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Highlights of the Québec Health Survey of High School Students 2010-2011

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At the request of the Ministère de la Santé et des Services sociaux (MSSS), in 2010-2011 the Institut de la statistique du Québec (ISQ) conducted a general health survey of Québec secondary school students, namely the Québec Health Survey of High School Students 2010-2011 (QHSHSS). Conducted on more than 63,000 youths across Québec, data from this large-scale survey, for the first time, has provided comparable, regional portraits of their physical, mental and psychosocial health.

The QHSHSS was developed to respond to the need for data which the MSSS and the health and social services network had deemed a priority. Its aim was to provide, on a recurring basis, statistical data that can contribute to monitoring the health status of young Québecers – a major concern of the various stakeholders in public health. The next edition of the survey will be conducted in 2016-2017.

In the context of increasing overweight and obesity being observed in youth, lifestyle habits such as diet and engaging in physical activity constitute major issues for their health. Furthermore, studies based on data from various editions of the Québec Survey on Smoking, Alcohol, Drugs and Gambling in High School Students have demonstrated that smoking, alcohol consumption and drug use among youth remains a concern, even if notable progress has been accomplished in the past 15 years. The increase observed in sexually transmitted infections (STIs) is another major issue, indicating the importance of having access to accurate data on the sexual behaviours of young people, mainly with regards to condom use.

Surveys have historically not provided very much data on the mental health, social environment and social adjustment of youth. Yet acquiring knowledge

of these factors has become increasingly important, particularly for planning health and social service programs. The social environment of young people, comprising family, friends and school, have a known influence on their health and well-being. Self-esteem and social competencies are also at the core of youth development and can contribute to strengthening their ability to overcome challenges and foster academic achievement. Moreover, being a victim of verbal or physical violence at school or cyberbullying, increasingly observed, can also influence the health of teenagers. Mental health problems such as anxiety or depression are increasingly widespread in the population, particularly among youth. Other problems are just as much a concern in terms of public health, such as direct and indirect aggression, rebellious or delinquent behaviours, and violence, whether inflicted

or suffered, in adolescents' romantic relationships. School dropout, associated with multiple risk factors, remains a major issue in Québec society.

As a large-scale survey, the QHSHSS 2010-2011 covered all these aspects of the health and well-being of youth. This summary report provides an overview of the principal findings of the survey by topic under two general headings. The first addresses lifestyle habits, risk behaviours and physical health, the second social environment, mental health and social adjustment, and risk of school dropout. These highlights are based on two reports published by the ISQ.[1,2,3]

LIFESTYLE HABITS, RISK BEHAVIOURS AND PHYSICAL HEALTH

Diet and eating habits

> Only one-third (33%) of high school students were consuming, on average, the minimum daily requirement of fruits and vegetables recommended by Canada's Food Guide (namely 6 to 8 portions according to age group and sex).

> Just under a half (48%) of adolescents were regularly consuming the recommended 3 portions of dairy products per day, fewer girls (42%) than boys (54%).

> Slightly less than a third (31%) of high school students were routinely consuming sugary drinks, salty snacks, and sweets at least once a day, proportionally more boys (35%) than girls (26%).

> A similar proportion (31%) were consuming junk food in a restaurant (including a snack bar or fast-food eatery) at least 3 times during the school week, again more boys (36%) than girls (27%).

> Approximately 60% had eaten or drunk something (other than coffee, tea or water) every morning before school during the previous school week, the proportion being lower in girls (57%) than in boys (63%). However, 11% had not had breakfast during the same reference period, girls in a slightly higher proportion (13%) than boys (10%).

1. PICA, Lucille A., Issouf TRAORÉ, Francine BERNÈCHE, Patrick LAPRISE, Linda CAZALE, Hélène CAMIRAND, Mikaël BERTHELOT, Nathalie PLANTE et autres (2012). *L'Enquête québécoise sur la santé des jeunes du secondaire 2010-2011. Le visage des jeunes d'aujourd'hui : leur santé physique et leurs habitudes de vie,* Tome 1, Québec, Institut de la statistique du Québec, 258 p. (available in French only).

