

YOUTH RISK BEHAVIOUR SURVEY (YRBS)

AN ANALYSIS OF RISK BEHAVIOURS AMONG YOUTH IN EASTERN ONTARIO

[CONDENSED REPORT]

FEBRUARY 2008

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INTRODUCTION & PURPOSE

As in previous years, the Eastern Ontario Health Unit (EOHU) continues to be involved in educating the local students on health risks and appropriate health behaviours. In accordance with the *Health Protection and Promotion Act*¹, a significant portion of our health programs and services are geared towards youth. Programs such as *Young Adult Centres*, *Health In Perspective*, and *Racing Against Drugs*, offer a multi-disciplinary, comprehensive approach to school-level interventions.

The last project conducted to assess risk behaviours in youth was entitled *High School Public Health Services in Eastern Ontario*² (henceforth referred to as simply the *High School* survey). This year's *Youth Risk Behaviour Survey (YRBS)* was conducted for the purpose of providing an updated assessment of the health risk behaviours and health practices of youth in the five Eastern Counties of Stormont, Dundas, Glengarry, Prescott, and Russell.

METHODOLOGY

The 2007 Youth Risk Behaviour Survey (YRBS) was designed to be the second component of the *High School* student survey². The YRBS was modeled after the *Centers for Disease Control and Prevention (CDC) Youth Risk Behavior Survey (YRBS)*³. Some questions relating to substance abuse were adapted from *Ontario's Student Drug Use and Health Survey (OSDUHS)*⁴. Other additional questions were developed by the Eastern Ontario Health Unit program evaluation team, in consultation with public health professionals involved in service delivery in schools.

This survey's target population was youth in Grades 7, 9, 11, and 12. To reach this population, sampling was done at three levels: school boards, schools, and classrooms. Data were collected from March to June 2007 in 68 schools (Public,

¹ Service Ontario. E-Laws. *Health Protection and Promotion Act* (1991, amended 2007). Available online at: http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90h07_e.htm

² Eastern Ontario Health Unit. *High School Public Health Services in Eastern Ontario, Final Report*. Cornwall, Ontario. 6 April 2004.

³ *Youth Risk Behaviour Survey (YRBS)*, Centers for Disease Control and Prevention (CDC), <http://www.cdc.gov/HealthyYouth/yrbs/index.htm>

⁴ *Ontario Student Drug Use and Health Survey (OSDUHS)*, Centre of Addiction and Mental Health (CAMH), <http://www.camh.net/Research/osdus.html>

Catholic, French, and English). Public health nurses and health educators administered the YRBS to 2325 students. In an effort to properly represent the youth of Eastern Ontario, the data were adjusted (weighted) by sex, grade and school board (n=12124).

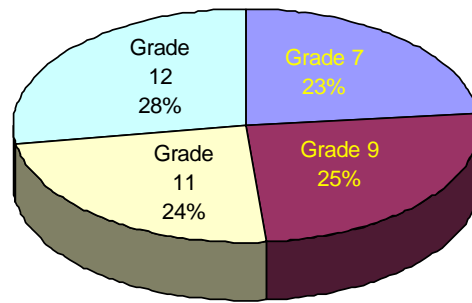
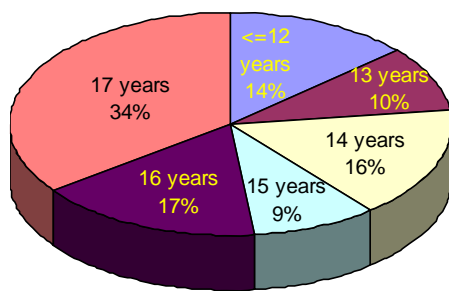
RESULTS

The results of the YRBS are presented, by section, in the order they were asked.

PERSONAL INFORMATION

The proportion of male and female respondents was nearly equal (51% and 49%, respectively). The age and grade distribution (Figures 1, 2) show the expected distribution of respondents. As the data were adjusted (weighted) to represent the student population in Eastern Ontario, these proportions represent the actual demographics for this age group.

Figure 1. Distribution (Categorized by Age) Figure 2. Distribution (Categorized by Grade)



The proportion of students attending Francophone (40%) or Anglophone (60%) schools was highly indicative of home language (55% English, 23% French, 20% French and English, 2% Other).

NUTRITION

Many studies have documented the importance of eating breakfast⁶⁵, especially among students. This survey found that:

- 24% of students were not eating breakfast on a regular basis,
- 8% of students were not eating lunch regularly.

These trends are more predominant among females and older students. While the regularity of food intake is important, the *type* of foods being consumed is also of great importance. Poor eating habits generally include the consumption of fast foods, take-out foods, innutritious snacks, and/or high-energy drinks. This survey found that:

- The vast majority of students (74%) eat fast food from 1 to 3 times per week; an additional 7% of students eat fast food even more frequently. Of the 19% of students who never eat fast food, most are female (23% versus 15% male).
- The consumption of energy drinks is an emerging trend among students. Twenty-nine percent of students reported having tried high-energy drinks before. Male respondents were more likely to report drinking high-energy drinks than females (38% males, 20% females).

The following results describe the frequency of consumption of the four main food group per week, rather than serving size:

- Most students consume Grain Products 1 to 6 times per day (88% male and 94% female), although males tended to report more frequent consumption than females (Figure 3).
- The frequency of eating Meat and Alternatives shows the same trends. The majority of students reported consuming Meat and Alternatives 1 to 6 times per day (92% male and 95% female), although males tended to report more frequent consumption (4 to 6 times/day and 7+ times/day) than females (Figure 4).
- The reverse trend is seen when examining the frequency of eating Vegetables and Fruit (Figure 5). As with other food groups, the majority of students (80% male and 80% females) reported eating Vegetables and Fruit from 1 to 6 times per day (Figure 5). Females, and not males, tended to report more frequent consumption of foods from this group.
- In the last of the four food groups, Milk and Alternatives, males reported higher frequencies in both the 4 to 6 times per day (29%) and over 7 times per day (8%) frequency groups than females (27% and 6%, respectively, see Figure 6).

