

2012

Youth Health Survey Report



WRHA Access River East
Community Area

Grade 7 - 12



Winnipeg Regional
Health Authority
Caring for Health

Office régional de la
santé de Winnipeg
À l'écoute de notre santé

Acknowledgments

This report was made possible through the efforts of many organizations and people:

- School administrators, teachers, and staff who coordinated the Youth Health Survey
- Partners in Planning for Healthy Living and its member organizations who oversaw the survey development and implementation processes
- CancerCare Manitoba, Department of Epidemiology and Cancer Registry for their assistance in statistical programming and data analysis, and to the CancerCare Manitoba Foundation for their generous support
- Manitoba Education, Manitoba Healthy Living, Seniors and Consumer Affairs, and Healthy Child Manitoba
- All Manitoba Regional Health Authorities
- Youth Health Survey Topic Expert working groups who gave input on survey question design and the report
- Students who participated in the Youth Health Survey with enthusiasm, honesty and willingness.

Table of Contents

Reading this Report	4
Promoting Health in Schools	5
Quick Facts	6
Survey Participation	8
Perceptions of Health and Mental Wellbeing	10
Physical Activity	21
Sun/UV Safety	30
Healthy Eating and Healthy Weights	32
Tobacco Use	42
Alcohol, Marijuana and Other Drug Use	52
Youth Safety and Injury Prevention	58
Healthy Sexuality	64
List of References	72

Reading this Report

This Youth Health Survey was completed by Manitoba students in Grades 7-12 during the 2012-2013 school year. Between 2006 and 2008, the first Youth Health Survey was completed by Manitoba students in Grades 6 to 12. Although the two surveys are similar, the current survey includes many expanded and adapted questions. In addition, due to the exclusion of Grade 6 students from this current survey, comparisons to results from the previous Youth Health Survey should be done with caution and should note this limitation.

This report provides a snapshot on students' health behaviours. The results presented here reflect the responses of the **youth themselves***. Asking questions about youth health behaviors can help you to learn what youth are thinking, what motivates them and what's important to them.

Throughout the report, many ideas for action are provided to support your work. In addition, your divisional Physical Education and Health Education Consultants and your Regional Health Authority are a rich source of information in school health planning.

It is hoped that reading this report may be one step on a journey toward improving the health of students in your schools and in creating a healthy school environment.

This report includes the following schools:

Chief Peguis Junior High
École John-Henderson Junior High School
Elmwood High
George V School
John G. Stewart School
John Pritchard School
Kildonan East Collegiate
Miles MacDonnell
Munroe Junior High
River East Collegiate
Robert Andrews School
Salisbury Morse Place School
St. Alphonsus School
The King's School
Valley Gardens Junior High

* Please note that students may not have answered every question in the survey and therefore each question has a certain amount of missing data. The results presented in this report only include students who had a valid answer for the question being reported on. In cases where there was a large amount of missing data ($\geq 10\%$), a footnote is included in the graph or text to reflect this.

In some cases, only a small number of students may have chosen a particular response category for a sensitive question. In these cases, the results will be suppressed to protect the privacy of these students. This safeguard will come into effect when 6 or fewer students choose a particular response and make up 6% or less of the total. The resulting graph or table will feature an "S" to indicate that the data has been suppressed, or be reported as "too small to report" in the text.

Promoting Health in Schools

Why is Promoting Health in Schools Important?

Education and health are interdependent (Joint Consortium for School Health [JCSH], 2012). Healthy students are better learners and better-educated individuals are healthier (JCSH, 2012). Children and youth can achieve their fullest potential as learners if their physical, mental, intellectual and emotional health needs are met. Some of the best opportunities for positively influencing the health of young people and preventing health risk behaviours from starting are found in the school setting (World Health Organization [WHO], 1999). Research shows that:

- Healthy young people are more likely to learn more effectively
- Health promotion can help schools to meet their targets in academic achievement and meet their social aims
- Youth who feel good about their school and feel connected to adults are less likely to undertake high risk behaviours and are likely to have better learning outcomes
- Schools are also workplaces for school staff and can promote and model effective workplace health promotion for the benefit of their staff and ultimately their students

(St. Leger et al., 2010)

Being a Healthy School

Healthy Schools is rooted in the principles of *comprehensive school health* (CSH). CSH is an internationally recognized framework for supporting improvements in students' educational outcomes while addressing school health in a planned, integrated and holistic way. CSH helps educators, school administrators, students, regional health authorities, health practitioners and others work together to create an environment that makes their school the best place possible to learn, work, and play. CSH is not limited to the classroom – it addresses the whole school environment with actions in four interrelated pillars that provide a strong foundation for healthy schools:

- Social and physical environment
- Teaching and learning
- Partnerships and services
- Healthy school policy

(JCSH, 2012)

Within this broad foundation, a variety of health-related topics need to be considered, including those in this report.

Taking action in all four CSH pillars is working in a holistic and comprehensive way and increases the impact of healthy school activities. Being a healthy school is a journey that can start with a few simple changes that can improve the health and wellbeing of students and staff. Some schools start with an emphasis on one health topic. This can lead to a broader set of healthy school policies and practices which, combined, create a school culture that supports greater student health and achievement.

Manitoba's Healthy Schools Initiative

Healthy Schools is a partnership of Manitoba Healthy Living, Seniors and Consumer Affairs, Manitoba Education and Healthy Child Manitoba. To find out more about Healthy Schools, go to www.manitoba.ca/healthyschools.

Quick Facts

Perception of Health and Mental Wellbeing

- 59% of students perceived their health to be excellent/very good; 40% perceived their health to be good/fair and 1% perceived their health to be poor
- 58% of students reported flourishing mental health; 36% report moderate mental health; 6% reported languishing mental health

School and Community Connectedness

- 79% of students feel close to people at their school
- 84% of students feel they are part of their school
- 86% of students are happy to be at their school
- 90% of students feel safe at their school
- 87% of students feel safe in their community
- 98% of students feel safe in their home
- 94% of students have at least one close friend to share things with
- 93% of students feel their family supports them
- 60% of students feel involved in their community

Bullying and Personal Threats

- 26% of students reported that they have been physically threatened or injured in the past year
- 7% of students reported that they have been threatened or injured with a weapon in the past year
- 39% of students reported that they had been bullied, taunted or ridiculed in the past year
- 22% of students reported that someone had said something bad about their race or culture in the past year
- 12% of students reported that someone said something bad about their sexual orientation or gender identity in the past year
- 39% of students reported that someone said something bad about their body shape or size in the past year
- 20% of students reported that someone had asked for personal information over the internet in the past year
- 9% of students reported that someone made them feel unsafe when they were in contact over the internet in the past year
- 16% of students reported being bullied or picked on through the internet in the past year

