2011 RRFSS indicators for Ontario as a whole, and in so doing:

- Provide a valid comparator for local health unit results for selected indicators;
- Allow for a reduction in RRFSS "core" content;
- Provide a more flexible, timely system by which to collect provincially-relevant risk factor surveillance data than is currently available.

The provincial sample includes over 1800 interviews, with the number of interviews proportionate to the size of the health units' populations. Within households, the adult with the most recent birthday is selected to participate in the survey.

### B. PSPP Evaluation

The evaluation of the RRFSS PSPP is supported by Locally-Driven Collaborative Project funding through Public Health Ontario.

The purpose of the PSPP evaluation is to summarize the implementation and results of the RRFSS PSPP, documenting what worked well and why, what the challenges were, what the benefits of the PSPP were and whether or not they were worth the costs.

The information will be used to inform decisions related to future provincial sampling in RRFSS.

### C. Data Collection

January - December 2011

(Data was collected for Ontario and for all RRFSS-participating health units during this time period)

Only RRFSS participating health units who agreed to share their data have been included in this report.

### PURPOSE OF MODULE

The purpose of this RRFSS module is to provide baseline data for programs aimed at reducing exposure to second-hand smoke. In 2009, legislation was passed under the Smoke-Free Ontario Act, prohibiting the smoking in vehicles when another person under the age of 16 is present<sup>1</sup>.

### KEY FINDINGS

- In 2011, 85% (95% CI, 83-87) of Ontario drivers aged 18 and over had smoke-free vehicles (see Figure 1 and Table 1) and 15% (95% CI, 13-17) did not. The 15% who did not have smoke-free vehicles were composed of:
  - 6% (95% CI, 5-7) who allowed smoking some of the time;
  - 7% (95% CI, 5-8) who allowed smoking except when children were present; and
  - 2% (95% CI, 2-3)\* who allowed smokers to do whatever they wanted.

### Sex

- In 2011, the proportion of Ontario drivers who had smoke-free vehicles did not vary significantly by sex (see Figure 2).

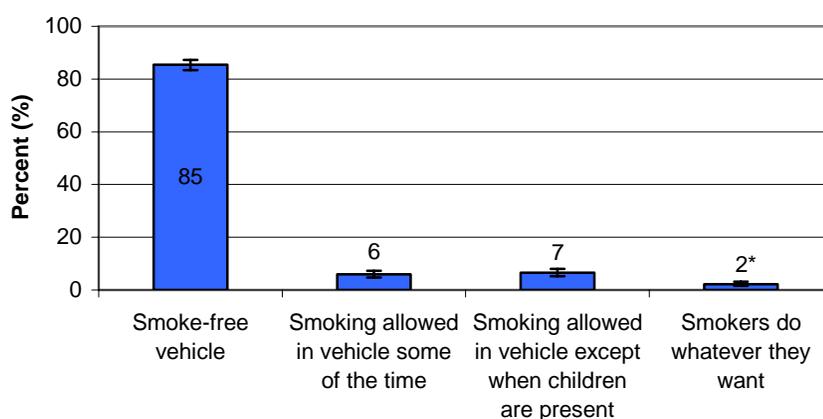
### Age Group

- In 2011, Ontario drivers aged 18-24 were significantly less likely to have smoke-free vehicles than the other age groups (see Figure 3).

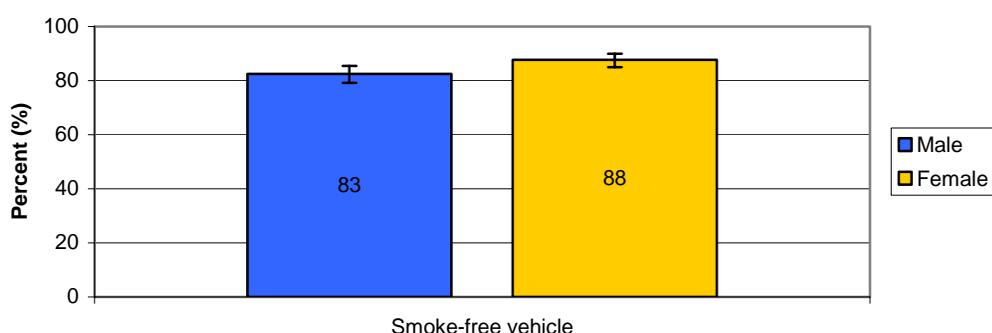
### Health Unit

- In 2011, drivers in Haldimand-Norfolk, Kingston, Leeds, Grenville and Lanark, Middlesex-London, Niagara and Sudbury were significantly less likely to have smoke-free vehicles than drivers in Ontario (see Figure 1 and Table 1).
- In 2011, there were no significant differences between health units and Ontario in the proportion of drivers who sometimes allowed smoking in their vehicles (see Figure 1 and Table 1).
- In 2011, drivers in Brant, Haldimand-Norfolk, Kingston, Leeds, Grenville and Lanark, Middlesex-London, Niagara, Sudbury, Waterloo and York were significantly more likely to allow smoking in the vehicles, except when children were present, than drivers in Ontario (see Figure 1 and Table 1).
- In 2011, drivers in Haldimand-Norfolk were significantly more likely to allow smokers to do whatever they wanted than drivers in Ontario (see Figure 1 and Table 1).