2. PICA, Lucille A., Issouf TRAORÉ, Hélène CAMIRAND, Patrick LAPRISE, Francine BERNÈCHE, Mikaël BERTHELOT, Nathalie PLANTE et autres (2013). *L'Enquête québécoise sur la santé des jeunes du secondaire 2010-2011. Le visage des jeunes d'aujourd'hui : leur santé mentale et leur adaptation sociale,* Tome 2, Québec, Institut de la statistique du Québec, 141 p. (available in French only).

3. The survey results on respiratory health, dental habits, and work experience are not presented in this summary report, since they were not covered in these previously published reports.

Physical activity (leisure and active transportation)

> During the school year, fewer than a third (30%) of secondary school students attained the recommended level ("active") of physical activity, taking into account both leisure and active transportation. Proportionally more boys (37%) than girls (23%) attained this level.

> Almost a quarter (24%) of students were sedentary during the school year, girls in a higher proportion (27%) than boys (21%).

Weight, body image, and efforts related to weight

> According to their Body Mass Index (BMI), calculated from self-reported data on height and weight, the majority of high school students, namely 69%, were of normal weight, 21% had excess weight (14% overweight and 7% obese), and 10% were underweight.

> Proportionally more boys (25%) than girls (17%) were overweight or obese.

> Approximately half of high school students (49%) were dissatisfied with their body image; they would like to be either thinner (33%), particularly girls, or heavier (16%), particularly boys.

> Nearly three-quarters (71%) of secondary school students had taken some action to change or maintain their body weight: 25% had tried to lose weight, 12% to gain weight, and 34% to maintain their weight; proportionally more girls had tried to lose weight and more boys had tried to gain weight.

Cigarette smoking

> More than one in ten adolescents (11%) had smoked cigarettes, the proportion being similar among boys and girls.

> Smokers comprised 3.5% of Secondary 1 students, rising to 16% in Secondary 5.

Alcohol consumption

> 63% of high school students had already drunk alcohol in their lifetime, and 60% had consumed it in the previous 12 months, with a similar proportion observed among boys and girls.

> The proportion of high school students having consumed alcohol in the previous 12 months rose from 26% in Secondary 1 to 85% in Secondary 5.

> 15% of students had consumed alcohol at a high frequency (at least once a week) during the previous 12 months.

> 41% had consumed alcohol excessively (5 standard drinks or more on a single occasion) at least once during the previous 12 months.

> More than one in 10 (12%) had already consumed alcohol regularly (at least once a week in a period of at least a month during his/her lifetime); this proportion rose to 18% among those who had already drunk alcohol.

Drug use

> More than a quarter (27%) of secondary school students had used drugs in their lifetime, and 26% had done so in the previous 12 months, the proportions being slightly higher in boys than in girls.

> The proportion of students having consumed drugs in the previous 12 months increased from 5% in Secondary 1 to 44% in Secondary 5.

> A quarter (25%) of students had used cannabis in the previous 12 months, making it the most popular drug; 9% had used ecstasy, 7% amphetamines or methamphetamines, and 6% hallucinogens during the same reference period.

> 12% of high school students had already experienced time periods during which they regularly used drugs, namely at least once a week for at least a month in their lifetime; the proportion who had engaged in this behaviour was 43% among students who had already used drugs.

> A quarter (25%) of students had both consumed alcohol and used drugs in the previous 12 months.

> For 5% of students, their alcohol consumption and drug usage was judged problematic and would require specialized intervention. An emerging problem of consumption and usage was observed in a similar proportion of students (5%).

Sexual behaviours of high school students 14 years of age and over

> More than a third (37%) of students 14 years of age and over had had consensual sexual relations (oral, vaginal or anal) at least once in their lifetime, girls in a slightly higher proportion (38%) than boys (36%).

> A quarter (25%) of students 14 years of age and over in Secondary 1 and 2 (data combined) had had sexual relations (oral, vaginal or anal); this proportion rose to 52% in Secondary 5.

> Among sexually active high school students, slightly less than a third had had oral (31%) or vaginal (30%) relations with 3 or more partners in their lifetime, considered to be a risk behaviour.

