

Healthy Weights 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 substance use 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% 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

Aboriginal Identity

Only students who identified themselves as Aboriginal on the survey are included in this group. It is possible that some students did not self-identify, and are thus excluded from this group.

Perceived Socio-Economic Status (SES)

Students were asked to identify where they thought their family would be on the 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.

Overweight or Obese

About one in four students in our region were overweight or obese in our region in 2014/15 (27.6%; 95% CI; 23.9-31.5), similar to the percentage for other northern regions (28.2%; 95% CI; 23.2-33.7) and Ontario (25.4%; 95% CI; 23.0-27.9). This percentage has not changed between 2010/11 and 2014/15 school years in any of the three regions.

Data from 2010/11 & 2014/15 was combined to analyze overweight and obesity by subgroups. The percentage of students that were overweight or obese did not vary significantly by gender, grade level, aboriginal identity, perceived socioeconomic status, maternal or paternal education within our region (Tables 1 through 6). In Ontario, almost double and a significantly higher percentage of students who identified as Aboriginal or whose mother had less than a high school education were overweight/obese compared to non-Aboriginal students and students whose mother had a university education, respectively (Tables 3 & 5).

Table 1. Percentage (95% CI) of Students Who Were Overweight or Obese, by Gender & Region, 2010/11 & 2014/15 Combined

Gender	NBPSDHU Region	Other Northern Regions	Ontario
Males	29.0 (24.3, 34.2)	33.2‡ (29.3, 37.3)	29.5 ‡ (27.5, 31.6)
Females	25.3 (22.0, 29.1)	22.9 (18.7, 27.7)	21.6 (19.6, 23.6)

‡ Estimate is significantly different from females in the same region

Table 2. Percentage (95% CI) of Students Who Were Overweight or Obese, by Grade Level & Region, 2010/11 & 2014/15 Combined

Grade Level	NBPSDHU Region	Other Northern Regions	Ontario
Grades 7 - 8	20.2 ^Δ (15.7, 25.7)	30.6* (26.7, 34.9)	21.1 (19.1, 23.3)
Grades 9 - 12	29.0 (25.3, 33)	27.3 (22.7, 32.4)	27.2 ‡ (25.2, 29.3)

‡ Estimate is significantly different from students in grades 7 & 8 in the same region

* Estimate is significantly different from provincial estimate

Δ Estimate is significantly different from estimate for other northern regions

Table 3. Percentage (95% CI) of Students Who Were Overweight or Obese, by Aboriginal Identity & Region, 2010/11 & 2014/15 Combined

Aboriginal identity	NBPSDHU Region	Other Northern Regions	Ontario
Aboriginal	32.3 (22.8, 43.5)	40.6 (30.3, 51.8)	38.1‡ (33.1, 43.3)
Non-Aboriginal	26.7 (23.4, 30.2)	27.1 (23.9, 30.6)	25.4 (23.7, 27.2)

‡ Estimate is significantly different from students those who did not identify as Aboriginal in the same region

Table 4. Percentage (95% CI) of Students Who Were Overweight or Obese, by Perceived Socioeconomic Status & Region, 2010/11 & 2014/15 Combined

Perceived Socioeconomic Status (SES)	NBPSDHU Region	Other Northern Regions	Ontario
Low SES	31.1 (25.7, 37.1)	32.8 (26.3, 40)	29.9‡ (27.5, 32.5)
High SES	24.8 (22, 27.9)	26.6 (23.3, 30.2)	23.8 (22.1, 25.6)

‡ Estimate is significantly different from students those who perceived their socioeconomic status to be high, in the same region

Table 5. Percentage (95% CI) of Students Who Were Overweight or Obese, by Highest Level of Maternal Education Completed & Region, 2010/11 & 2014/15 Combined

Highest level of maternal education completed	NBPSDHU Region	Other Northern Regions	Ontario
University	22.5 (16.2, 30.5)	23.1 (18.7, 28.3)	21.5 (20.3, 22.8)
College	31.8 (26.3, 37.9)	24.7 (20.1, 30)	28.7 ‡ (25.3, 32.3)
High school	29.1 (21.4, 38.3)	35.4 (26.6, 45.3)	27.8‡ (24.9, 30.9)
Less than high school	34.2 ^E (21.9, 49.1)	43.1 ‡ (30.7, 56.5)	37.3 ‡ (30.9, 44.2)