⁵ *Child Nutrition Fact Sheet: Breakfast for Learning*. Food Research & Action Center (FRAC). Washington, DC. Article available online at: <http://www.frac.org/pdf/breakfastforlearning.PDF>

Figure 3. Frequency of Eating Grain Products (Categorized by Sex)

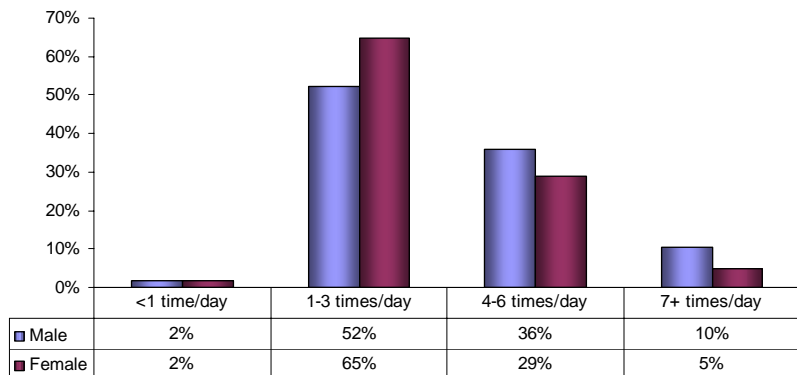


Figure 4. Frequency of Eating Meat and Alternatives (Categorized by Sex)

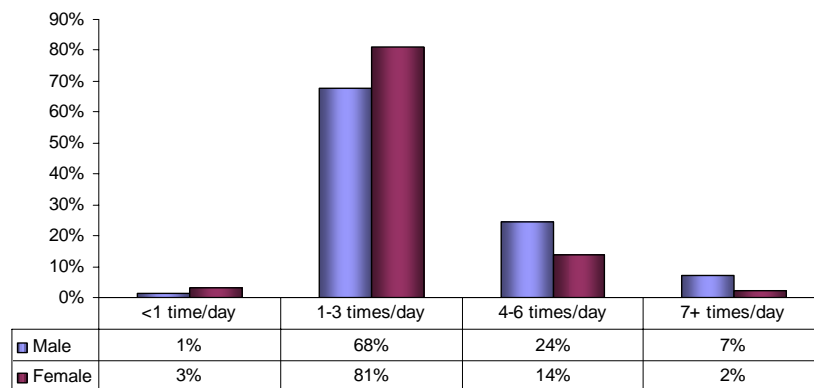


Figure 5. Frequency of Eating Vegetables and Fruit (Categorized by Sex)

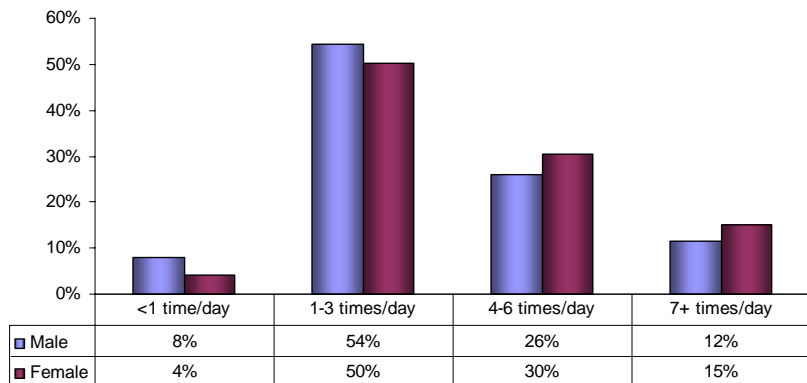
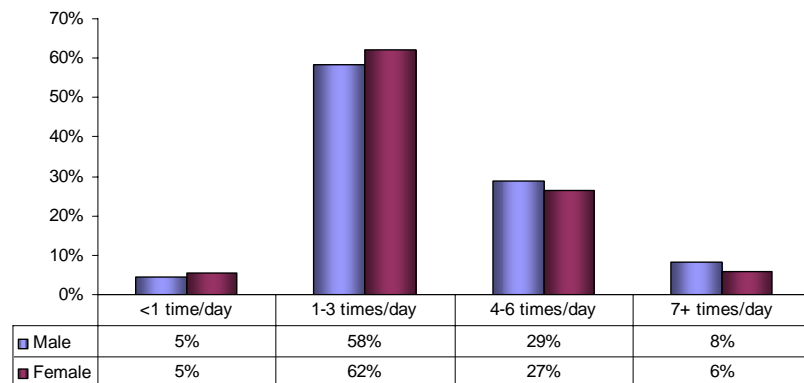


Figure 6. Frequency of Eating Milk and Alternatives (Categorized by Sex)



BODY WEIGHT

Participants were asked to describe their weight. In this self-assessment:

- 58% replied that they are “about the right weight” (Figure 7),
- 26% of students described themselves as being slightly or very overweight,
- a surprising 15% said they are slightly or very underweight.

These self-reported perceptions differ from the self-reported measure of BMI (Figure 8). There is a large variation in the perception of being underweight (15%) and the BMI measure of being underweight (2%). The variation in the perception of being overweight (26%) and the BMI measure of being overweight (21%) is not as drastic. What is interesting, however, is that although more females viewed themselves as being “slightly” or “very overweight” (31% female, 21% male), it is the males who are more “at risk of overweight” or “overweight” (15% female, 26% male).

