

Cannabis Use 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 [Substance Use Among 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). The North Bay Parry Sound District Health Unit (NBPSDHU) region sample includes 580 students from 19 regional schools within three school boards.

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 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 13.1 (StataCorp LP, College Station, TX).

Definitions and Comparison Groups

Aboriginal

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.

Connectedness

Students were asked their agreement to three statements to determine how connected they felt to their school community: “I feel safe in my school”. “I feel close to people at this school” and “I feel like I am part of this school”. Students who responded that they somewhat or strongly agreed to all three statements were considered “connected”, otherwise they were considered “disconnected”

Previous Year Use

In 2014/15, the proportion of students in the NBPSDHU region who reported cannabis use in the previous year (29.7%; 95% CI: 25.8-33.8) is significantly higher than Ontario students who reported cannabis use (21.3%; 95% CI: 19.2-23.6), but similar to students in other northern regions that reported cannabis use (22.0%; 95% CI: 17.9-26.7). The percentage of students that reported cannabis use in 2014/15 is similar to 2010/11 in all regions (North Bay Parry Sound District Health Unit, 2012).

All analyses for cannabis use in the previous 12 months among select demographic groups within the NBPSDHU region and other northern regions are for the 2010/11 & 2014/15 regions combined (Tables 1 through 5). A significantly higher percentage of male students in the NBPSDHU region reported using cannabis in the previous 12 months compared to male students in other northern regions and in Ontario (Table 1). Males and females reported using cannabis in comparable proportions over the previous year in all regions.

Significantly more students in grades 9-10 and grades 11-12 in the NBPSDHU and other northern regions reported cannabis use in the previous year compared to students in grades 7-8 and grades 9-10, respectively (Table 2). Similarly, Ontario students in grades 11-12 reported cannabis use in the past year more than Ontario students in grades 9-10 reported cannabis use. Compared to Ontario grade 11-12 students, a significantly higher percentage of grade 11-12 students in the NBPSDHU region reported cannabis use.

The percentage of self-identified Aboriginal students who reported cannabis use in the previous year did not differ from non-Aboriginal students in the NBPSDHU region or Ontario (Table 3). A significantly higher percentage of Aboriginal students in other northern regions reported cannabis use compared to non-Aboriginals in other northern regions. A significantly higher percentage of non-Aboriginal students in the NBPSDHU region reported previous year cannabis use compared to Ontario non-Aboriginal students.

The percentage of students that reported cannabis use in the previous year did not differ by perceived SES status within the NBPSDHU region and Ontario, but was significantly higher among those with low perceived SES in other northern regions compared to those with high perceived SES (Table 4).

In Ontario, significantly more students who did not feel connected to their school community reported cannabis use in the past year, as compared to students who reported they did feel connected to their school community (Table 5). The percentage of students who reported cannabis use in the previous year in NBPSDHU region did not differ by connectedness.

Table 1. Percentage (95% CI) of Students Who Reported Using Cannabis in the Previous 12 Months, by Gender and Region, 2010/11 & 2014/15 Combined (NBPSDHU Region & Other Northern Regions) and 2014/15 (Ontario)

Gender	NBPSDHU Region	Other Northern Regions	Ontario
Males	37.1* ^Δ (29.6-45.3)	23.5 (19.9-27.5)	22.0 (19.5-24.8)
Females	27.0 (20.8-34.2)	27.3 (22.6-32.6)	20.5 (17.8-31.0)

* Estimate is significantly different from provincial estimate

Δ Estimate is significantly different from estimate for other northern regions

Table 2. Percentage (95% CI) of Students Who Reported Using Cannabis in the Previous 12 Months, by Grade Level and Region, 2010/11 & 2014/15 Combined (NBPSDHU Region & Other Northern Regions) and 2014/15 (Ontario)

Grade Level	NBPSDHU Region	Other Northern Regions	Ontario
Grades 7 - 8	6.3 ^E (3.8-10.4)	6.3 ^E (4.0-9.9)	F
Grades 9 - 10	24.3 ‡ (19.4-30.1)	22.1 ‡ (18.2-26.6)	17.8 (15.5-20.3)
Grades 11 - 12	52.8*‡ (46.3-59.3)	42.0 ‡ (34.0-50.4)	36.4 ‡ (32.3-40.6)