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

‡ Estimate is significantly different from students those whose mothers had completed a university education or higher, in the same region

Table 6. Percentage (95% CI) of Students Who Were Overweight or Obese, by Highest Level of Paternal Education Completed & Region, 2010/11 & 2014/15 Combined

Highest level of paternal education completed	NBPSDHU Region	Other Northern Regions	Ontario
University	18.9 (12.4, 27.6)	19.6 (15.7, 24.2)	20.3 (18.8, 22.0)
College	24.1 (19.4, 29.6)	30.7 (24.6, 37.6)	29.5 ‡ (26.4, 32.7)
High school	34.1 (29.1, 39.5)	28.4 (23.2, 34.3)	28.8 ‡ (24.9, 33.1)
Less than high school	35.4 ^E (23.6, 49.2)	30.3 (22.9, 38.9)	33.7 ‡ (29.2, 38.5)

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

‡ Estimate is significantly different from students those whose fathers had completed a university education or higher, in the same region

Body Image

About one in five students in our region thought they were ‘too fat’ (18.2%; 95% CI; 13.7-23.7), which was similar to students in other northern regions (24.0%; 95% CI; 20.3-28.3) and Ontario (24.3%; 95% CI; 21.4-27.4). The percentage of students who perceive themselves as ‘too thin’, ‘about the right weight’, or ‘too fat’, has not changed significantly in all three regions from the 2010/11 school year.

Data from 2010/11 & 2014/15 was combined to analyze body image by subgroups (Tables 7 through 11). One of every two overweight or obese students in our region think they are ‘about the right weight’; similar to overweight or obese students in other northern regions and Ontario. In Ontario and other northern regions, almost one in three female students thought they were ‘too fat’, while only one in eight males thought they were ‘too fat’ (Table 1).

Table 7. Percentage (95% CI) of Students Who Thought They Were ‘Too Fat’, by Gender & Region, 2010/11 & 2014/15 Combined

Gender	NBPSDHU Region	Other Northern Regions	Ontario
Males	16.9 (12.1, 23.1)	16.0 (12.4, 20.5)	17.5 (15.0, 20.2)
Females	23.9 (17.8, 31.2)	30.8 ‡ (26.7, 35.2)	30.4 ‡ (28.3, 32.6)

‡ Estimate is significantly different from females in the same region

Table 8. Percentage (95% CI) of Students Who Thought They Were 'Too Fat', by Grade Level & Region, 2010/11 & 2014/15 Combined

Grade Level	NBPSDHU Region	Other Northern Regions	Ontario
Grades 7 - 8	18.5 (13.2, 25.4)	20.1 (16.0, 25.0)	19.6 (17.0, 22.5)
Grades 9 - 12	21.0 (15.7, 27.4)	24.3 (20.5, 28.5)	25.0 (22.4, 27.9)

Table 9. Percentage (95% CI) of Students Who Thought They Were 'Too Fat', by Aboriginal Identity & Region, 2010/11 & 2014/15 Combined

Aboriginal identity	NBPSDHU Region	Other Northern Regions	Ontario
Aboriginal	23.6 (14.5, 36.1)	29.3 (17.0, 45.6)	23.3 (16.8, 31.3)
Non-Aboriginal	20.4 (16.3, 25.3)	22.4 (19.5, 25.6)	23.6 (21.4, 26.0)

Table 10. Percentage (95% CI) of Students Who Thought They Were 'Too Fat', by Perceived Socioeconomic Status & Region, 2010/11 & 2014/15 Combined

Perceived Socioeconomic Status (SES)	NBPSDHU Region	Other Northern Regions	Ontario
Low SES	27.4 (19.7, 36.6)	25.1 (18.7, 32.9)	27.3 (24.6, 30.0)
High SES	17.1 (13.3, 21.6)	22.4 (19.2, 26.1)	22.0 (19.5, 24.7)

Table 11. Percentage (95% CI) of Students Who Thought They Were 'Too Fat' among Students Who Were Overweight & Obese, by Region, 2010/11 & 2014/15 Combined

Overweight/obese	NBPSDHU Region	Other Northern Regions	Ontario
Overweight/obese	50.3 (39.9, 60.7)	41.9 (34.8, 49.3)	52.9 (49.1, 56.8)

Desired Change in Weight

About three of every ten students reported trying to lose weight, similar to percentages for students in other northern regions and Ontario (Table 12).

