

# Gambling:

## Québec Survey of Tobacco Use in High School Students

Since 1998, the Québec Ministry of Health has mandated the *Institut de la statistique du Québec (ISQ)* (Québec Institute of Statistics) to conduct ongoing surveys on smoking among youth. Two other areas of interest related to dependence have been integrated into the surveys – alcohol consumption and drug use, and gambling. As occurs with most large-scale surveys of this type, data is being collected in schools.

The third edition of the *Québec Survey of Tobacco Use in High School Students* took place in 2002, the previous ones in 1998 and 2000. The main goal of this biennial survey is to profile and monitor trends in the smoking habits of young people in Québec.

The survey not only indicates the prevalence and frequency of tobacco use, but also covers additional topics such as sociodemographic factors associated with smoking, access to cigarettes, exposure to environmental (second-hand) tobacco smoke (ETS), attitudes towards smoking and cessation activities.

Since the 2000 edition, the *Québec Survey of Tobacco Use in High School Students* has included two other sections on risk behaviours in youth – alcohol consumption and drug use, and gambling (including lotteries). The results confirm the importance of continually monitoring teenagers on their drinking and drug habits. They also confirm that expanding the section on gambling can help gain a better understanding of this emerging risk behaviour. The 3<sup>rd</sup> edition of the survey therefore presents analyses comparing alcohol consumption and drug use with that observed in the two previous editions of the survey, and a detailed cross-sectional portrait of gambling in 2002.

The 2002 results presented in this bulletin only cover the gambling section of the survey. They are based on data collected in the autumn of 2002 from approximately 4,800 students in Secondary 1 to 5 in 150 high schools across Québec.

Partial results of the smoking and alcohol/drug sections are presented in two other bulletins. A report containing the complete results of the three sections will be published in the autumn of 2003.

## Portrait of the Situation in 2002

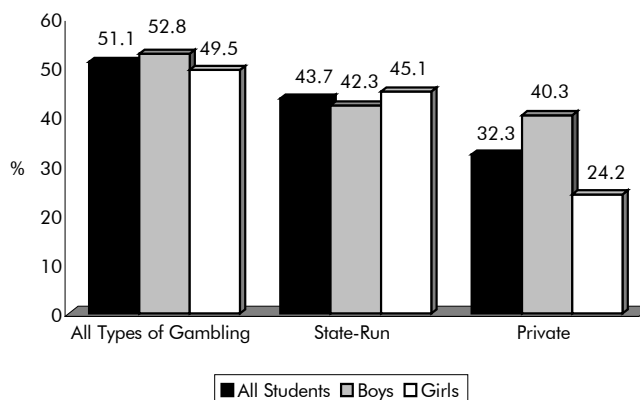
### What is the Definition of Gambling?

Gambling (including playing lotteries) can be defined as any form of wagering involving a financial risk, whether based on chance or certain physical or mental skills. By its very nature gambling implies that the results cannot be predicted or controlled because they are based on chance.

### Gambling rates

Whatever the wagering involved – a hockey pool, cribbage game, dominos, Loto-Québec scratch-and-win – half (51 %) of Québec high school students reported they had gambled at least once in the 12 months preceding the survey. In all, a significantly<sup>1</sup> higher proportion of boys compared to girls (53 % vs. 50 %) had tried gambling in one form or another (Figure 1). In response to the question whether they had gambled *in their lifetime*, approximately three in five (61%) answered in the affirmative (data not shown).

Figure 1 – Gambling in High School Students by Sex



Source: Institut de la statistique du Québec, *Québec Survey of Tobacco Use in High School Students, 2002*.

1. In this document the percentages are based on values that have been weighted and adjusted according to the sample design. The statistical tests have a confidence interval of 95%. Statistical differences are considered significant at the threshold of  $p < 0.05$ .