> More than two-thirds (68%) of sexually active teenagers 14 years of age and over had used a condom in their last vaginal relation, proportionally more boys (75%) than girls (62%).

Perception of health status

> 71% of secondary school students considered themselves to be in excellent (27%) or very good health (44%), and a quarter (25%) reported their health to be good; a small proportion, namely 4.3%, considered their health to be fair or poor.

> A higher proportion of boys (75%) than girls (67%) perceived their health status to be excellent or very good.

SOCIAL ENVIRONMENT, MENTAL HEALTH AND SOCIAL ADJUSTMENT, AND RISK OF SCHOOL DROPOUT

Family environment

- Three quarters (75%) of high school students reported benefiting from social support in their family environment, with little difference being observed between boys and girls.
- 42% of students were growing up in a family in which they had a high level of meaningful participation. Again, there was little difference observed between the sexes.
- A higher proportion of girls (41%) than boys (30%) benefited from a high level of parental supervision.

Friends

- Over two-thirds (69%) of high school students indicated that their friends provided a high level of social support, girls in a much greater proportion than boys (81% vs. 57%).
- More than half of students (54%) reported that they had friends who manifested a high level of prosocial behaviours, proportionally more girls than boys (65% vs. 44%).

School environment

- A third (34%) of secondary school students reported benefiting from a high level of support at school, while 57% reported a moderate level of support. A slightly greater proportion of girls than boys said they felt a high level of support at school (36% vs. 32%).
- 16% of students reported a high level of meaningful participation in school, proportionally more girls (18%) than boys (15%).
- Slightly under a third (30%) of students reported a high level of connectedness to their school, while more than two-thirds (68%) reported a moderate level. Proportionally more girls than boys indicated a high level of school connectedness (33% vs. 27%).
- More than a third (36%) of high school students had been victims of violence at school or on the way to or from school since the beginning of the school year, proportionally more boys (42%) than girls (29%). The victims of violence experienced *often* or *sometimes* verbal insults, threats, being hit, having something stolen, or other.
- 5% of students said they had been a victim of cyberbullying since the beginning of the school year, proportionally more girls (7%) than boys (3.9%). Among victims of cyberbullying, 4.7% indicated that it had occurred *very often*.
- Overall, 37% of high school students had been victims of violence at school (or on the way to or from school), or of cyberbullying, proportionally more boys than girls (43% vs. 31%). This phenomenon was reported to occur more at the beginning of high school (46% in Secondary 1) than at the end of high school (27% in Secondary 5).

Self-esteem and social competencies

- Nearly a quarter of boys (24%) had a high level of self-esteem, compared to 15% of girls.
- Slightly less than a third of boys (32%) presented a high level of self-efficacy overall, compared to a quarter of girls (25%).
- Nearly half (48%) of secondary school students had a high level of empathy, considerably more girls (65%) than boys (32%).
- Almost a third (32%) of students scored high on the index of problem-solving, a much higher proportion of girls (41%) compared to boys (22%).
- Girls presented a high level of self-control in a slightly higher proportion than boys (17% vs. 14%).

Mental health problems

- Proportionally more girls than boys presented a high level of psychological distress (28% vs. 14%). Students in Secondary 5 were more likely to have a high level of distress compared to those in Secondary 1 (25% vs. 16%).
- 9% of high school students presented a problem of anxiety diagnosed or confirmed by a doctor or other health professional, while 4.9% reported having received a diagnosis of depression, and 1.8% indicated they had an eating disorder confirmed by a doctor or other health professional.
- Overall, proportionally more girls (15%) than boys (9%) reported having had at least one diagnosis of anxiety, depression or eating disorder.
- 13% of secondary school students presented attention deficit disorder with or without hyperactivity confirmed by a doctor or other health professional, boys (16%) in a greater proportion than girls (9%). This was more observed in the first three years of high school.