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

* Estimate is significantly different from provincial estimate

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

F Estimate suppressed; too unreliable to be released

Table 3. Percentage (95% CI) of Students Who Reported Using Cannabis in the Previous 12 Months, by Aboriginal Identity & Region, 2010/11 & 2014/15 Combined (NBPSDHU Region & Other Northern Regions) and 2014/15 (Ontario)

Aboriginal identity	NBPSDHU Region	Other Northern Regions	Ontario
Aboriginal	35.1 (25.6-46.0)	46.9 ‡ (38.9-55.2)	31.1 (23.3-40.1)
Non-Aboriginal	31.8* (27.3-36.6)	23.2 (19.5-27.5)	21.1 (18.9-23.4)

* Estimate is significantly different from provincial estimate

‡ Estimate is significantly different from non-Aboriginal students in the same region

Table 4. Percentage (95% CI) of Students Who Reported Using Cannabis in the Previous 12 Months, by Perceived Socioeconomic Status and Region, 2010/11 & 2014/15 Combined (NBPSDHU Region & Other Northern Regions) and 2014/15 (Ontario)

Perceived Socioeconomic Status (SES)	NBPSDHU Region	Other Northern Regions	Ontario
Low SES	37.1* (30.9-43.8)	33.8 ‡ (27.4-41.0)	23.2 (19.9-26.7)
High SES	29.8* (24.6-35.6)	22.2 (18.8-26.1)	20.5 (18.3-23.0)

* Estimate is significantly different from provincial estimate

‡ Estimate is significantly different from students with high perceived socioeconomic status, in the same region

Table 5. Percentage (95% CI) of Students Who Reported Using Cannabis in the Previous 12 Months, by Level of Connectedness to Their School and Region, 2010/11 & 2014/15 Combined (NBPSDHU Region & Other Northern Regions) and 2014/15 (Ontario)

Level of School Connectedness	NBPSDHU Region	Other Northern Regions	Ontario
Connected	30.3* (25.9-35.2)	U	19.6 (17.4-22.0)
Disconnected	39.8* (33.2-46.8)	39.9 (32.3-48.0)	28.9 ‡ (25.4-32.8)

* Estimate is significantly different from provincial estimate

‡ Estimate is significantly different from students who felt connected to school, in the same region

U - Estimate for combined sample unavailable as estimate changed significantly between 2010/11 & 2014/15 school years

Frequency of Cannabis Use in Previous Month

All analyses for frequency of cannabis use in the previous month within the NBPSDHU region and other northern regions are for the 2010/11 & 2014/15 regions combined. Compared to other northern regions and Ontario, significantly fewer NBPSDHU regional students reported not using cannabis in the past four weeks (Table 6). A significantly higher percentage of NBPSDHU regional students reported using cannabis less than once a week and once a week or more often compared to Ontario students.

Table 6. Percentage (95% CI) of Students by Reported Cannabis Use in the Previous Four Weeks, by Region, 2010/11 & 2014/15 Combined (NBPSDHU Region & Other Northern Regions) and 2014/15 (Ontario)

Grade Level	NBPSDHU Region	Other Northern Regions	Ontario
No use in past 4 weeks	75.6* (71.9-79.0)	83.8 (80.5-86.6)	86.2 (84.5-87.8)
Used less than once a week (<4 times)	11.7* ^E (8.0-16.7)	7.2 (5.7-9.0)	6.9 (5.9-8.0)

Grade Level	NBPSDHU Region	Other Northern Regions	Ontario
Used once a week or more (4+ times)	12.7* (9.2-17.3)	9.0 (6.8-11.8)	6.9 (5.9-8.0)

* Estimate is significantly different from provincial estimate

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

First Use in Previous Year

All analyses for first time cannabis use in the previous year within the NBPSDHU region and other northern regions are for the 2010/11 & 2014/15 regions combined. Comparable percentages of students in NBPSDHU (8.4%; 95% CI: 5.8-12.0), other northern regions (7.7%; 95% CI: 5.7-10.3) and Ontario (9.6%; 8.2-11.1) reported using cannabis for the first time in the past year. A significantly higher percentage of elementary students in other northern regions reported first using cannabis in the past year compared to Ontario elementary students (Table 7).