Sleep

- 22% of students get 9 or more hours of sleep on school nights (Sunday to Thursday)

Physical Activity

- 40% of female and 51% of male students were active; 41% of female and 34% of male students were moderately active; and 20% of female and 15% male students were inactive
- 65% of students use active transportation to get to and/or from school in a typical week
- 47% of students limit their screen time to the recommended amount of 2 hours or less per day on weekdays (Monday-Thursday)

- 33% of students limit their screen time to the recommended amount of 2 hours or less per day on weekends (Friday-Sunday)

Sun/UV Safety

- 38% of students reported that they always/often use sun/UV protection (seek shade, use sunscreen with SPF 15 or higher, and/or cover up)
- 7% of students reported that they had ever used artificial tanning equipment

Healthy Eating and Healthy Weights

- 38% of students reported eating fruit and/or vegetables 7 or more times per day
- 25% of students reported eating salty and sugary snacks 3 or more times per day
- 8% of students reported eating fast foods 3 or more times per day
- 78% of females and 68% of males fall within the recommended healthy weight category

Tobacco Use

- 10% of female and 11% of male students reported being current smokers (daily and occasional)
- 2% of students reported using smokeless tobacco in the past month
- 38% of tobacco users reported wanting to stop their use of tobacco

Alcohol, Marijuana and Other Drug Use

- 21% of students reported having consumed at least one drink of alcohol in the past month
- 16% of students reported consuming five or more drinks within a couple of hours on at least one day in the past month
- 16% of students reported using an illegal, prescription, or over-the-counter drug for the purposes of getting high in the past month

Injury Prevention and Safety

- 2% of students reported having driven one or more times after drinking alcohol in the past month
- 3% of students reported having driven one or more times after using illegal drugs including marijuana in the past month

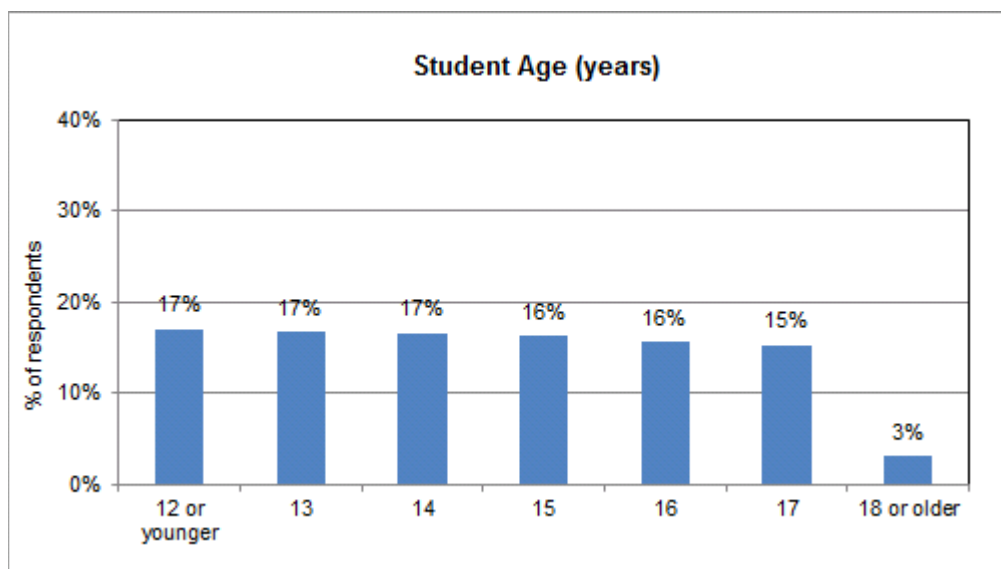
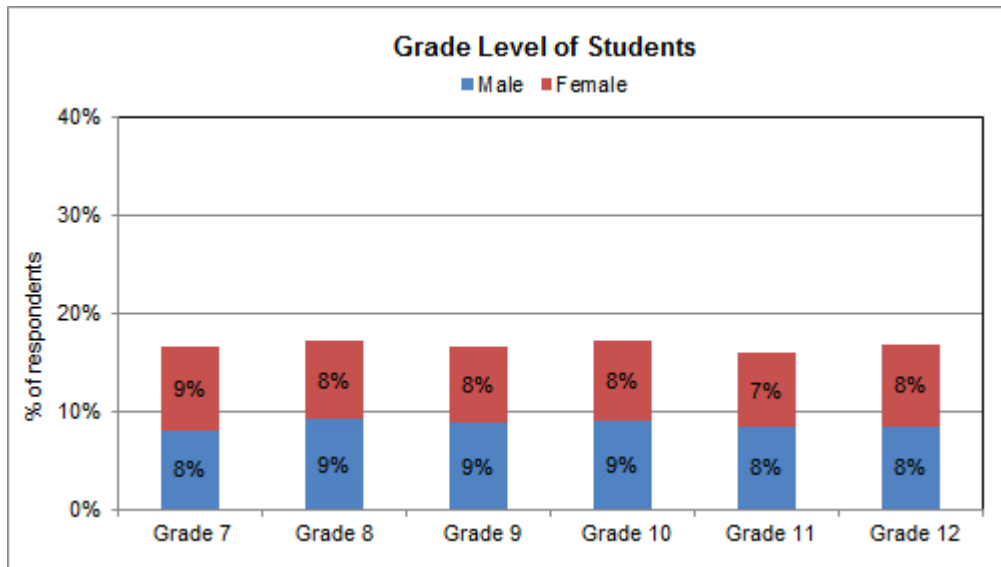
Healthy Sexuality (This section was completed by students in grades 9 to 12, and in grades 7 to 12 at Elmwood High, but does not include students from St. Alphonsus or The King's School)

- When asked the age when they first had sex, 73% of students reported that they had never had sex
- The age that the most number of students reported having sex at for the first time was 15 years old
- 50% of students who reported being sexually active indicated that they always wear a condom when they have sex

Survey Participation

This report presents the findings of the 2012/2013 Youth Health Survey. Following is the demographic profile of the students who completed the survey.

5277 students from **ACCESS River East** completed the survey.
The students who responded were 48% female and 52% male.