Figure 7. Self-Reported Body Weight (Categorized by Sex)

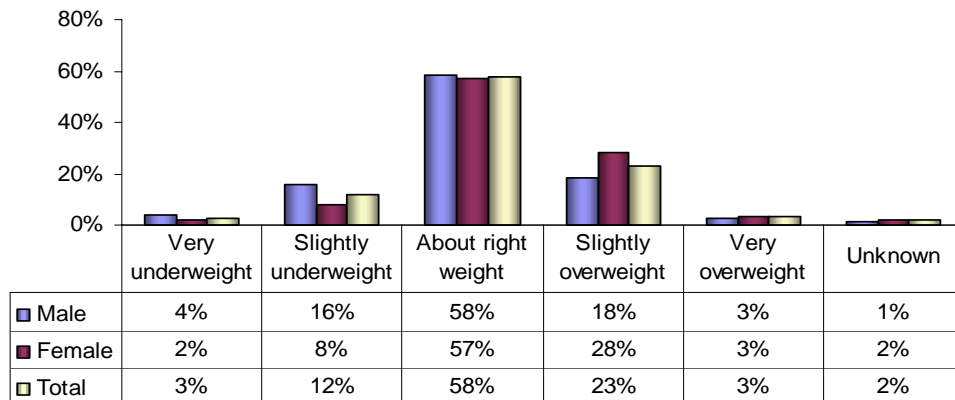
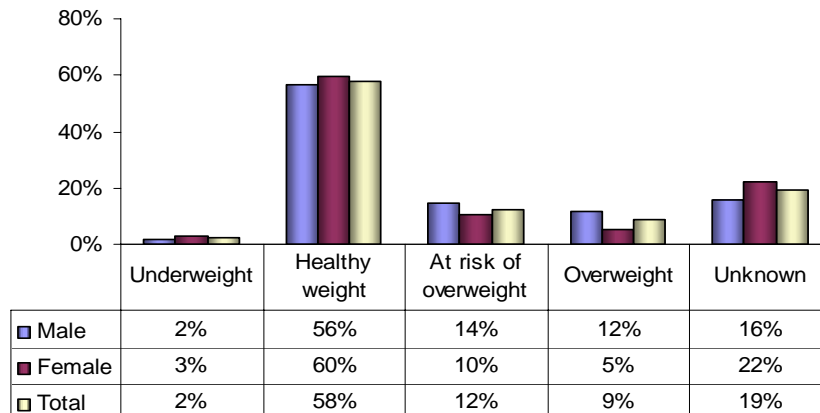


Figure 8. Calculated Body Mass Index (BMI) (Categorized by Sex)



Respondents were asked to describe what, if anything, they were trying to do about their weight. Responses varied by sex. While females (51%) were more likely than males (23%) to respond that they were trying to lose weight, males (22%) were more likely than females (15%) to reply that they wanted to gain weight. This supports the notion that males often try to “bulk up”, building muscle mass, while females generally tend to want to maintain a lean physique.

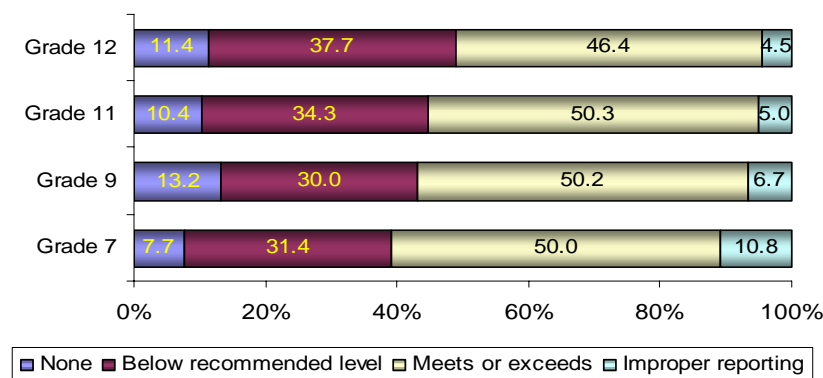
PHYSICAL ACTIVITY

The duration and frequency for various forms of physical activity were measured in this survey. Categorization is based on *Canada’s Physical Activity Guide to Health Active Living*⁶: no physical activity (0 hours per day), below recommended (less than 1.5 hours per day), meets or exceeds recommended (1.5 to 7 hours per day), improper reporting (over 7 hours per day).

Figure 9 shows the categorical breakdown of total time spent doing physical activity by grade:

- The number of students meeting or exceeding the recommended time decreases slightly with each subsequent grade.
- Males are more likely (52%) than females (46%) to meet or exceed the recommended time spent doing physical activity.
- Females (41%) were more likely than males (26%) to report being below the recommended level for physical activity.

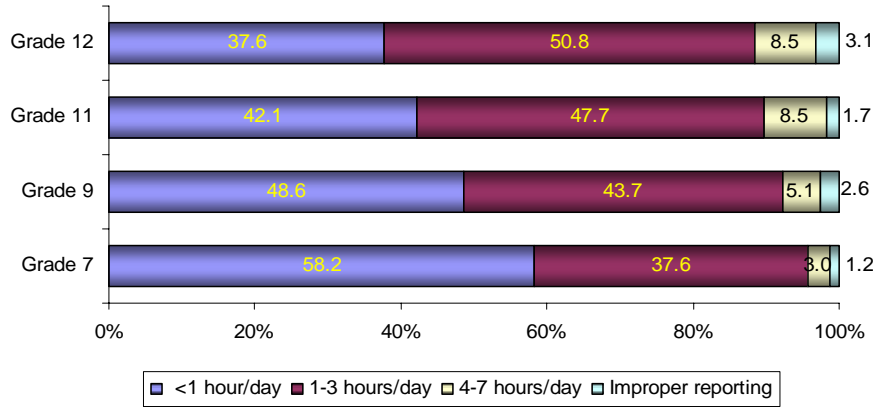
Figure 9. Time Spent Doing Physical Activity (Categorized by Grade)



It is evident that as grade level increases, so too does the time spent on sedentary activities (Figure 10). The time spent on sedentary activities does not vary by sex.

