# Sleep Among Students in Grades 7 to 12 in the NBPSDHU Region 

Methodology, Data Source and Limitations

The data presented in this report is from the Ontario Student Drug Use and Health Survey (OSDUHS) conducted by the Centre for Addiction and Mental Health (CAMH) and administered by the Institute for Social Research, York University. Its contents and interpretation are solely the responsibility of the author and do not necessarily represent the official view of the Centre for Addiction and Mental Health.

The data presented in this report was collected during the 2014/2015 school year, and when noted, for a combined sample of the 2010/2011 \& 2014/2015 school years. It provides an update of health behaviours in Ontario youth, updating data that were previously reported in The Health of Youth in the North Bay Parry Sound District Health Unit Region (North Bay Parry Sound District Health Unit, 2012).

The survey was administered to students from grades seven through twelve enrolled in public and Catholic school systems (French and English). Excluded from this report are youth enrolled in private schools or home-schooled, those institutionalized for correctional or health reasons, and those schooled on native reserves, military bases, or in the remote northern region of Ontario. Data in this report has been presented for the North Bay Parry Sound District Health Unit (NBPSDHU), other northern regions in Ontario (excluding the NBPSDHU region) and Ontario. The NBPSDHU region sample includes 580 students from 19 regional schools within three school boards.

The term "significant" is used within this report to describe differences between health regions or groups that are statistically meaningful. Without statistical significance you cannot say with certainty that the differences are real, or simply due to chance. Sampling variability associated with each estimate is described using $95 \%$ confidence intervals ( $95 \% \mathrm{CI}$ ), which indicate the precision of the estimate. Confidence intervals were used to determine significant differences between estimates.

Estimates with a coefficient of variation (ratio of standard error to its estimate) equal to or higher than 33.3, or based on less than 50 responses were suppressed due to high sampling variability. Estimates were calculated using complex survey analysis in Stata 14.2 (StataCorp LP, College Station, TX).

## Definitions and Comparison Groups

Perceived Socio-Economic Status (SES)
Students were asked to identify where they thought their family would be on the socioeconomic status (SES) ladder, on a scale from 1 to 10, with 1 being "worst off", and 10 being "best off". Students who selected a rating of 1-6 were considered to be of low SES, while students who selected 7-10 were considered to be of high SES.

## Hours of Sleep

In 2014/15, about one of every three students in the Health Unit region reported seven hours of sleep on an average night, and one of every three students reported eight hours of sleep on an average night, similar to the percentages for other northern regions and Ontario (Table 1).

In Ontario, significantly high percentages of male students slept eight hours or more an average night compared to females (Table 2). However, in the Health Unit region and other northern regions, this percentage was similar among males and females.
In all three regions, about one in three secondary students slept eight or more hours on an average night, significantly lower compared to about seven of every ten elementary students (Table 3). About half of students with a high perceived socioeconomic status slept eight or more hours on an average night in all three regions, significantly higher compared to about one in three students with low perceived socioeconomic status (Table 4).

Table 1. Percentage ( $95 \% \mathrm{Cl}$ ) of Students, by the Number of Hours of Sleep on an Average Night and Region, 2014/15

| Hours of Sleep | NBPSDHU Region | Other Northern <br> Regions | Ontario |
| :--- | :---: | :---: | :---: |
| Four hours or fewer | F | $3.7^{\mathrm{E}}$ | $(1.9,6.9)$ |
| Five hours | F | $5.0^{\mathrm{E}}$ | $(3.3,4.3)$ |
| Six hours |  | $(3.2,7.8)$ | 8.0 |
|  | 13.7 | 17.5 | $(7.2,9.0)$ |
| Seven hours | $(10.1,18.2)$ | $(15.0,20.4)$ | 18.0 |
|  | 29.0 | 25.2 | $(16.6,19.5)$ |
| Eight hours | $(23.6,35.2)$ | $(20.6,30.5)$ | 29.2 |
|  | 28.7 | 31.9 | $(27.7,30.7)$ |
| Nine hours | $(24.4,33.4)$ | $(28.2,35.8)$ | 25.8 |
|  | 13.0 | 10.6 | $(24.3,27.4)$ |
| Ten or more hours | $(10.1,16.7)$ | $(7.8,14.4)$ | 10.9 |
|  | $4.4^{\mathrm{E}}$ | $6.1^{\mathrm{E}}$ | $(10.0,11.9)$ |

E Interpret with caution; the estimate is associated with high sampling variability
F Estimate suppressed; too unreliable to be released

Table 2. Percentage ( $95 \% \mathrm{CI}$ ) of Students Who Slept Eight Hours or More on an Average Night, by Gender and Region, 2014/15

| Gender | NBPSDHU Region | Other Northern <br> Regions | Ontario |
| :--- | :---: | :---: | :---: |
| Males | 49.7 | 55.9 | $44.9 \ddagger$ |
|  | $(43.2,56.1)$ | $(47.4,64.1)$ | $(41.9,47.9)$ |
| Females | 42.3 | 40.8 | 36.9 |
|  | $(37.3,47.5)$ | $(34.2,47.8)$ | $(34.6,39.3)$ |

$\ddagger$ Estimate is significantly different from females in the same region

Table 3. Percentage ( $95 \% \mathrm{CI}$ ) of Students Who Slept Eight Hours or More on an Average Night, by Grade Level and Region, 2014/15

| Grade Level | NBPSDHU Region | Other Northern <br> Regions | Ontario |
| :--- | :---: | :---: | :---: |
| Grades 7-8 | $71.3 \ddagger$ | $71.2 \ddagger$ | $68.9 \ddagger$ |
|  | $(65.2,76.8)$ | $(56.9,82.2)$ | $(64.3,73.2)$ |
| Grades 9-12 | 36.0 | 39.5 | 30.9 |
|  | $(28.1,44.6)$ | $(35.0,44.2)$ | $(28.9,32.9)$ |

$\ddagger$ Estimate is significantly different from secondary students in the same region

Table 4. Percentage ( $95 \% \mathrm{Cl}$ ) of Students Who Slept Eight Hours or More on an Average Night, by Perceived Socioeconomic Status and Region, 2014/15

| Perceived <br> Socioeconomic Status <br> (SES) | NBPSDHU Region | Other Northern <br> Regions | Ontario |
| :--- | :---: | :---: | :---: |
| Low SES | 34.7 | 39.0 | 33.5 |
| High SES | $(25.3,45.6)$ | $(31.9,46.6)$ | $(30.9,36.2)$ |
| $(43.5 \ddagger$ | $52.5 \ddagger$ |  |  |
| $(47.6,57.4)$ | $(41.5,47.5)$ |  |  |

$\ddagger$ Estimate is significantly different from students with low perceived socioeconomic status, in the same region