6. How long have you lived in Canada?

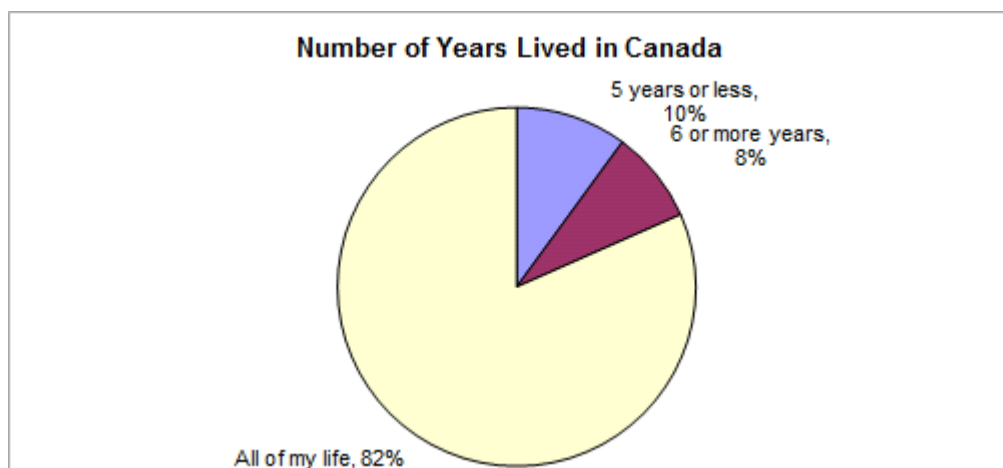
- ☐ All of my life
- ☐ Less than 1 year
- ☐ 1 to 2 years
- ☐ 3 to 5 years
- ☐ 6 or more years

Years Lived in Canada

Between 2008 and 2010, Manitoba welcomed 5078 new permanent residents 10 to 19 years of age (Manitoba Labour and Immigration, 2011). The health among immigrants can be influenced by:

- *Their country of origin*
 - *Host country*
 - *Personal experiences*
 - *Low socio-economic status*
 - *Cultural conflicts*
 - *Language*
 - *Role changes and identity crises*
 - *Racial discrimination*
 - *Provincial and community factors such as social isolation*
- (Messias & Rubio, 2004)*

Any health interventions should be targeted to the specific immigrant sub-population with consideration given to cultural acceptability and preference (Flynn et al., 2006).



Perceptions of Health and Mental Wellbeing

Why We Study Mental, Emotional and Social Health

Mental health and wellbeing contribute to our enjoyment of life, better physical health, improved educational attainment, increased economic participation and rich social relationships (Friedli & Parsonage, 2007; Kirkwood et al., 2008; Mental Health Commission of Canada [MHCC], 2009; MHCC, 2012). Healthy emotional and social development in childhood lays the foundation for mental health and resilience throughout life (MHCC, 2012).

The health and wellbeing of children and youth is influenced by many factors, including family income, social support networks, personal health practices and coping methods, biology and genetics, education and the physical environment of home and school (Public Health Agency of Canada [PHAC], 2011).

“Mental health status is associated with risk behaviours at all stages of the life cycle. For instance, in young people, depression and low self-esteem are linked with smoking, binge drinking, eating disorders and unsafe sex.” (Herrman & Jané-Llopis, 2005)

Schools can promote positive mental health and create resilience, providing youth with resources to thrive and, in adverse conditions, to cope by buffering negative stressors (Weare & Nind, 2011).

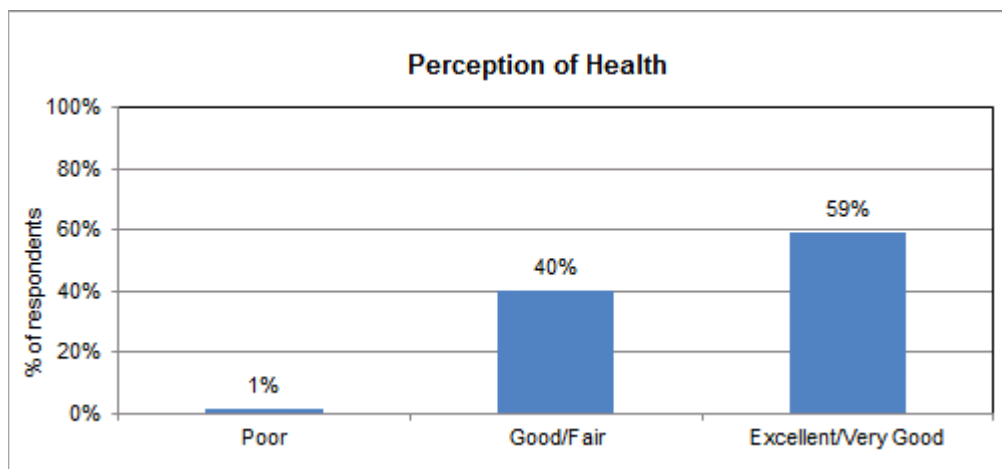
9. In general, how do you describe your health?

- ☐ Excellent
- ☐ Very good
- ☐ Good
- ☐ Fair
- ☐ Poor

Perception of Health

Youth perceptions of good health are strong predictors of long-term healthy behaviours and quality of life (Saewyc et al., 2006).

We asked students to describe their health.