Behaviours of direct and indirect aggression

- 38% of high school students reported having committed at least one direct act of aggression (*fighting often, physically attacking, threatening or hitting [an]other person[s]*), proportionally more boys than girls (46% vs. 29%). These behaviours seemed to be reported by slightly more students in Secondary 2 and 3.
- Nearly two-thirds (65%) of students reported engaging in at least one indirect aggressive behaviour (more subtle and less visible than direct aggression – i.e. *when mad at someone: becomes friends with somebody else as revenge, says things behind his/her back, tells that person's secrets to other people, etc.*). Proportionally more girls than boys (73% vs. 57%) engaged in this type of behaviour. Indirect aggression behaviours seemed less frequent among students in Secondary 1.

Rebellious or delinquent behaviours

> More than a third (36%) of secondary school students had engaged in at least one rebellious behaviour in the previous 12 months (*stayed out all night without permission, ran away from home, was questioned by the police*), and 41% had engaged in at least one delinquent behaviour (*stolen something from a school or store, damaged or destroyed something that didn't belong to him/her, got into a fight and seriously injured or intended to injure someone, carried a weapon for the purpose of defending oneself or using it in a fight, sold drugs, etc.*).

> Boys were more likely than girls to engage in rebellious behaviours (42% vs. 30%) or delinquent behaviours (50% vs. 31%).

> Rebellious behaviours were more frequent near the end of high school, the proportion rising from 22% in Secondary 1 to 42% and 43% in Secondary 4 and 5 respectively. This was similarly observed with regards to delinquent behaviours, the proportion being 33% in Secondary 1, and varying from 42% to 44% between Secondary 2 and 5.

Violence inflicted or suffered in love relationships

> A quarter (25%) of high school students who had had a love relationship in the previous 12 months had inflicted at least one form of violence (psychological, physical or sexual) on their partner, while 30% of students had suffered at least one of the three forms of violence inflicted on them by their partner.

> When analyzing victims and perpetrators separately, proportionally more girls than boys reported being victims of violence in their love relationships (36% vs. 25%). Yet more girls than boys reported they had inflicted violence on their partner (32% vs. 17%).

> Violence inflicted in love relationships increased with grade level, going from 17% in Secondary 1 to 29% in both Secondary 4 and Secondary 5. Being a victim of violence showed the same trend, rising from 25% in Secondary 1 to 34% in Secondary 4 and 33% in Secondary 5.

Risk of school dropout

> Nearly a quarter (24%) of boys in high school presented a risk of dropping out, compared to 16% of girls.

> The risk of dropout was primarily observed among students in Secondary 2 and 3 (22% and 25% respectively).

> Students with a high level of social support in their family (15%) had a lower risk of dropping out from school than those with a low or moderate level of family support (34%, data combined).

> The risk of dropping out was also lower among students who had a high level of self-esteem (11%) compared to those who had a low or moderate level of self-esteem (32% and 19% respectively).

> Similarly, the risk of dropout was lower among students who reported a high level of connectedness to their school (14%) than those who had a low or moderate level of connectedness to their school (23%, data combined).

RESULTS THAT CAN FOSTER ACTION

As seen in this summary report, the QHSHSS 2010-2011 provided a wealth of accurate and precise data on the health and well-being of high school students and their determinants. Various stakeholders in public health and the education system can apply these results to adjust their action plans and interventions addressing youth. The next edition of this survey, to be conducted in the 2016-2017 school year, will provide data to monitor any changes in the physical, mental and psychosocial health status of high school students and assess trends over time in their lifestyle habits and related behaviours.

About the survey

The main goal of the Québec Health Survey of High School Students 2010-2011 (QHSHSS) was to present a portrait of the physical and mental health, lifestyle habits, social environment and social adjustment of young Québecers attending secondary school. It was conducted by the Institut de la statistique du Québec and funded by the Ministère de la Santé et des Services sociaux. The target population comprised all students in Secondary 1 through 5 enrolled in the youth sector in public and private, francophone and anglophone high schools in Québec. The data were collected using a self-administered, anonymous questionnaire, filled out on a notebook computer, from 63,196 students in 470 schools in 16 administrative regions, ensuring the data were representative by region. Two regions, Nunavik and the Terres-Cries-de-la-Baie-James (Cree lands), were not covered by the survey.

To learn more about the QHSHSS, visit the website at: www.eqsjs.stat.gouv.qc.ca/index_an.htm

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