⁶ *Canada’s Physical Activity Guide to Healthy Active Living*. Public Health Agency of Canada. Publication available online at: <http://www.phac-aspc.gc.ca/pau-uap/paguide/>

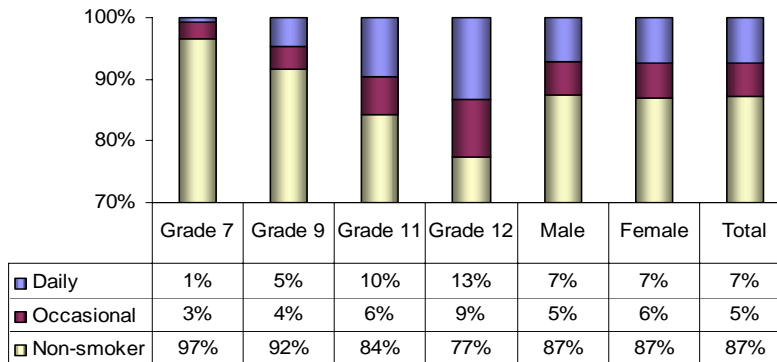
Figure 10. Time Spent Doing Sedentary Activities (Categorized by Grade)



TOBACCO

Thirty-seven percent of students have tried smoking. Among Grade 7, 9, 11 and 12 students, combined, 12% of students claimed to be current (daily or occasional) smokers (Figure 11).

Figure 11. Type of Smoker (Categorized by Grade and Sex)

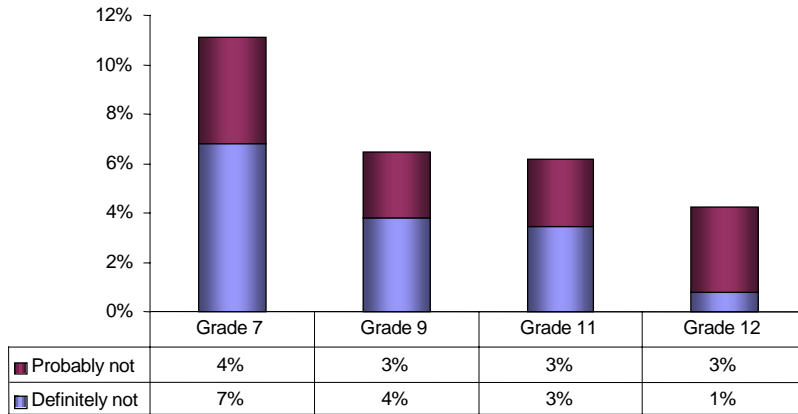


Most (54%) smokers smoke 1 to 5 cigarettes per day. Although the majority (69%) smoke Canadian cigarettes, 20% admitted to using contraband cigarettes, and 17% to Native cigarettes. Despite their age, 31% of students reported buying their cigarettes in-store themselves. When asked if someone had ever refused to sell them cigarettes, only 7% of smokers (11% of those who tried) replied “yes”.

Fifty-four percent of smokers indicated that they wanted to stop smoking. When asked why, the majority (54%) indicated that their choice was based on family objection to the behaviour.

Thirty percent of students who have tried smoking, and 36% of students who have never tried smoking reported having been taught about the tobacco industry this year in school. This includes nearly 40% of Grade 7 students and half of Grade 9 students. The older students, however, reported lower proportions of such education (26% among Grade 11 students, and 22% among Grade 12 students). Despite this, older students were less likely to report that second-hand smoke is “probably not” or “definitely not” harmful (Figure 12).

Figure 12. Is Second-Hand Smoke Harmful?



Finally, students were asked about their exposure to second-hand smoke at home and in public places. Results vary by smoking status. Those students who have tried smoking cigarettes show higher proportions of having second-hand smoke exposure in the home (Figure 13). The proportion of students reporting second-hand smoke exposure in public places is higher than home exposure (Figure 14). Those who have tried smoking, however, reported higher proportions of smoke exposure than their “never smoked” counterparts.