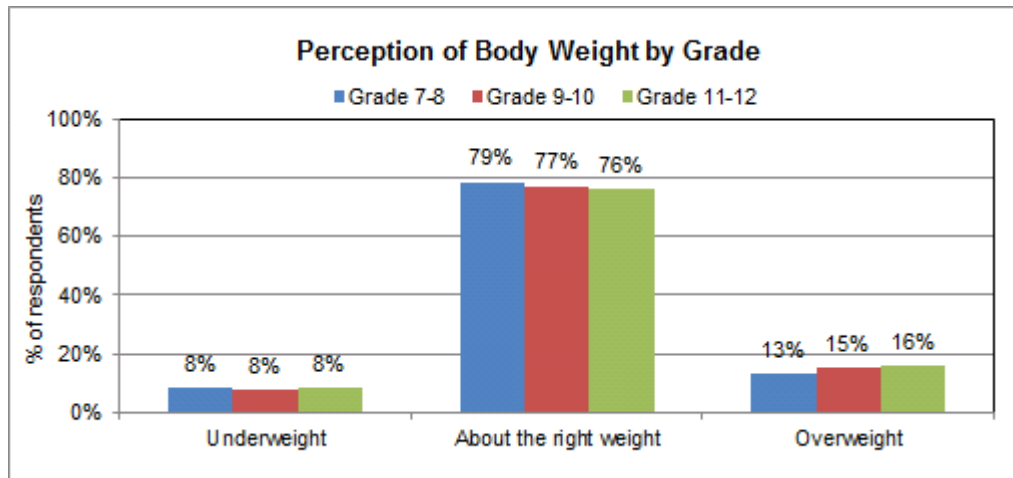
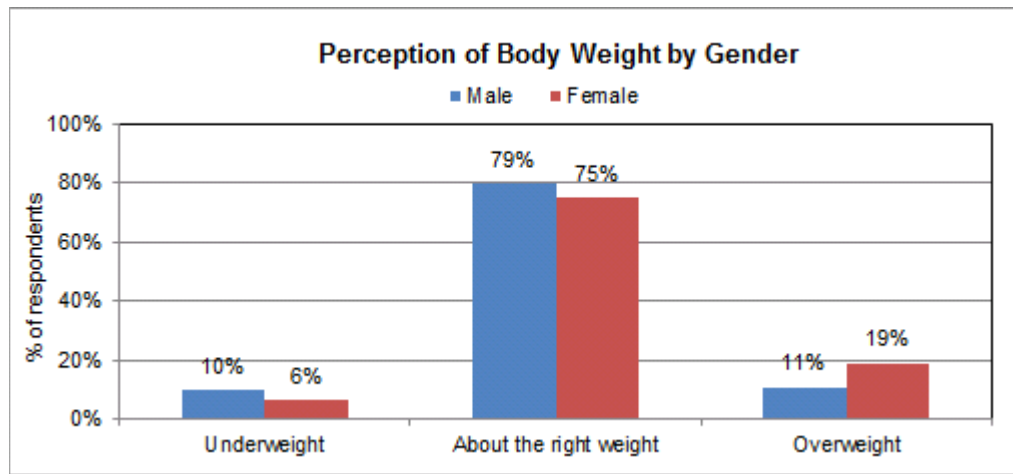
Perception of Body Weight

62% of young people of normal weight feel that their body is about the right size (Boyce, King, & Roche, 2008). Studies show that girls tend to see their bodies as being too fat and boys tend to see their bodies as too thin (Freeman et al., 2011).

We asked students about their own perception of their body weight. Overall, 77% of students reported that they considered themselves to be about the right weight; 15% consider themselves to be overweight; and 8% consider themselves to be underweight.

10. Do you consider yourself:

- ☐ Overweight?
- ☐ About the right weight?
- ☐ Underweight?



11. Do you have a part-time job outside of school hours? (babysitting, restaurant, etc.)

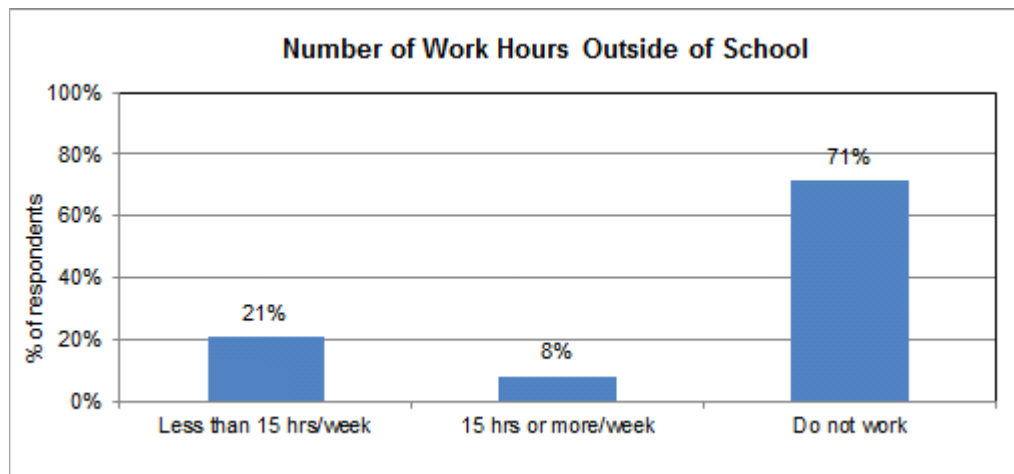
- ☐ Yes – I work under 15 hours per week
☐ Yes – I work 15 or more hours per week
☐ No

Youth Employment

Some studies have shown that by graduation 80% of high school students have had a part-time job (Loughlin & Barling, 1998).

Youth employment can be complimentary with schooling. It may teach time management and organizational skills, responsibility and may motivate students to work harder at school to achieve a career goal (Rothstein, 2007). However, working more than 20 hours per week may cause students to achieve at lower levels academically (Staff et al., 2010). They are also more likely to engage in negative behaviors, have lower academic and career aspirations, and are less likely to hold leadership positions, engage in extracurricular activities, and attend or stay in university/college (Marsh & Kleitman, 2005).

We asked students about part-time work. Overall, 29% of students had a part-time job outside of school.



Youth Volunteering

12. How often do you take part in unpaid volunteer activities/work?

- ☐ Never
- ☐ Once a year
- ☐ Once a month
- ☐ Once a week
- ☐ Daily

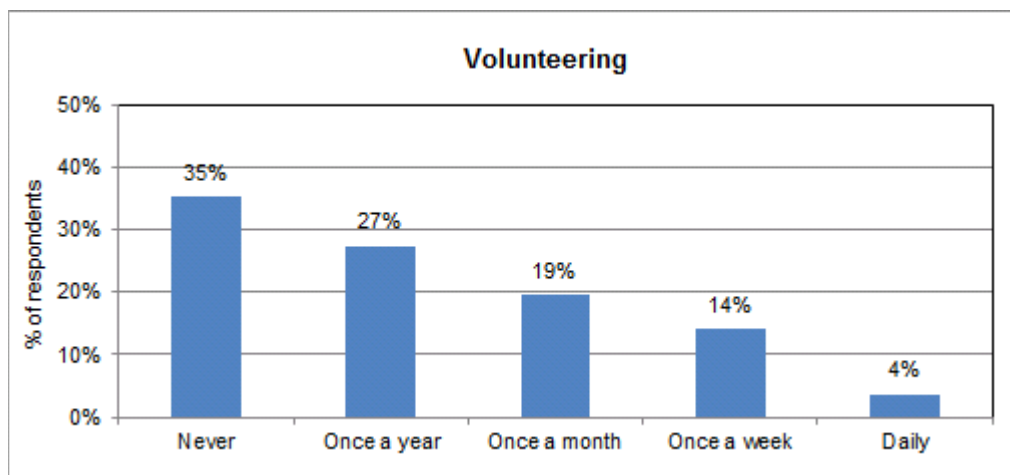
Studies show that people who volunteer report better health and greater happiness (Borgonovi, 2008). Feeling engaged and valued within extracurricular activities is shown to be an important protective factor associated with good or excellent health (Smith et al., 2011).