Various types of gambling are not equal before the law. Indeed, some forms of gambling are legislated and managed by the government, directly or indirectly; such as instant lotteries, regularly-scheduled lotteries (6/49™, Super 7™ etc.), bingo games, horse racing, sports lotteries, video lottery terminals (VLTs), and games and slot machines in casinos. These are known as “state-run.” It is illegal for minors, i.e. the vast majority of high school students, to participate. Other forms of gambling, designated as “private,” are considered legal in terms of the Criminal Code. For example, it is not illegal for either minors or adults to bet on an Alouettes football game. In 2002, similar proportions of boys (42 %) and girls (45 %) reported having engaged in state-run forms of gambling in the 12 months preceding the survey. However, girls were significantly less likely than boys (24% vs. 40%) to engage in private forms of gambling (Figure 1).

It seems that a rather large proportion of youth engage in state-run gambling (Figure 1). From a test conducted on independent samples, the proportion of youth who only engaged in state-run gambling was higher than that of those who only engaged in private gambling (data to be shown in the final report).

## What Types of Gambling?

The students were asked about what forms of gambling they had engaged in during the 12 months preceding the survey. As indicated in Table 1, the results show that many played instant scratch-and-win lotteries – more than a third (37%) had paid to scratch the latex off these types of lottery tickets, with girls having a greater tendency to do so than boys. Many also played cards for money; 21% had experimented with this form of gambling in the 12 months preceding the survey. Nearly a fifth (18%) had wagered on their skills at snooker or pool, basketball or any other activity allowing them to bet on their own abilities. Boys were relatively more likely to engage in this type of gambling than girls. More than 10% of students had experimented with lotteries, bingo, sports betting and other games; 8% reported having already played a video lottery terminal (VLT).

**Table 1 – Proportions of High School Students Reported Having Engaged in Various Forms of Gambling<sup>1</sup> in the 12 Months Preceding the Survey, By Sex**

	Total	Boys %	Girls
<b>State-Run</b>			
Instant Lotteries <sup>†</sup>	37.3	34.9	39.7
Lotteries	14.2	14.6	13.9
Bingo	14.0	13.4	14.5
Video Lotteries <sup>†</sup>	8.1	9.0	7.1
Mise-O-Jeu™ <sup>†</sup>	5.4	8.2	2.5
Casino <sup>†</sup>	2.2	3.1	1.2*
<b>Private</b>			
Card Games <sup>†</sup>	21.0	26.0	15.9
Skill-Testing <sup>†</sup>	17.7	25.1	10.2
Private Sports Betting <sup>†</sup>	12.6	19.9	5.2
Internet Gambling <sup>†</sup>	3.7	4.7	2.6
Other games <sup>†</sup>	10.5	14.5	6.5

1. A student could have gambled in a variety of ways; therefore the sum of the prevalences does not total 100%.

<sup>†</sup> Significant difference between girls and boys.

\* Coefficient of variation between 15% et 25%: interpret with caution.

Source: Institut de la statistique du Québec, Québec Survey of Tobacco Use in High School Students, 2002.

## Terminology to Describe Students' Frequency of Gambling

### TYPE OF GAMBLER

#### Non-Gambler

Had not gambled in the 12 months preceding the survey.

#### Occasional Gambler

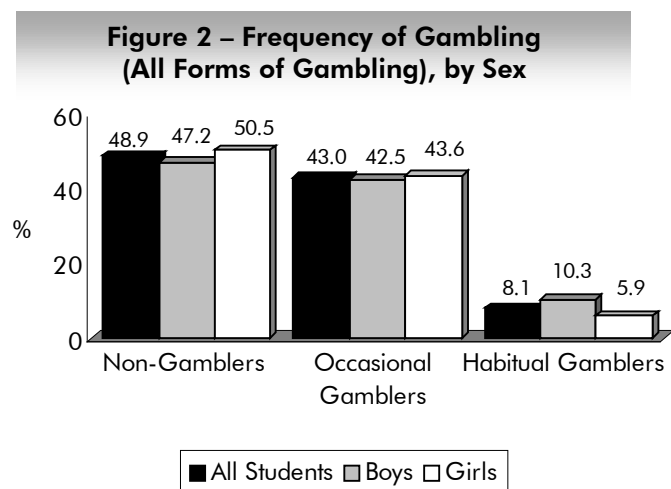
Had tried gambling once or had gambled once a month or less in the 12 months preceding the survey.