Figure 13. Proportion Exposed to Second-Hand Smoke at Home Last Week

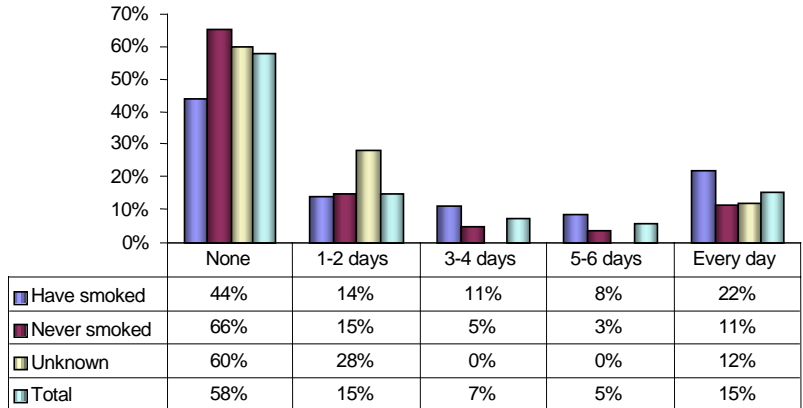
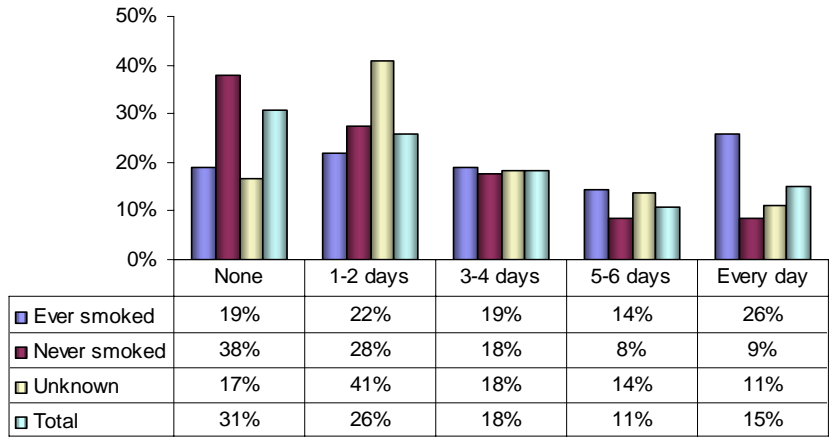


Figure 14. Proportion Exposed to Second-Hand Smoke in a Public Place Last Week



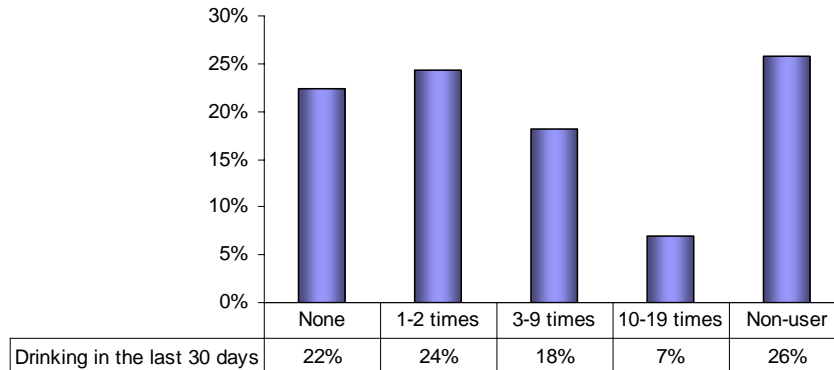
ALCOHOL

Seventy-four percent of students admitted to having had at least one alcoholic drink in their lifetime. Of those respondents, 19% confessed to drinking on school property at least once, 8% indicated that they had driven after drinking, and an alarming 43% of respondents answered “yes” when asked: “have you ever been in a car driven by someone who had been drinking alcohol?”

In an effort to measure drinking habits, two questions were asked about frequency of drinking. The first, presented in Figure 15, asked how often in the last 30 days had the respondent had at least one drink. Nearly half of all

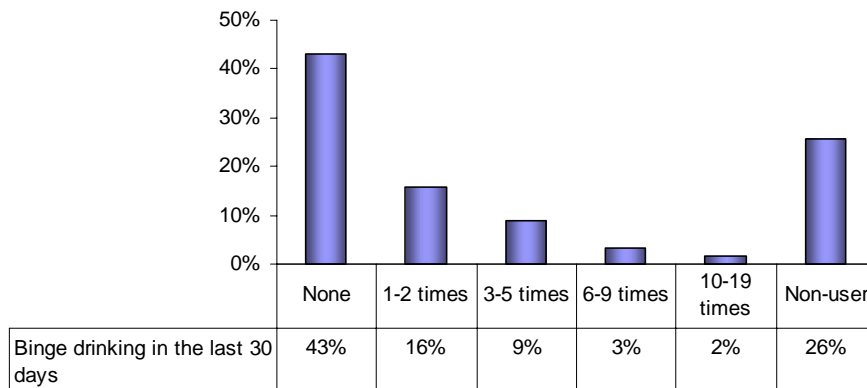
students had alcohol in the previous month. A minority (7%) indicated that they had been drinking alcohol between 10 and 19 times in the previous month.

Figure 15. Frequency of Drinking in the Previous 30 Days Among Drinkers



The second question asked about binge drinking (five or more drinks of alcohol in a row, within a couple of hours). Surprisingly (considering the age of these students), 30% of participants reported that they had done so at least once (Figure 16).

Figure 16 - Frequency of Binge Drinking (5+ Drinks on One Occasion) in the Previous 30 days Among Drinkers



MARIJUANA & OTHER DRUGS

Among Grade 7, 9, 11, and 12 students in Eastern Ontario:

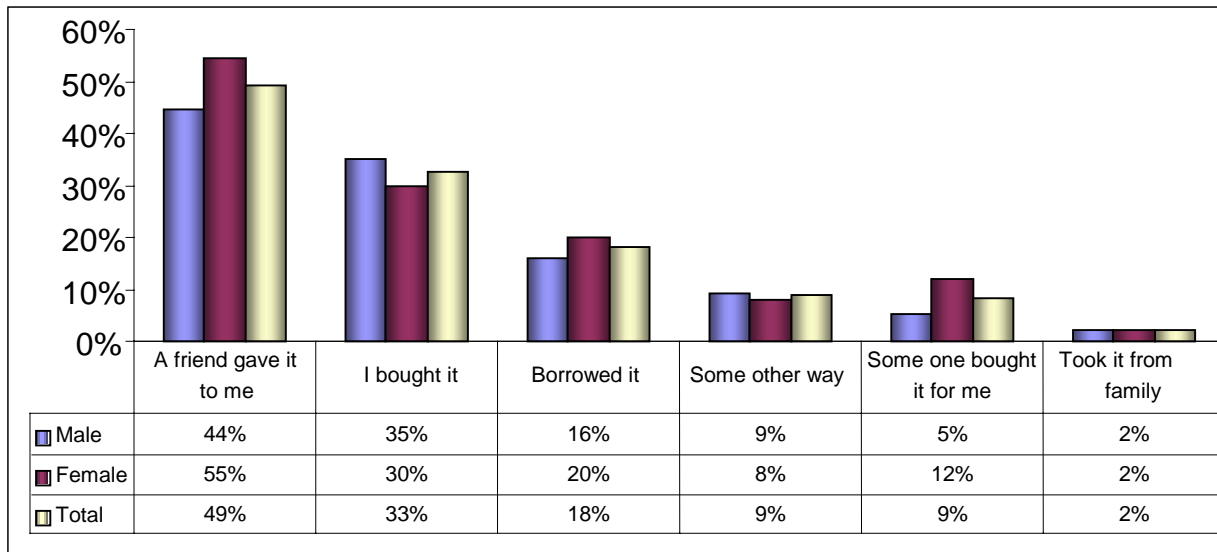
- 35% admitted to having tried marijuana before. Of these respondents, nearly half could be considered regular users, as they have used marijuana on more than 20 occasions.

To get a better picture of regularity of use, all respondents who have used marijuana on at least one occasion were asked if and how often they have used the drug in the previous 30 days:

- 48% of these marijuana users (roughly 12% of participants) replied that they had used the drug in the previous 30 days.

As this is an illegal substance, the method of obtaining marijuana is of great interest. A summary of these data are presented in Figure 17, below. About half of the respondents for this question (49%) said they had gotten the drug from a friend. Another 33% said they bought it themselves (Figure 17).

Figure 17. Method of Acquiring Marijuana (Among Users)



* These responses are not mutually exclusive – respondents may have answered “yes” to more than one prompt, and percentages do not therefore add to 100%.

The use of drugs is not limited to marijuana. Students are becoming more creative and more adventurous in their choice of drugs. Below is a list of other drugs that respondents admitted to using (Figure 18).

Ten percent of the population indicated that they have used at least one of these drugs:

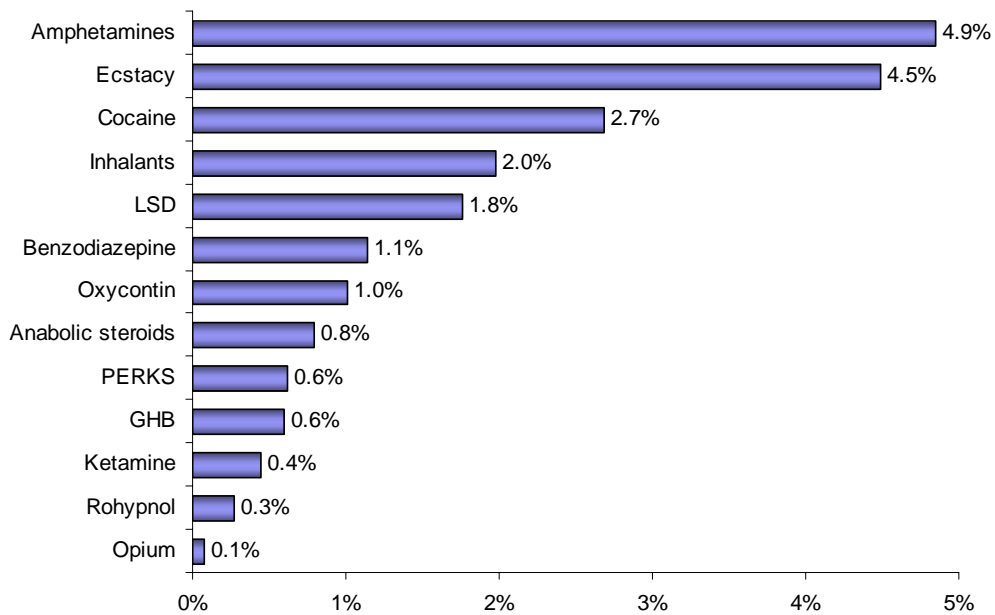
- amphetamines (used by 4.9% of participants),
- ecstasy (used by 4.5%),
- cocaine (used by 2.7%).

The proportion of male and female users is relatively equal (9% and 10%, respectively).

The striking difference is found when examining the students' grades:

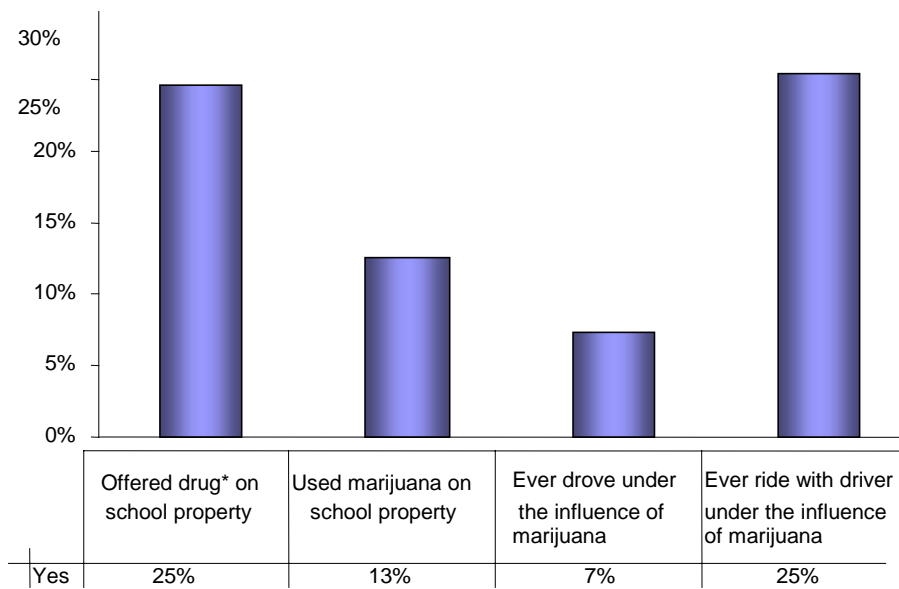
- Very few (4%) Grade 7 students have tried one of the aforementioned drugs.
- The proportion increases among Grade 9 (9%), 11 (10%), and 12 (16%) students.
-