"Positive youth development approaches should focus on building relationships with caring adults within the community through engagement in challenging activities in which youth are active participants rather than solely recipients of services or supports." (Morrison & Kirby, 2010)

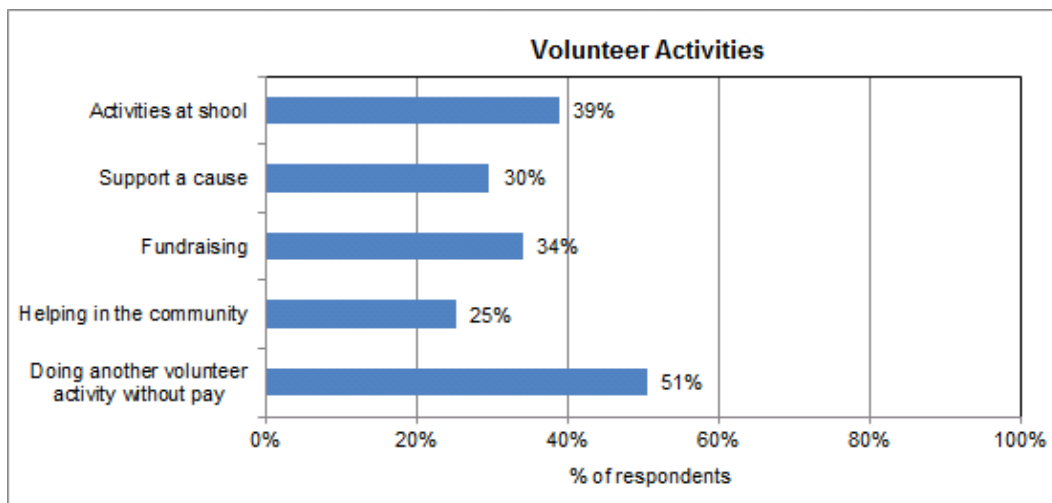
13. What kinds of volunteer activities have you participated in?
Choose all that apply.

- ☐ I do not volunteer
- ☐ Activities at school (yearbook committee, student council, etc.)
- ☐ Support a cause (food bank, environment group etc.)
- ☐ Fundraising (charity, school trips, etc.)
- ☐ Helping in the community (hospital volunteering, etc.)
- ☐ Doing another volunteer activity without pay

37% of students report volunteering once a month or more often.



These are the types of activities that students reported participating in:



School and Community Connectedness

Adolescents with positive interpersonal relationships tend to fare better in terms of mental health (Freeman et al., 2011; Smith et al., 2011).

A B.C. youth study showed that the more connected youth felt to family or school, the more likely they were to report excellent general health and higher self-esteem, and the less likely they were to have considered suicide (Smith et al., 2011).

"Students need to feel safe... safe enough to try new things... safe enough to discover their strengths." (Morrison & Kirby, 2010)

14. Do you agree with each of the following statements? (See statements in chart)

- ☐ Agree
☐ Disagree

The following tables show the percentage of students who agree with the feelings expressed in the statements:

	% Agree	% Disagree
I feel close to the people at this school	79%	21%
I feel I am a part of this school	84%	16%
I am happy to be at this school	86%	14%
I feel safe at my school	90%	10%
I feel safe in my community	87%	13%
I feel safe in my home	98%	2%
I have at least one close friend that I can share things with	94%	6%
I feel my family supports me	93%	7%
I feel involved in my community	60%	40%

Youth who are able to identify adults in the community who know and care about them tend to experience a greater sense of wellbeing (Morrison & Kirby, 2010).

15. Do you agree with each of the following statements? (See statements in chart)

- ☐ Agree
☐ Disagree

	% Agree	% Disagree
At my school adults care about people my age	84%	16%
At my school there is an adult who I trust	73%	27%
If I need help, I believe a counselor or other adult could help me	78%	22%
If I need help, I would talk to a counselor or other adult	65%	35%

Bullying

Bullying is characterized by acts of intentional harm, repeated over time, in a relationship where an imbalance of power exists. It can include physical actions (punching, kicking, biting), verbal actions (threats, name calling, insults, racial or sexual comments), and social exclusion (Public Safety Canada, 2008).

School bullying is associated with:

- Lower academic achievement
 - Lower school satisfaction
 - Lower levels of school engagement
- (Schneider et al., 2012)*

Consequences of cyber-bullying are similar to those of traditional bullying, including increased anxiety and emotional distress. Online victimization may also lead to more serious distress, including depression, self-harm, and suicide (Schneider et al., 2012).

Victims of both cyber and school bullying were more than four times as likely to experience depressive symptoms and more than five times as likely to attempt suicide as were non-victims (Schneider et al., 2012).

Roughly 6% of students aged 12 to 19 report bullying others on a weekly basis, and 8% report that they are victims of bullying weekly (Public Safety Canada, 2008).

We asked students about bullying and personal threats in the past year.

62. How many times in the past year (12 months) has anyone done any of the following TO YOU: (See activities in chart)

☐ Never

☐ 1 – 5 times

☐ 6 or more times

☐ Every day

	Never in the past year	1 or more times in the past year
a. Physically threatened or injured you	74%	26%
b. Threatened or injured you with a weapon such as a gun, knife or club	93%	7%
c. Bullied, taunted or ridiculed you	61%	39%
d. Said something bad about your race or culture	78%	22%
e. Said something bad about your sexual orientation or gender identity	88%	12%
f. Said something bad about your body shape or size	61%	39%
g. Asked for personal information over the internet (e.g. address, phone # or last name)	80%	20%
h. Made you feel unsafe when you were in contact with them over the internet	91%	9%
i. Bullied or picked on you through the internet (e.g. posted something on Facebook or emailed you)	84%	16%



Emotional, Psychological and Social Wellbeing

We asked students to respond to a number of statements related to thoughts and feelings.

