

One in 50 Ontario High School Students Reports Carrying a Gun

This *eBulletin* presents epidemiological data on the number of Ontario high school students who report carrying a handgun. Data are from the 2005 *Ontario Student Drug Use Survey (OSDUS)*, an Ontario-wide, anonymous school survey of elementary and high school students (grades 7 to 12). The *OSDUS*, conducted every two years, monitors substance use and other health risk behaviours among youth. The sample of high school students surveyed in 2005 represents about 663,500 students in grades 9 to 12 across the province.

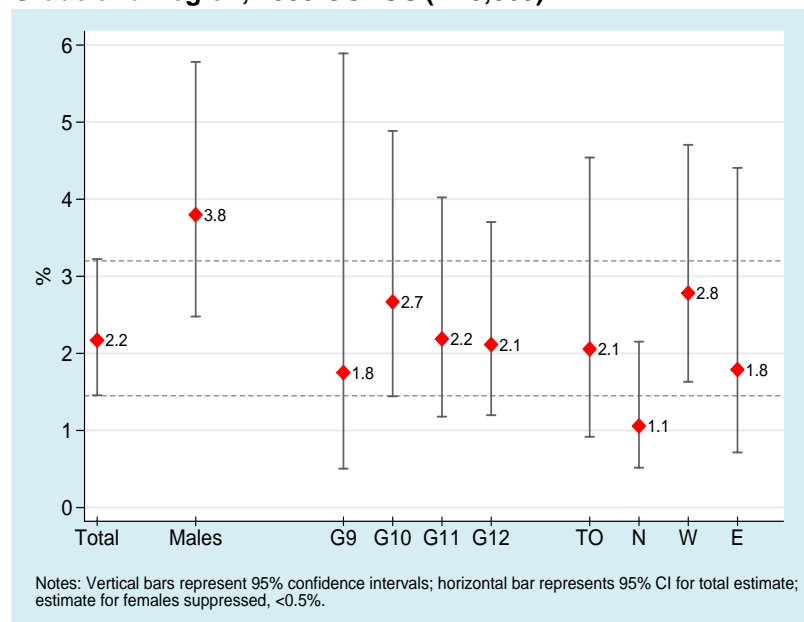
Overall, 2.2% (95% CI: 1.5%-3.2%) of students in grades 9 to 12 report carrying a handgun at least once during the 12 months before the survey. This percentage represents about 14,800 high school students in Ontario.

Figure 1 presents the breakdown by demographic factors. Carrying a handgun is significantly more likely among males (3.8%) than females (< 0.5%). However, there is no significant grade association, as the estimate hovers at about 2% in each grade. Similarly, the differences in the percentages among the four regions shown (varying from 1.1% to 2.8%) are not statistically significant. However, due to differing population sizes, the absolute numbers estimated to report carrying a gun do vary widely: 2,400 in Toronto, 600 in Northern Ontario, 7,600 in Western Ontario, and 4,200 in Eastern Ontario. Finally, when the data are examined by rural (2.9%) versus non-rural residence (2.0%), there is no significant difference.

Fewer Ontario students report carrying a handgun compared to American students. A 2003 American school survey (*YRBS*) found that 6.1% (95% CI: 5.0%-7.2%) of students in grades 9 to 12 report carrying a gun in the past month.¹

It is important to note that these estimates are not without error given that some underreporting – even in an anonymous survey – is likely. In addition, the circumstances surrounding the carrying, such as purpose and use, are unknown. Still, these data are useful in establishing a conservative estimate for gun carrying among a mainstream population, and to show the extent gun carrying varies across different subgroups of students.

Figure 1. Percentage of Ontario Students in Grades 9 to 12 Reporting Carrying a Handgun in the Past 12 Months, by Sex, Grade and Region, 2005 OSDUS (N=3,069)



Methods:

The *Ontario Student Drug Use Survey (OSDUS)* is an Ontario-wide survey of elementary (grades 7 and 8) and secondary (grades 9-12) school students conducted every two years since 1977. The 2005 survey, which used a stratified (region) two-stage cluster design (school, class) included 7,726 students in grades 7 to 12 from 42 school boards, 137 schools, and 445 classes. Self-administered questionnaires, which promote anonymity, were administered by staff from the Institute for Social Research, York University on a classroom basis between January and June 2005. The student participation rate was 72%. The gun carrying question was asked of a random-half sample. For this analysis, only data from students in grades 9 to 12 were used (N=3,069).

All survey estimates were weighted, and variance and statistical tests were corrected for the sampling design. The 2005 full sample size of 7,726 students represents about 975,200 students in grades 7 to 12 in public and Catholic schools across the province.

Terminology:

- **Gun Carrying** was measured with the question “*How often (if ever) in the last 12 months have you carried a handgun?*”. The percentage reflects those who reported carrying a handgun at least once during the 12 months before the survey.
- **Region:** For the survey design, Ontario was divided into four regions using the following boundaries: Toronto (schools within the former Metropolitan Toronto); North (schools within the North Bay and Sudbury areas and farther north); East (schools within York Region and farther east); West (schools within Peel Region and farther west).
- **95% Confidence Interval (CI)** can be crudely interpreted as being 95% likely to include the “true” percentage value if every high school student in Ontario was surveyed.
- **Significant Difference** refers to a difference between two percentages that is not likely due to chance. For example, a difference found at the $p < .05$ level of statistical significance is one that is less than 5% likely to occur by chance alone.

Source:

Results are based on unpublished data analyses. For drug use results from the 2005 OSDUS, please see:

Adlaf, E.M., & Paglia-Boak, A. (2005). *Drug Use Among Ontario Students, 1977-2005: Detailed OSDUS Findings*. CAMH Research Document Series, No. 16. Toronto: Centre for Addiction and Mental Health. (The report is available in PDF format at <http://www.camh.net/research/osdus.html>.)

Suggested Citation:

Centre for Addiction and Mental Health. One in 50 Ontario High School Students Reports Carrying a Gun. *CAMH Population Studies eBulletin, January/February 2006, Vol. 7, No. 1*. Toronto, Ontario: CAMH.

To receive future issues of the *eBulletin*, please contact Maureen Kothare via email at: maureen_kothare@camh.net

Media Enquiries: Tel: 416-595-6015

References:

1. Centers for Disease Control and Prevention. *Surveillance Summaries*, May 21, 2004. MMWR 2004: 53 (No. SS-2).