

Exposure to cigarette smoke in the health unit region

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Smoking not allowed in the house

In 2013/14, about eight of every ten households in the North Bay Parry Sound District Health Unit (Health Unit) region did not allow smoking inside the home, significantly lower compared to Ontario households where about nine of every ten households prohibited smoking inside the home (Table 1).

Data from 2011 to 2014 was combined to analyze households that did not allow smoking inside the home by adjusted household income level. In the Health Unit region, about seven of every ten households with low adjusted household income did not allow smoking inside the home, significantly lower compared to about nine of every ten households with high adjusted household income levels in the region (Table 2).

Table 1. Percentage (95% CI) of households where smoking is not allowed inside the home, by region, 2011 – 2014.

Time period	Health Unit Region	North East LHIN Region	Ontario
2011/12	81.2* (76.8, 85.0)	79.6* (76.5, 82.3)	85.7 (85.1, 86.2)
2013/14	81.2* ^Δ (77.0, 84.9)	72.0* (68.4, 75.4)	87.1 ‡ (86.6, 87.6)

^Δ Estimate is significantly different from the North East LHIN estimate

‡ Estimate is significantly different the estimate in 2011/12

*Estimate is significantly different from the provincial estimate

Table 2. Percentage (95% CI) of households where smoking is not allowed inside the home, by adjusted household income level and region, 2011 – 2014 combined.

Adjusted Household Income Level	Health Unit Region	North East LHIN Region	Ontario
Low	71.7*‡ (66.6, 76.2)	72.6*‡ (69.5, 75.5)	81.0 ‡ (80.3, 81.6)
Middle	87.9 (83.6, 91.3)	82.7*‡ (78.9, 85.9)	88.3 ‡ (87.7, 88.9)
High	93.7 (88.9, 96.5)	92.2 (89.9, 94.0)	93.1 (92.5, 93.6)

‡ Estimate is significantly different from households with high adjusted household income levels, in the same region

*Estimate is significantly different from the provincial estimate

Second-hand smoke in a private vehicle

In 2013/14, about one of every ten non-smokers of the age-standardized population aged 12 years or older in the Health Unit region reported exposure to second-hand smoke in a private vehicle, statistically similar to estimates for the population in the North East LHIN region and Ontario (Table 3).

Data from 2007 to 2014 was combined to analyze exposure to second-hand smoke in private vehicles by gender, and adjusted household income level. About one of every ten males reported exposure to second-hand smoke in a private vehicle within the Health Unit region, significantly higher compared to about one in 15 males in Ontario (Table 4). Exposure to second-hand smoke in a private vehicle did not vary in households with low or mid adjusted household income level in either of the three regions (Table 5).

Table 3. Age-standardized percentage (95% CI) of non-smoker individuals aged 12 years or older who reported exposure to second-hand smoke in a private vehicle, by region, 2007 - 2014

Time period	Health Unit Region	North East LHIN Region	Ontario
2007/08	11.2* (8.5, 14.7)	12.4* (10.6, 14.5)	7.2 (6.7, 7.7)
2009/10	6.3 ^E (4.3, 9.3)	6.5 (5.0, 8.4)	6.4 (5.9, 6.9)
2011/12	7.8 ^E (5.3, 11.3)	8.4* (6.4, 10.8)	5.5 (5.1, 6.0)
2013/14	8.6 ^E (5.4, 13.4)	8.5* (6.8, 10.5)	5.2 (4.8, 5.7)

*Estimate is significantly different from the provincial estimate

^E Interpret with caution; the estimate is associated with high sampling variability

Table 4. Age-standardized percentage (95% CI) of non-smoker individuals aged 12 years or older who reported exposure to second-hand smoke in a private vehicle, by gender and region, 2007 – 2014 combined.

Gender	Health Unit Region	North East LHIN Region	Ontario
Male	9.6* (7.2, 12.5)	9.9* (8.5, 11.5)	6.5 ‡ (6.2, 6.9)
Female	7.3 (5.7, 9.4)	8.1* (7.0, 9.5)	5.6 (5.3, 6.0)

‡ Estimate is significantly different from females in the same region

*Estimate is significantly different from the provincial estimate

Table 5. Age-standardized percentage (95% CI) of non-smoker individuals aged 12 years or older who reported exposure to second-hand smoke in a private vehicle, by adjusted household income level and region, 2007 – 2014 combined.

Adjusted Household Income Level	Health Unit Region	North East LHIN Region	Ontario
Low income	9.7 ^E (6.7, 13.7)	12.3* (10.3, 14.7)	7.1 (6.6, 7.6)
Mid income	9.7* (7.1, 13.2)	8.6* (7.1, 10.5)	6.0 (5.7, 6.4)
High income	6.6 ^E (4.7, 9.3)	U	U

*Estimate is significantly different from the provincial estimate

^E Interpret with caution; the estimate is associated with high sampling variability

U Estimate for combined sample is unavailable as estimated has changed significantly between time periods

Second-hand smoke in a public place

In 2013/14, about three of every twenty non-smokers of the age-standardized population aged 12 years or older within the Health Unit region were exposed to second-hand smoke in a public place, statistically similar to estimates from the population in the North East LHIN region and Ontario (Table 6).