16. During the past month (30 days) how often did you feel...
- a. Happy
 - b. Interested in life
 - c. Satisfied with life
 - d. That you had something important to contribute to society
 - e. That you belonged to a community (like a social group, your school or neighbourhood)
 - f. That our society is becoming a better place for people like you
 - g. That people are basically good
 - h. That the way our society works makes sense to you
 - i. That you liked most parts of your personality
 - j. Good at managing the responsibilities of your daily life
 - k. That you had warm and trusting relationships with others
 - l. That you had experiences that challenged you to grow and become a better person
 - m. Confident to think or express your own ideas or opinions
 - n. That your life has a sense of direction or meaning to it
- | | |
|--|--|
| <input type="checkbox"/> Never | <input type="checkbox"/> 2 or 3 times a week |
| <input type="checkbox"/> Once or twice | <input type="checkbox"/> Almost everyday |
| <input type="checkbox"/> About once a week | <input type="checkbox"/> Every day |

Defining Mental Health

Responses were analyzed using the Keyes Mental Health Continuum to categorize children into three categories of mental health. The first three statements (a, b, c) represent emotional wellbeing. The next six statements (d to i) represent psychological and social wellbeing (Keyes, 2006; Keyes, 2009).

(1) Flourishing: (respond 'every day' or 'almost every day' to one of the first three statements and to at least six of the other statements)

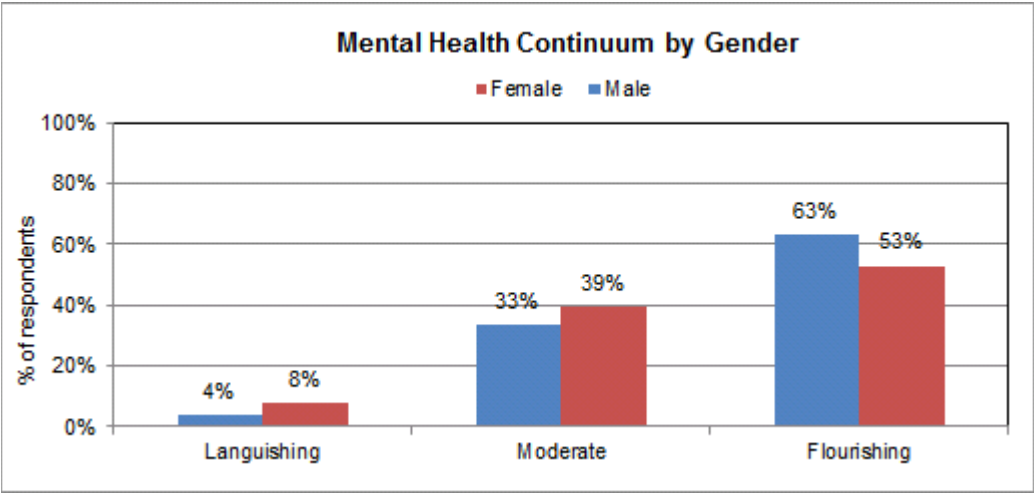
Flourishing is defined as being filled with positive emotion and functioning well psychologically (i.e. have self-acceptance, positive relationships, personal growth, purpose in life, and environmental mastery and autonomy) and socially (see society as meaningful and understandable, see society as possessing the potential for growth, when they feel they belong to and are accepted by their communities, and see themselves as contributing to society).

(2) Languishing: (respond 'never' or 'once or twice' to one of the first three statements and at least six of the other statements)

Languishing is defined as possessing low level of well-being and may be conceived as a life of emptiness and stagnation, constituting of quiet despair that parallels accounts of individuals who describe themselves and life as "a shell", and "a void", "hollow", "empty".

(3) Moderate: (are neither flourishing nor languishing)

The Mental Health Continuum tool indicated that overall, 58% of students reported flourishing mental health, 36% reported moderate mental health, and 6% reported languishing mental health.



Anything less than flourishing mental health is not optimal and may in fact be a potential warning sign for poor mental health in the future. Actions to both sustain flourishing states of mental health and actions to enhance moderate or languishing states of mental health are necessary to protect and promote mental health (Keyes, 2006).

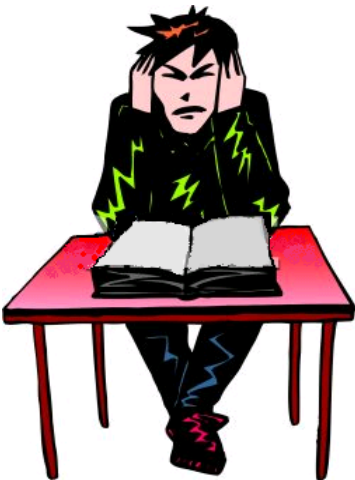
A Canadian study reports that 21 to 26% of boys and 24 to 38% of girls have indicated that they feel depressed at least once a week. Students with low levels of emotional wellbeing are also more likely to report low levels of academic achievement (PHAC & JCSH, 2008a).

44% of students reported feeling so sad or hopeless in the past 12 months that they stopped doing some usual activities for awhile.

17. During the past 12 months, did you ever feel so sad or hopeless that you stopped doing some usual activities for awhile?

☐ Yes

☐ No





Youth Sleep

There is a normal change in sleeping patterns during adolescence. Youth require 9 to 9½ hours of sleep per night, but the actual sleep time for this group is less (Greig et al., 2010; Millman, 2005).

Adequate sleep is a critical factor in youth health and health-related behaviors (Chen, Wang, & Jeng, 2006). There is a significant correlation between sleep quality and mental wellbeing (British Columbia Ministry of Health, 2007).

Self-reported shortened total sleep time, erratic sleep/wake schedules, late bed and rise times, and poor sleep quality are associated with poor academic performance for youth (Wolfson & Carskadon, 2003).

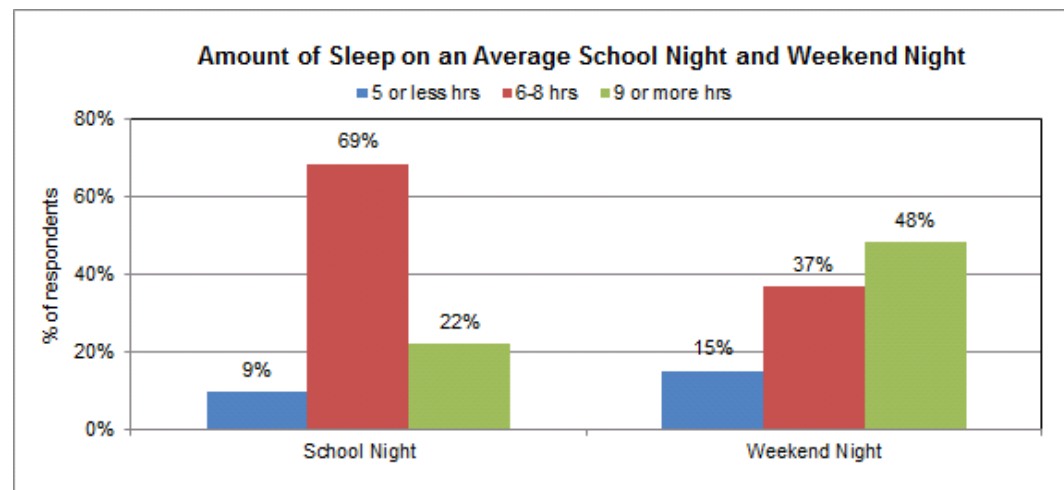
Students were asked how many hours of sleep that they get on an average school night (Sunday to Thursday) and weekend night (Friday and Saturday).