Figure 18. Proportion of Other Drug Use (Among All Students)



In terms of drug dealing, 25% of all students admitted to having been offered drugs (including marijuana) on school property (Figure 19), and 13% of all students admitted to having used marijuana on school property. In terms of driving under the influence of drugs, 25% of all study participants responded that they have travelled with a driver who was “high” at the time. Seven percent of marijuana users admitted to having driven under the influence.

Figure 19. Proportion of Risk Behaviours Involving Marijuana and Drug Use

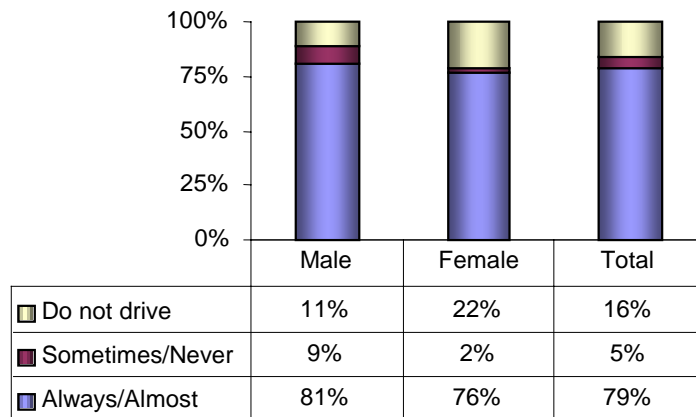
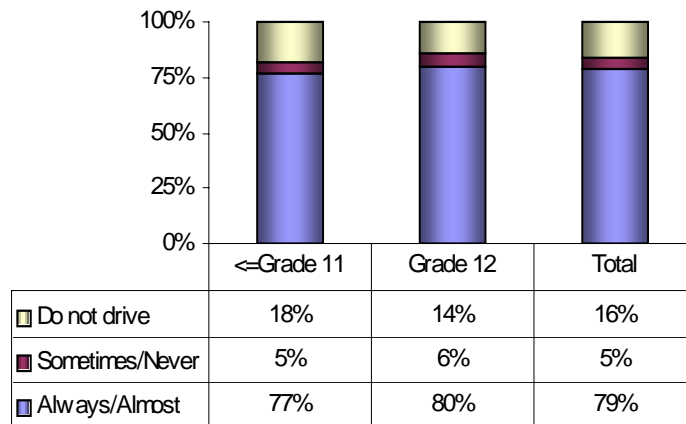


* offered any drug, including marijuana

INJURY PREVENTION

Motor vehicle accidents are among the most common types of accidents affecting youth. Seat belts play a major role in reducing injury and deaths. For those respondents who were 16 years old or older, 79% said they always or almost always wear their seatbelt when driving (Figure 20). Males exhibit this behaviour more often than females (81% and 76%, respectively). Grade 12 students report wearing their seat belts more often than grade 11 students (80% and 77%, respectively).

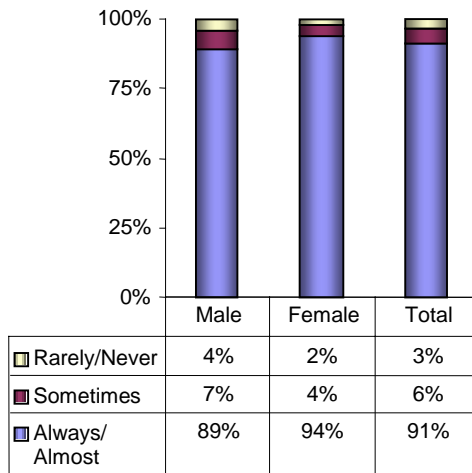
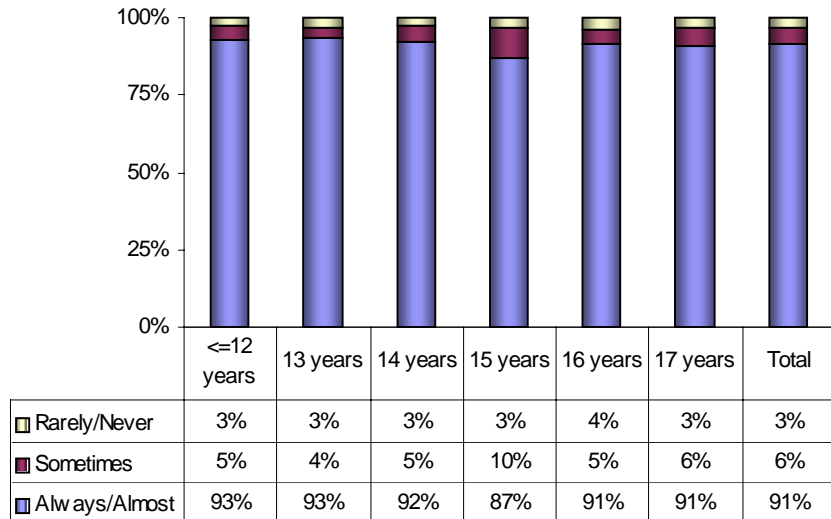
Figure 20. Frequency of Seatbelt Use While Driving (Categorized by Grade and Sex)



All students, regardless of age, were asked about seat belt use on occasions when they are passengers in a vehicle. The large majority of students (91%) admitted to wearing their seat belts always or most of the time. Details of this analysis are presented in Figure 21.