#### Habitual Gambler

Had gambled at least once a day or once a week in the 12 months preceding the survey.

## How Often Do High School Students Gamble?

Many students who had engaged in one or more forms of gambling did so in rather sporadic fashion, namely occasionally. Approximately 43% of high school students were occasional gamblers, whereas 8% gambled regularly – in at least one form, at least once a week (Figure 2). The latter can be designated as habitual gamblers (see box on previous page for a precise definition of the terms used to describe a student's frequency of gambling).

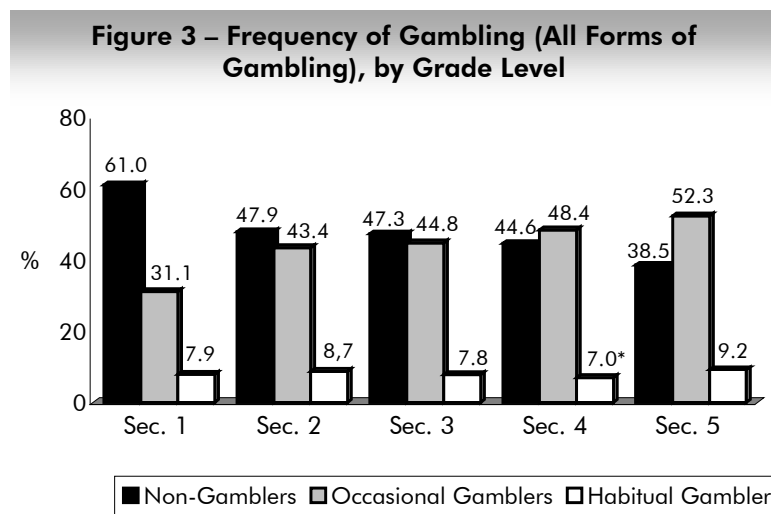


Source: Institut de la statistique du Québec, Québec Survey of Tobacco Use in High School Students, 2002.

Approximately equal proportions of girls and boys were occasional gamblers, 44% and 43% respectively. However, in all, a significantly higher number of boys compared to girls reported being habitual gamblers, 10% vs. 6% (Figure 2).

Gambling rates increased with grade level (Figure 3). In Secondary 1, 39% had gambled at least once in the 12 months preceding the survey.

This proportion increased with grade level, attaining 62% in Secondary 5 (sum of occasional and habitual). However, there was virtually no variation by grade level in habitual gamblers, namely those who gambled weekly.



\* Coefficient of variation between 15% et 25%: interpret with caution.

Source: Institut de la statistique du Québec, Québec Survey of Tobacco Use in High School Students, 2002.

## Factors Associated with Gambling

The data showed that the language spoken at home was a factor associated with gambling (Table 2). Students who spoke French had a greater tendency to gamble occasionally than those who spoke another language at home (44% vs. 37%). The latter, however, were more likely to be habitual gamblers (11% vs. 8%).

Marks were also significantly associated with gambling behaviours. The proportion of occasional gamblers was essentially the same irrespective of whether students evaluated themselves above, below or average in terms of grades. However, students who reported themselves as being below average had a greater tendency to be habitual gamblers compared to those who described themselves as average or above average (12% vs. 7%).

**Table 2 – Frequency of Gambling (All Forms of Gambling) by Language, Perceived Grades, and Pocket Money**

	Language Spoken		Perceived Grades			Weekly Pocket Money		
	French	Other	Above Average	Average	Below Average	\$0-10	\$1-30	\$31 & over
	%							
Non-Gamblers	48.3	52.0	50.3	48.0	47.8	58.3	47.4	37.5
Occasional Gamblers	44.1	37.4	42.4	44.9	40.3	37.3	45.3	48.1
Habitual Gamblers	7.5	10.6	7.3	7.1	12.0	4.4	7.3	14.4

Source: Institut de la statistique du Québec, Québec Survey of Tobacco Use in High School Students, 2002.