18. On an average **school** night (Sunday to Thursday), how many hours of sleep do you get?
- ☐ 4 or less hours
 - ☐ 5 hours
 - ☐ 6 hours
 - ☐ 7 hours
 - ☐ 8 hours
 - ☐ 9 hours
 - ☐ 10 or more hours

19. On an average **weekend** night (Friday or Saturday), how many hours of sleep do you get?
- ☐ 4 or less hours
 - ☐ 5 hours
 - ☐ 6 hours
 - ☐ 7 hours
 - ☐ 8 hours
 - ☐ 9 hours
 - ☐ 10 or more hours

20. How often do you have trouble going to sleep or staying asleep?
- ☐ Never
 - ☐ Rarely
 - ☐ Often
 - ☐ Always

21. How often do you find it difficult to stay awake during class or at school?
- ☐ Never
 - ☐ Rarely
 - ☐ Often
 - ☐ Always



Students were asked how often they had trouble going to or staying asleep, and staying awake during class or at school.

37% of students reported that they 'often' or 'always' have trouble going to sleep or staying asleep.

25% of students reported that they 'often' or 'always' find it difficult to stay awake during class or school.

Ideas for Action

The key components of mental health promotion include supporting individual resilience, creating supportive environments and addressing the broader determinants of health (Morrison & Kirby, 2010).

What Can Schools Do?

Positive Mental Health

Key strategic actions for positive mental health promotion/programming include:

- Balancing universal and targeted approaches
 - Starting early with the youngest children and continuing with older ones
 - Operating for a lengthy period of time
 - Taking a whole-school approach
 - Creating supportive public and school policies
 - Building safe and caring environments
 - Directing instruction for students on skills and strategies that enhance their coping and problem solving capacities
 - Engaging and mobilizing community members in promoting protective factors
 - Collaborating and integrating services and supports that share a common vision
- (Morrison & Kirby, 2010; Weare & Nind, 2011)

Targeting Bullying

Reducing bullying in schools substantially impacts youth's emotional wellbeing (Bond et al., 2001). There is consensus that a whole school approach is effective in reducing bullying. The key principles of this approach are:

- Strong teacher and adult leadership and strong student-teacher bonding
 - Clear and consistent behavioural norms
 - Adult awareness and involvement
 - Effective (focused and intense) supervision
 - Involvement of multiple stakeholders
 - Involvement of youth in program development and delivery
 - Target multiple and protective risk factors
 - Focus on early, long-term interventions
 - Be gender and age specific and focus on social skills
- (Public Safety Canada, 2008)

Resource: The Joint Consortium for School Health has developed the Positive Mental Health Toolkit. The tool kit is a resource designed to help schools promote positive mental health. To access the resource go to <http://www.jcsh-cces.ca> or contact Manitoba Healthy Schools.

Perceptions of healthy body weight

Media literacy interventions teach youth how to critically analyze the media and recognize cultural pressures regarding body shape and weight. They focus on changing youth perception about the "thin ideal" promoted by the media and developing their ability to realistically assess what constitutes a healthy body (British Columbia Ministry of Health, 2007).

What Can Communities Do?

Collaboration between school and community fosters student connections and student learning (Morrison & Kirby, 2010). Together, schools and communities can:

- Create continuums of care for positive development and prevention of mental health concerns
- Organize evidence-informed early intervention services and supports that can be accessed easily and timely
- Provide continuity of assistance for those with chronic conditions who require more intensive supports

(Morrison & Kirby, 2010)

What Can Parents Do?

Bullying

Autonomy supportive practices such as acknowledging the child's feelings, taking the child's perspective, providing rationale, allowing choice, and minimizing pressure have been found to be most effective in creating pro-social values and behaviours in preventing bullying (Roth, Kanat-Maymon, & Bibi, 2011).

Positive Mental Health

Parents can promote positive mental health through five core positive parenting principles:

- 1) Ensuring a safe and engaging environment
- 2) Creating a positive learning environment
- 3) Using assertive discipline
- 4) Having realistic expectations
- 5) Taking care of oneself as a parent

(PHAC, n.d.-a)

What Can Youth Do?

Positive Mental Health

Mentoring programs have been shown to contribute to students' resiliency, enhance their self-esteem and increase their learning (Ellis & Small-McGinley, 2000).

Sleep

The following tips can help youth to improve their sleep:

- Go to bed at the same time each night and get up at the same time each morning
- Make sure the bedroom is quiet, dark, comfortable and cool
- Do not watch TV, use computers or phones, or play video games in the bedroom
- Get exercise, but not within a few hours of bedtime
- Avoid meals within a few hours of bedtime

(Active Healthy Kids Canada, 2012)

Crisis Services are available and accessible across the province for youth, schools, communities, and family. A contact list is on-line at www.gov.mb.ca/healthyliving/mh/crisis

Physical Activity

Why We Study Youth Physical Activity

"Escalating levels of obesity and chronic disease worldwide have ignited public health interest in physical activity and inactivity. There is a large body of evidence to suggest that physical activity contributes significantly to the health of the cardiovascular, cellular, endocrine, and skeletal systems and to mental health." (Naylor & McKay, 2009)

*The Canadian Physical Activity Guidelines recommend;
For health benefits, youth aged 12 to 17 years should accumulate at least 60 minutes of moderate to vigorous intensity physical activity daily. This should include:*

- *Vigorous intensity activities at least three days per week*
- *Activities that strengthen muscle and bone at least three days per week*
- *More daily physical activity provides greater health benefits*

(Canadian Society for Exercise Physiology, 2012)

Being active for at least 60 minutes daily can help teens:

- *Improve their health*
- *Do better in school*
- *Improve their fitness*
- *Grow stronger*
- *Have fun playing with friends*
- *Feel happier*
- *Maintain a healthy body weight*
- *Improve their self-confidence*
- *Learn new skills*

(Canadian Society for Exercise Physiology, 2012)

Only 7% of Canadian youth accumulate 60 minutes of moderate-to-vigorous physical activity on at least six days a week (Active Healthy Kids Canada, 2012).