Table 7. Percentage (95%CI) of Students Who Reported Using Cannabis for the First Time in the Previous Year, by Grade Level and Region, 2010/11 & 2014/15 Combined (NBPSDHU Region & Other Northern Regions) and 2014/15 (Ontario)

Grade Level	NBPSDHU Region	Other Northern Regions	Ontario
Grades 7 - 8	F	4.9* ^E (3.0-7.8)	1.4 ^E (0.8-2.4)
Grades 9 - 12	9.8 ^E (6.7-14.2)	8.9 (6.3-12.4)	12.4 (10.6-14.3)

* Estimate is significantly different from provincial estimate

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

F Estimate suppressed; too unreliable to be released

Grade of First Use

All analyses for grade of first cannabis use within the NBPSDHU region and other northern regions are for the 2010/11 & 2014/15 regions combined. A significantly higher percentage of NBPSDHU and other northern regional students reported first using cannabis before grade 6 and grades 7 and 8 compared to Ontario students (Table 8).

Table 8. Percentage (95% CI) of Students by Reported Grade of First Cannabis Use, by Region, 2010/11 & 2014/15 Combined (NBPSDHU Region & Other Northern Regions) and 2014/15 (Ontario)

Grade Level	NBPSDHU Region	Other Northern Regions	Ontario
No smoking	64.3* (58.5-69.8)	69.3 (65.0-73.3)	75.5 (73.2-77.6)
Grade 6 or lower grade level	2.7* ^E (1.5-4.9)	3.5* ^E (2.5-5.0)	1.1 (0.8-1.4)
Grade 7 - 8	11.6* (9.6-14.0)	10.5* (10.9-16.5)	5.5 (4.7-6.5)

Grade Level	NBPSDHU Region	Other Northern Regions	Ontario
Grade 9 - 10	15.2 (11.4-20.0)	13.5 (10.9-16.5)	13.1 (11.6-14.8)
Grade 11 - 12	6.2 ^E (4.0-9.3)	3.2 ^E (2.3-4.6)	4.8 (4.2-5.6)

* Estimate is significantly different from provincial estimate

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Cannabis Dependency

The Severity of Dependence Screen (SDS) consists of five items used to measure the degree of dependence experienced by drug users.

All analyses of individual components for the SDS for the NBPSDHU region and other northern regions are for the 2010/11 & 2014/15 regions combined. Significantly more students in the NBPSDHU region report that it would be quite difficult, very difficult, or impossible to stop using cannabis, as compared to Ontario students (Table 9).

One in 20 (5.2%, 95% CI: 2.2-12.0) NBPSDHU regional students have a potential cannabis dependency (score of four and higher on SDS), which is similar to students in other northern regions (3.3%, 95% CI: 1.9-5.7) and Ontario (2.2%, 95% CI: 1.5-3.2). The percentage of NBPSDHU regional students reporting dependency in 2014/15 is similar to the number of students reporting dependency in 2010/11 (3.9%, 95% CI: 2.3-6.6; North Bay Parry Sound District Health Unit, 2012).

Table 9. Percentage (95% CI) of Secondary Students Who Reported Experiencing Each SDS Item in the Previous Three Months, by Region, 2010/11 & 2014/15 Combined (NBPSDHU Region & Other Northern Regions) and 2014/15 (Ontario)

SDS Item	NBPSDHU Region	Other Northern Regions	Ontario
Cannabis use was out of control	4.3 ^E (3.0-6.1)	3.8 ^E (2.3-6.4)	3.4 (2.7-4.3)
Idea of missing cannabis smoke made you anxious	9.5 ^E (6.7-13.1)	6.1 ^E (4.3-8.6)	5.9 (4.7-7.4)
Worried about your use of cannabis	5.0 ^E (3.4-7.1)	5.8 (4.2-8.1)	5.8 (4.6-7.2)
Wish you could stop using cannabis	5.4 (3.9-7.5)	5.0 (3.7-6.7)	4.1 (3.0-5.4)
It would be difficult to stop using cannabis	6.2* ^E (4.3-8.9)	2.3 ^E (1.3-4.4)	2.6 ^E (1.8-3.7)

* Estimate is significantly different from provincial estimate

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

Education about Cannabis and Other Drugs

Over one-third (37.0%, 95% CI: 28.3-46.6) of NBPSDHU regional students reported that they have had at least one class about cannabis and other drugs in the past 12 months. This is significantly lower than the

percentage of Ontario students who reported at least one class about cannabis and other drugs (51.5%; 95% CI: 48.2-54.7).