Figure 21.

Frequency of Seat belt Use While Riding in a Vehicle (Categorized by Grade and Sex)



SEXUAL HEALTH

Catholic schools did not participate in this portion of the survey, nor did Grade 7 students. The study population for this section is 4207 students.

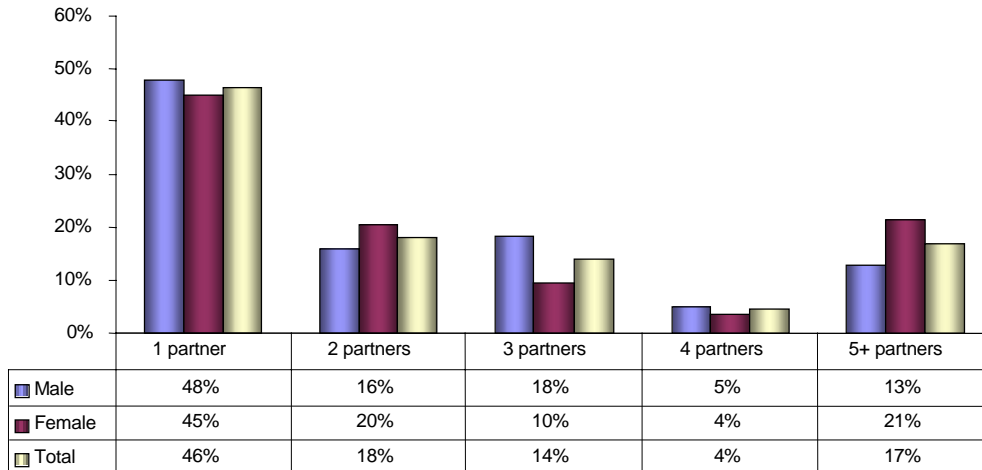
Among the 4207 respondents for this portion of the survey:

- The vast majority (93%) remember having been taught about sexually transmitted infections (STIs) at school.
- 42% of students admitted to having had sexual intercourse. This is comparable to the *High School* survey, which found that 37% of participants were sexually active².

Only those students who replied “yes” to having had sexual intercourse answered the remaining questions.

- The median age at which students reported having sexual intercourse for the first time is 15, with a range of 12 to 17 years old.
- The number of partners ranged from one (46% of students) to five or more (17% of students, Figure 22).

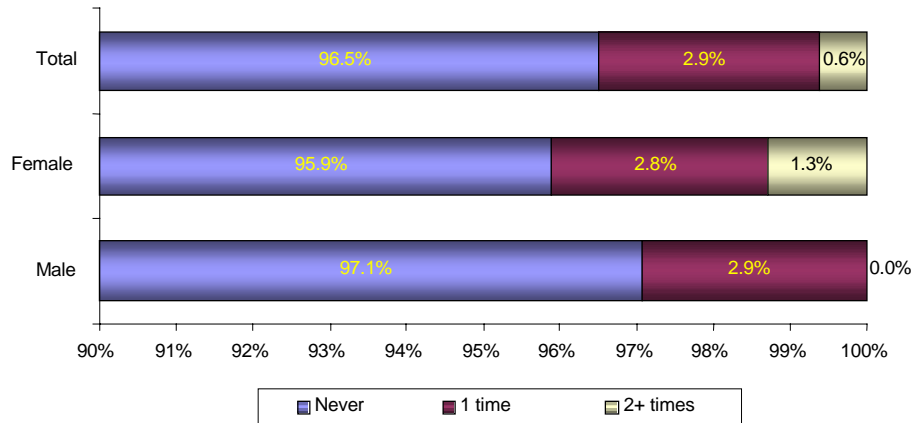
Figure 22. Number of Sexual Partners Ever Had (Categorized by Sex, Among Sexually Active Students)



Alcohol and drugs are always a concern when talking about sexual intercourse, as they may propagate high-risk behaviours. Four percent of students reported using alcohol or drugs before sexual intercourse most of the time. Two thirds of respondents (65%) denied using alcohol or drugs (“not really” and “not at all”) before sexual intercourse.

In terms of pregnancy, 4.1% of females reported having been pregnant at least once (Figure 23). Only 2.9% of males, however, admitted to having gotten someone pregnant. The *High School* survey found that 10% of respondents had been pregnant or gotten someone pregnant on at least one occasion². This year’s survey shows a decrease of 6.5% in the number of students reporting pregnancies (3.5% overall, Figure 23).

Figure 23. Ever Been Pregnant or Gotten Someone Pregnant (Categorized by Sex)



Finally, sexually active survey participants were asked “the last time you had sexual intercourse, what method did you or your partner use to prevent

Pregnancy or STIs?” Respondents were permitted to submit more than one answer. Over two thirds of respondents (76% female and 69% male) reported having used condoms (Figure 24). Not surprisingly, females were more likely to report having used birth control pills (56%) than males (36%). The complete breakdown of contraception use by sex is presented in Figure 24, below.

Figure 24. Contraception Used During Last Sexual Intercourse (Categorized by Sex)