Data from 2007 to 2014 was combined to analyze exposure to second-hand smoke in public places by selected gender, and adjusted household income level. Exposure to second-hand smoke in public places did not vary significantly by gender or adjusted household income levels, in the Health Unit region (Table 7 & Table 8).

Table 6. Age-standardized percentage (95% CI) of non-smoker individuals aged 12 years or older who reported exposure to second-hand smoke in a public place, by region, 2007 – 2014 combined.

Time period	Health Unit Region	North East LHIN Region	Ontario
2007/08	10.8 (7.8, 14.7)	13.0 (11.2, 15.1)	11.1 (10.6, 11.7)
2009/10	10.7 ^E (7.7, 14.8)	12.0 (10.1, 14.2)	12.0 (11.4, 12.7)
2011/12	9.1 ^E (6.5, 12.7)	13.2 (10.7, 16.3)	13.0 (12.4, 13.7)
2013/14	14.6 (10.8, 19.4)	13.7 (11.5, 16.2)	14.6 (13.8, 15.4)

E Interpret with caution; the estimate is associated with high sampling variability

Table 7. Age-standardized percentage (95% CI) of non-smoker individuals aged 12 years or older who reported exposure to second-hand smoke in a public place, by gender and region, 2007 – 2014 combined.

Gender	Health Unit Region	North East LHIN Region	Ontario
Male	12.9 (10.0, 16.5)	13.1 (11.5, 14.8)	13.2 (12.7, 13.7)
Female	10.0 (8.0, 12.4)	12.7 (11.2, 14.4)	12.3 (11.9, 12.8)

Table 8. Age-standardized percentage (95% CI) of non-smoker individuals aged 12 years or older who reported exposure to second-hand smoke in a public place, by adjusted household income level and region, 2007 – 2014 combined.

Adjusted Household Income Level	Health Unit Region	North East LHIN Region	Ontario
Low income	9.5* (7.1, 12.7)	U	14.0‡ (13.3, 14.8)
Mid income	13.5 (10.5, 17.3)	13.6 (11.7, 15.8)	13.3‡ (12.7, 13.9)
High income	10.0 (7.4, 13.4)	12.6 (10.9, 14.6)	11.4 (10.9, 11.9)

* Estimate is significantly different from the provincial estimate

‡ Estimate is significantly different from households with high adjusted household income levels, in the same region

U Estimate for combined sample is unavailable as estimated has changed significantly between time periods

Definitions and data sources

Definitions:

Smoking not allowed in the house:

The percentage of households that did not allow smoking in the home was calculated by adding the population who did not allow smoking in the house and dividing by the total households for the region.

Adjusted Household Income:

The population's household income adjusted for family size, divided into three equally sized groups (lowest income, middle income, and highest income). Household income is divided by the squared number of persons in that household, for each person. For example, lowest income represents the one third of households with the lowest income per household size and the third tertile represents the one third of households with the highest income per household size.

Exposure to cigarette smoke in a private vehicle:

The percentage of the population exposed to second-hand smoke in a private vehicle was calculated by adding the population of non-smokers that were exposed to second-hand smoke, every day or almost every day, in a car or other private vehicle during the previous month, and dividing that by the total number of non-smokers aged 12 years or older.

Exposure to cigarette smoke in a public place:

The percentage of the population exposed to second-hand smoke in a public place was calculated by adding the population of non-smokers that were exposed to second-hand smoke, every day or almost every day, in a public place (e.g., bars, restaurants, shopping malls, arenas, bingo halls, bowling alleys) during the previous month, and dividing that by the total number of non-smokers aged 12 years or older.

North East LHIN region:

The North East Local Health Integration Network (NE LHIN) region boundaries normally include the North Bay Parry Sound District Health Unit (NBPSDHU) region. However, for comparison purposes the NE LHIN region is defined as the whole of the region excluding the NBPSDHU region.

Data sources:

Canadian Community Health Survey 2007/08, 2009/10, 2011/12, 2013/14, Statistics Canada, Share File, Ontario Ministry of Health and Long-Term Care.

Analysis:

Canadian Community Health Survey (CCHS) data:

The confidence intervals and variance were measured using the bootstrapping method, calculated with STATA IC/14.2 (2014).

Age-standardized rate calculation:

Crude rates were age-standardized using the Direct Method and standard 2011 Canadian population.

Interpretation of a significant difference:

A statistic interpreted as ‘significantly different’ from another is an estimate found to be statistically meaningful; the difference is unlikely due to chance. Error ranges noted in tables within this report illustrate 95% confidence intervals. If there is no overlap in range between confidence intervals, the difference can be described as statistically significant.