

Tobacco Use and Pregnancy

Trends over time

The percentage of women who reported smoking during their pregnancy in the North Bay Parry Sound District Health Unit (Health Unit) region was more than double the Ontario percentage for all years between 2013 and 2016 (Table 1). The percentage of women who reported smoking during their pregnancy has not changed significantly between 2013 and 2016 in either region.

Table 1. Number and Percentage (95% Confidence Interval) of Women Who Smoked During Their Pregnancy, by Year & Health Region, 2013-2016

Year	Number of Women Who Smoked During Their Pregnancy	Health Unit Region Percentage (95% CI)	Ontario Percentage (95% CI)
2013	201	18.8* (16.2, 21.4)	8.1 (8.0, 8.3)
2014	231	22.2* (19.3, 25.1)	8.4 † (8.2, 8.5)
2015	193	18.2* (15.6, 20.7)	8.0 † (7.8, 8.1)
2016	225	20.8 (18.1, 23.5)	7.4 † (7.3, 7.6)

* Estimate is significantly different from the provincial estimate

† Interpret with caution due to 5% to less than 15% of responses missing

Tobacco use by age

About one of every three pregnant women aged 25 years or younger in the Health Unit region smoked during her pregnancy, significantly higher compared to about one of every four women in Ontario overall (Table 2). The percentage of women aged 35 years or older who reported smoking during their pregnancy in the Health Unit region was almost four times the percentage of the same group of women in Ontario, and for women aged 25 to 34 years in the Health Unit region the percentage was triple the Ontario percentage.

Table 2. Number and Percentage (95% Confidence Interval) of Women Who Smoked During Their Pregnancy, by Age Group (Years) & Health Region, 2016

Woman's Age Group	Health Unit Region Percentage (95% CI)	Ontario Percentage (95% CI)
25 Years or Younger	29.3*‡ (22.8, 35.7)	19.8 ‡ (19.1, 20.5)
25 – 34 Years	18.4* (15.2, 21.7)	6.2 ‡ (6.1, 6.4)
35 Years or Older	15.6* (8.8, 22.5)	4.1 † (3.8, 4.3)

* Estimate is significantly different from the provincial estimate

‡ Estimate is significantly different from women aged 35 years or older, in the same region

† Interpret with caution due to 5% to less than 15% of responses missing

Tobacco use by household income level

For live infants born between January 12 2014 and December 31, 2015, about one of every three mothers in the Health Unit region who reported having a household income level less than \$40,000 a year had reported smoking during their pregnancy, significantly higher compared to about one in ten mothers with household income levels between \$40,000 and \$79,999, and compared to one in twenty mothers with household income levels of \$80,000 or higher (Table 3).

Table 3. Percentage (95% Confidence Interval) of Women Who Smoked During Their Pregnancy, by Household Income Level, NBPSDHU Region, 2014 & 2015 Combined

Household Income Level	Health Unit Region Percentage (95% CI)
Less than \$40,000	36.4 ‡ (31.4, 41.7)
\$40,000 to \$79,999	11.1 ^E ‡ (7.9, 15.4)
\$80,000 or higher	4.6 ^E (2.8, 7.6)

‡ Estimate is significantly different from women whose household income level is \$80,000 or higher.

Definitions and data sources

Smoking during pregnancy:

Percentages for smoking during pregnancy were calculated by dividing the number of women who reported smoking by the first prenatal visit or admission for birth by all the women who gave birth in the corresponding year.

Data sources:

Better Outcomes Registry and Network (BORN) Information System: BORN Ontario, public health data cube (2013-2015 calendar years). Date extracted: July 18, 2018

Citation:

Public Health Ontario. Snapshots: North Bay Parry Sound District Health Unit: Maternal smoking during pregnancy – Overall & age-specific rates 2013-2016. Toronto, ON: Ontario Agency for Health Protection and Promotion; 2017 Sep 29 [cited 2018 Oct 29]. Available from: publichealthontario.ca/en/DataAndAnalytics/Snapshots/Pages/Maternal-health.aspx

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 bars noted in figures 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.

Tobacco use during pregnancy by household income level:

Percentages for tobacco use during pregnancy by income level were calculated by dividing the number of women who gave birth to a live-born infant and reported smoking during their pregnancy divided by all the women who gave birth to a live-born infant in the corresponding year of the infant’s birth. Percentages were weighted to account for differences in the age range of all mothers who gave birth and those who participated in the survey.

Data sources:

Tobacco use by household income level: North Bay Parry Sound District Health Unit. Infant Feeding Survey internal data. Infants born between January 12, 2014 and December 31, 2015.

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 bars noted in figures 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. Confidence intervals (CI) and variances were estimated using the exact method in STATA IC/14.2 (2014) for the North Bay Parry Sound District Health Unit (NBPSDHU) region.