**Figure 1: Smoking in Vehicles, Ontario Drivers Aged 18 and Over, 2011**



**Figure 2: Smoke-Free Vehicles, Ontario Drivers Aged 18 and Over, By Sex, 2011**



**C. Definitions**

A 95% confidence interval (CI) refers to the range of values that has a 95% chance of including the 'true' estimate. A large CI means that there is a large amount of variability or imprecision. When CI's do not overlap, estimates are significantly different. CI's were selected as the measure of significance due to their conservative nature and transparency; there is less chance of incorrectly identifying a significant difference, which is important given the multiple tests of significance. CI's are reported in brackets or presented as | in the graphs.

Coefficient of variation (CV) refers to the precision of the estimate. When the CV is between 16.6 and 33.3, the estimate should be interpreted with caution because of high variability and has been marked with an asterisk (\*). Estimates with a CV of 33.3 or greater are not reportable.

**D. Limitations**

RRFSS results are self-reported and may not necessarily be recalled accurately. Individuals not living in households (such as those in prison, hospitals, or the homeless) are excluded. Similarly, individuals who live in a household without a landline telephone (about 12% of all Ontario households<sup>2</sup>) will not be reached through RRFSS. Thus the percentages may not represent the true estimates for the general population as respondents may have different characteristics than people who have not been included in the survey.

Household (HH) weights were used for any questions related to individuals. The HH weight adjusts for the fact that adults from larger HH are less likely to be selected than individuals from smaller HH. Provincial results were also weighted to account for the actual distribution of adults among health units in Ontario. Estimates were multiplied by the 2006 population for the health unit to adjust for this difference.

Household weights for Ottawa have been adjusted to account for the French oversample.

Don't know and refused responses were excluded from the analysis, along with responses from motorcycle drivers and those who do not drive or do not have a license.

Non-rounded estimates and confidence intervals were used when determining significant differences; however, rounded numbers were used for the presentation of data, thus estimates may not total 100 and confidence intervals may appear to overlap.

**E. References**

<sup>1</sup> Ministry of Health and Long-Term Care (2009). Fact Sheet: Smoking In Motor Vehicles With Children Present. Retrieved July 2012, from <http://www.mhp.gov.on.ca/en/smoke-free/simv/factsheet.asp>

<sup>2</sup> Ialomiteanu, A., Adlaf, E. M. (2011). CAMH Monitor 2010: Technical Guide. Retrieved May 2012 from [http://www.camh.ca/en/research/Documents/www.camh.net/Research/Areas\\_of\\_research/Population\\_Life\\_Course\\_Studies/CAMH\\_Monitor/CM2010\\_TechDoc.pdf](http://www.camh.ca/en/research/Documents/www.camh.net/Research/Areas_of_research/Population_Life_Course_Studies/CAMH_Monitor/CM2010_TechDoc.pdf)

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**Figure 3: Smoke-Free Vehicles, Ontario Drivers Aged 18 and Over, By Age Group, 2011**



**Table 1: Smoking in Vehicles, Ontario Drivers Aged 18 and Over, By Health Unit, 2011**

Health Unit/Province	Smoke-Free		Allowed Some of the Time		Allowed Except when Children are Present		Smokers Do Whatever They Want	
	Percent (CI)	↑↓	Percent (CI)	↑↓	Percent (CI)	↑↓	Percent (CI)	↑↓
<b>ONTARIO</b>	<b>85 (83-87)</b>	-	<b>6 (5-7)</b>	-	<b>7 (5-8)</b>	-	<b>2 (2-3)</b>	-
Brant	81 (78-83)		6 (4-7)		11 (9-13)	↑	2 (2-4)*	
Chatham-Kent	82 (80-85)		6 (5-8)		8 (7-10)		3 (2-4)*	
Durham Region	86 (84-87)		4 (3-5)		8 (7-10)		2 (2-3)*	
Haldimand-Norfolk	77 (75-79)	↓	7 (5-8)		12 (10-14)	↑	5 (4-6)	↑
Haliburton, Kawartha, Pine Ridge	83 (81-85)		6 (4-7)		9 (8-11)		2 (2-3)*	
Halton	87 (85-89)		4 (3-5)*		6 (5-8)		3 (2-4)*	
Kingston	78 (75-80)	↓	5 (3-6)		15 (14-18)	↑	2 (2-3)*	
Leeds, Grenville and Lanark	79 (76-82)	↓	5 (4-6)		12 (10-14)	↑	4 (3-6)*	
Middlesex-London	76 (74-79)	↓	4 (3-6)		16 (14-19)	↑	3 (2-4)*	
Niagara	80 (77-82)	↓	4 (3-6)*		14 (12-16)	↑	3 (2-4)*	
Ottawa	88 (85-90)		5 (4-7)		5 (3-6)*		3 (2-4)*	
Peel	85 (82-87)		4 (3-6)		8 (7-10)		3 (2-4)*	
Simcoe-Muskoka District	84 (81-86)		4 (3-6)*		9 (7-12)		3 (2-4)*	
Sudbury	74 (71-77)	↓	5 (4-7)		18 (15-20)	↑	4 (3-5)*	
Waterloo	81 (78-83)		4 (3-6)		12 (10-14)	↑	3 (2-5)*	
York	82 (79-84)		4 (3-6)		13 (11-15)	↑	2 (1-3)*	

↓ Health Unit was significantly lower than Ontario    ↑ Health Unit was significantly higher than Ontario

**Figure 4: Smoke-Free Vehicles, Ontario Drivers Aged 18 and Over, By Health Unit, 2011**