## Methodology in Brief

The money youth have at their disposal also played a role in gambling behaviour. It is not surprising that the more pocket money students had, the more likely they were to bet. This association was observed in both occasional and habitual gamblers.

### Issues to Monitor

It seems that recent concerns about youth being attracted to gambling are well-founded. Indeed, half of the students had gambled in the year preceding the survey, and over 8% had gambled at least once a week. A non-negligible percentage of students were engaging in state-run forms of gambling, with instant lotteries (scratch-and-win) being the most popular (see Table 1). Moreover, 31% of students had received lottery tickets as a gift in the 12 months preceding the survey (data not shown).

High school students seem not to be immune to problem gambling. Gambling becomes a *problem* when the habit has a negative effect on relations with family and friends, physical and mental health, and work or studies. It can be defined as *pathological* when a person is constantly preoccupied with gambling and is no longer capable of controlling or stopping the behaviour. Those who suffer from this condition experience a large number of negative effects, such as financial problems, delinquent behaviours, breaking of family ties, loss of friends, failure in school, etc.

Given the importance of these consequences, the survey report to be published in the autumn of 2003 will contain a specific section on problem and pathological gambling among high school students. The data collected was based on the DSM-IV-J index of pathological gambling, which is specifically designed to screen for this in youth.

### Access to the Survey Findings

The ISQ encourages researchers and those working in the anti-smoking, drug addiction, and gambling fields to use the raw data of this survey. Researchers can access the data by contacting the *Centre d'accès aux données de recherche* of the ISQ (CADRISQ), with offices in Montréal and Québec City. Detailed data from the *Québec Survey of Tobacco Use in High School Students, 2002* will be available for the general public in the autumn of 2003. For further information on accessing the data, consult the ISQ's website at ([www.stat.gouv.qc.ca](http://www.stat.gouv.qc.ca)).

To ensure the validity of the comparisons, the methodology used in the survey has been the same from one edition to the next.

**Target population:** All students enrolled in high schools in Québec, public or private, francophone or anglophone, with the exception of schools not governed by the Ministry of Education, aboriginal schools, schools far from urban centres, and schools composed of at least 30% handicapped students. In all, the sample was therefore representative of more than 95% of students enrolled in high school in Québec.

**Sample stratified by:**

- Language of instruction
- Private or public system
- Region

**Selection process:**

- Random selection of schools (approximately 160)
- Random selection of classes (36 by grade level, 180 in all) in the schools previously selected at random – one class per school, sometimes two
- All students in the selected classes were asked to respond to a questionnaire (5,300 potential respondents).

**Data collection instrument:** Closed, anonymous, self-administered questionnaire given in the classroom under the supervision of an ISQ representative. The gambling section of the survey included items from the index of pathological gambling in youth (DSM-IV-J).

**Data collection period:** Early November to mid-December, every two years since 1998.

**Combined response rate (classes and schools):** 89.8 % (1998), 92.4 % (2000), 93.4 % (2002).

#### To learn more about the Québec Survey of Tobacco Use in High School Students

This bulletin, as well as highlights of the reports of the **Québec Survey of Tobacco Use in High School Students**, can be accessed on the ISQ's website at [www.stat.gouv.qc.ca](http://www.stat.gouv.qc.ca) by clicking on "English," "Publications," "Studies and Analyses," section entitled "Health."

You can also telephone the Coordinators of the survey, Bertrand Perron or Jacynthe Loiselle at (514) 873-4749 or 1-877-677-2087 (toll-free if calling from outside the Montréal region).

Published by the Institut de la statistique du Québec.

Suggested reference: Chevalier, S., Deguire, A.-E. (2003). Gambling: Portrait of the Situation in 2002, *Québec Survey of Tobacco Use in High School Students, 2002* (Summary results), Québec, Institut de la statistique du Québec, August.

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