Access/Availability

Almost half (43.8%, 95% CI: 32.3-56.1) of NBPSDHU regional students reported that cannabis was “fairly easy” or “very easy” to obtain, which is similar to students in other northern regions (48.6%; 95% CI: 41.6-55.7) and Ontario (46.0%; 95% CI: 43.2-48.9). Significantly more secondary students reported that cannabis was easy to obtain compared to elementary students in all regions (Table 10). A significantly higher percentage of NBPSDHU regional elementary students reported cannabis was easy to obtain compared to Ontario elementary students. The perceived availability of cannabis has not significantly changed from 2010/11 (North Bay Parry Sound District Health Unit, 2012).

Table 10. Percentage (95%CI) of Students Who Perceived Cannabis as Easy to Obtain, by Grade Level and Region, 2014/15

Grade Level	NBPSDHU Region	Other Northern Regions	Ontario
Grade 7 - 8	23.4 ^{*E} (15.6-33.6)	17.7 ^E (9.8-29.9)	10.6 (8.8-12.8)
Grades 9 - 12	53.9 ‡ (38.3-68.7)	61.8 ‡ (53.6-69.4)	57.8 ‡ (54.5-61.0)

* Estimate is significantly different from provincial estimate

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

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

Perceived Harm

A significantly greater percentage of students reported a great risk of harm associated with using cannabis regularly, as compared to trying it once or twice (Table 11). A comparable percentage of students in the NBPSDHU region perceive great risk for cannabis use as students in other northern regions and Ontario.

In 2010/11, significantly more students in Ontario reported great risk of harm associated with trying cannabis once or twice (18.4%, 95% CI: 16.5-20.4) and using cannabis regularly (55.8%, 95% CI: 53.4-58.2) as compared to 2014/15 (North Bay Parry Sound District Health Unit, 2012). The percentage of NBPSDHU regional students who perceived great harm from using cannabis did not change significantly from 2010/11 to 2014/15.

Table 11. Percentage (95%CI) of Students Who Perceived Great Risk of Harm Associated with Using Cannabis, by Frequency of Cannabis Use & Region, 2014/15

Cannabis Use Behaviour	NBPSDHU Region	Other Northern Regions	Ontario
Try cannabis once or twice	7.0 ^E (3.6-12.9)	9.1 ^E (5.7-14.3)	12.2 (10.4-14.2)
Use cannabis regularly	43.7 (37.4-50.2)	40.6 (34.3-47.2)	44.2 (41.7-46.8)

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

Disapproval of Adult Use

Approximately one-quarter of NBPSDHU regional students strongly disapprove of adults trying cannabis once or twice, and almost half strongly disapprove of regular cannabis use, which is comparable to students in other northern regions and Ontario (Table 12).

NBPSDHU regional students in elementary school strongly disapprove of adults trying cannabis once or twice (43.9%, 33.1-55.3) and using cannabis regularly (66.6%, 95% CI: 57.1-75.0) significantly more than students in secondary school (16.6%; 95% CI: 11.6-23.1; 31.8%, 95% CI: 25.1-39.5, respectively).

Significantly fewer Ontario students reported disapproval of regular cannabis use in 2014/15, as compared to 2010/11 (55.8%, 95% CI: 53.2-58.3; North Bay Parry Sound District Health Unit, 2012).

Table 12. Percentage (95% CI) of Students who Strongly Disapprove of Adults (Aged 18 Years and Over) Using Cannabis, by Frequency of Cannabis Use Among Adults & Region, 2014/15

Cannabis Use Behaviour	NBPSDHU Region	Other Northern Regions	Ontario
Try cannabis once or twice	25.5 (19.2-32.9)	28.7 (22.2-36.3)	29.7 (27.5-32.0)
Use cannabis regularly	43.2 (34.5-52.3)	48.5 (41.5-55.6)	49.5 (47.2-51.7)

Driving After Using Cannabis

Of all secondary students who reported having a license in the NBPSDHU region, 12.6% (95% CI: 7.1-21.3) reported driving a vehicle within one hour of using cannabis, which is similar to secondary students in other northern regions (16.1%, 95% CI: 9.8-25.3), and Ontario (9.8%, 95% CI: 8.3-11.4).

References

North Bay Parry Sound District Health Unit. Substance Use among Youth in the NBPSDHU Region. North Bay: NBPSDHU, August 2012.