Data from 2010/11 & 2014/15 was combined to analyze weight control behaviours by subgroups (Tables 13 through 17). Almost half of the students who identified as Aboriginal in our region reported trying to lose weight, significantly higher compared to non-Aboriginal students (Table 15). The percentage of female students, secondary school students, non-Aboriginal students, and students with high perceived socioeconomic status who reported trying to lose weight was significantly lower in our region compared to their Ontario counterparts (Tables 13, 14, 15, & 16, respectively).

Table 12. Percentage (95% CI) of Students by Weight Control Behaviour & Region, 2014/15

Weight Control Behaviour	NBPSDHU Region	Other Northern Regions	Ontario
Trying to lose weight	30.6 (26.0, 35.5)	30.1 (27.8, 32.6)	30.1 (27.8, 32.6)
Trying to keep from gaining weight	23.3 (19.1, 28.1)	22.5 (20.7, 24.3)	22.5 (20.7, 24.3)
Not doing anything	33.5 (28.4, 39.1)	33.6 (31.1, 36.2)	33.6 (31.1, 36.2)
Trying to gain weight	12.6 (8.8, 17.7)	13.8 (12.2, 15.6)	13.8 (12.2, 15.6)

Table 13. Percentage (95% CI) of Students Who Were Trying to Lose Weight, by Gender & Region, 2010/11 & 2014/15 Combined

Gender	NBPSDHU Region	Other Northern Regions	Ontario
Males	17.5 ^E (12.3, 24.2)	21.1 (17.3, 25.3)	21.1 (19.1, 23.3)
Females	27.6* (21.6, 34.4)	40.3 ‡ (34.3, 46.6)	38.6 ‡ (36.4, 40.8)

‡ Estimate is significantly different from females in the same region

* Estimate is significantly different from provincial estimate

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

Table 14. Percentage (95% CI) of Students Who Were Trying to Lose Weight, by Grade Level & Region, 2010/11 & 2014/15 Combined

Grade Level	NBPSDHU Region	Other Northern Regions	Ontario
Grades 7 - 8	20.9 (17.3, 25.1)	33.6 (27.1, 40.8)	25.7 (23.0, 28.7)
Grades 9 - 12	23.0* (18.5, 28.2)	28.9 (24.3, 33.9)	30.8 ‡ (28.7, 32.9)

* Estimate is significantly different from provincial estimate

‡ Estimate is significantly different from students in grades 7 & 8 in the same region

Table 15. Percentage (95% CI) of Students Who Were Trying to Lose Weight, by Aboriginal Identity & Region, 2010/11 & 2014/15 Combined

Aboriginal identity	NBPSDHU Region	Other Northern Regions	Ontario
Aboriginal	45.4 ‡ (35.5, 55.7)	43.3 (27.4, 60.7)	39.6 (30.4, 49.5)
Non-Aboriginal	20.4* (16.3, 25.2)	29.0 (25.0, 33.3)	29.2 (27.4, 31.0)

* Estimate is significantly different from provincial estimate

‡ Estimate is significantly different from students those who did not identify as Aboriginal in the same region

Table 16. Percentage (95% CI) of Students Who Were Trying to Lose Weight, by Perceived Socioeconomic Status & Region, 2010/11 & 2014/15 Combined

Perceived Socioeconomic Status (SES)	NBPSDHU Region	Other Northern Regions	Ontario
Low SES	28.9 (22.7, 36.1)	33.6 (25.4, 43.0)	31.7 (29.0, 34.5)
High SES	19.3* (14.5, 25.2)	28.4 (26.5, 30.5)	29.1 (24.6, 34.0)

* Estimate is significantly different from provincial estimate

Table 17. Percentage (95% CI) of Students Who Were Trying to Lose Weight among Students Who Were Overweight & Obese, by Region, 2010/11 & 2014/15 Combined

Overweight/obese	NBPSDHU Region	Other Northern Regions	Ontario
Overweight/obese	44.3 (34.1, 55.0)	52.3 (45.8, 58.8)	54 (50.9, 57.1)