29. Mark how many minutes of **hard/vigorous** physical activity you did for each day last week. Include activities that lasted for at least 15 minutes at one time during physical education class, lunch, recess, after school, evenings, and spare time.

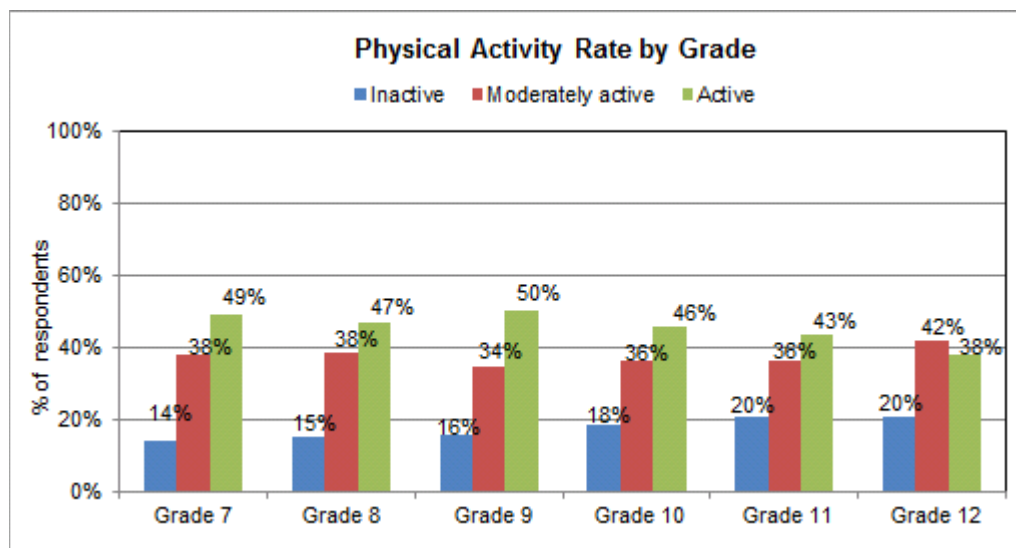
31. Mark how many minutes of **moderate** physical activity you did for each day last week. Include activities that lasted for at least 15 minutes at one time during physical education class, lunch, recess, after school, evenings, and spare time.

Students' Physical Activity Rates

In 2007, as part of an effort to increase physical activity levels, Manitoba Education mandated the amount of time that Kindergarten to Grade 10 students spend in Physical Education/Health Education (PE/HE) classes in 2007. Grade 11 and 12 PE/HE were made compulsory in 2008.

We asked students to report how much hard/vigorous and moderate physical activity they did each day for the previous week and then calculated their level of physical activity.

45% of students were active, 37% were moderately active and 17% were inactive.



Defining Level of Physical Activity

Physical activity is measured in average daily Metabolic Equivalents (METs), which is an indicator of the average intensity of a student's daily physical activity.

- Moderate intensity physical activity (eg. walking, biking and recreational swimming) burns 3 to 6 METs
- Vigorous intensity physical activity (eg. jogging, team sports, fast dancing, jump rope) burns more than 6 METs

Average Daily METs = $\left[(\# \text{ of Vigorous hours} \times 6 \text{ METs}) + (\# \text{ of Moderate hrs} \times 3 \text{ METs}) \right] / 7 \text{ days}$

- **Inactive** - Average Daily METs are less than 3
- **Moderately active** - Average Daily METs range from 3 to 8
- **Active** - Average Daily METs are greater than 8



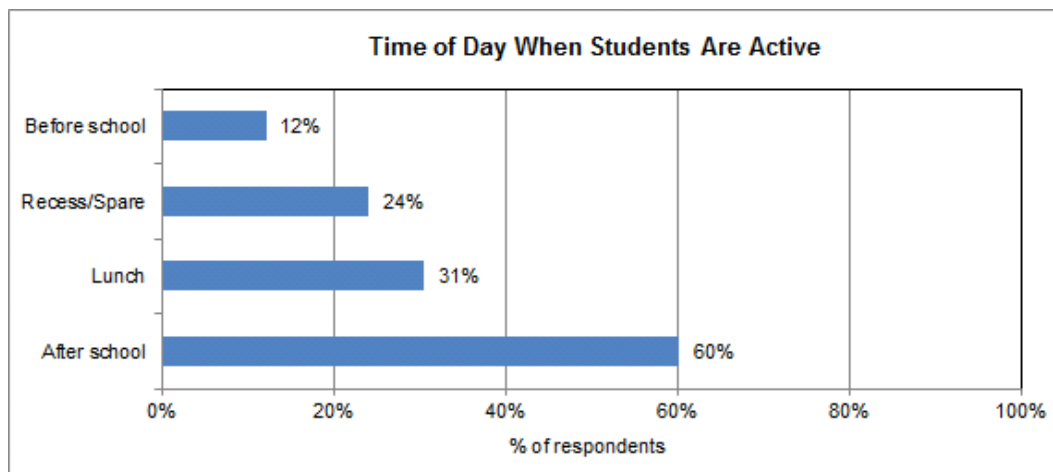
22. How physically active are you at the following times?

(Before school; Recess/spare; Lunch; After school)

- ☐ Active
☐ Somewhat active
☐ Inactive
☐ Does not apply

When Students Are Active

We asked students how physically active they were at the following times: before school, during recess/spare, lunch, and after school.



After school programming that incorporates physical activity can provide the safe location and equipment needed to support youth in being physically active (Pate & O'Neill, 2009; Rye et al., 2008).



Physical Activity with Friends

Having friends that are physically active increases youth participation in physical activity (Centers for Disease Control and Prevention [CDC], 1997). Youth are more likely to report more intense physical activity when in the company of peers or close friends (Salvy et al., 2008).

23. Your closest friends are the friends you like to spend the most time with. How many of your 5 closest friends are physically active?

- ☐ 0
☐ 1
☐ 2
☐ 3
☐ 4
☐ 5

73% of students reported that three or more of their closest friends were active.

24. In the **past month** (30 days), how often did you participate in before school, lunch-time or after school physical activities **organized by your school** (e.g., intramurals, dance club, school team sports)?

- ☐ Never
☐ Less than once a week
☐ 1-3 times per week
☐ 4 or more times per week

25. In the **past month** (30 days), how often did you participate in physical activities **organized outside** of your school with a coach (e.g., hockey, soccer, figure skating, dance, etc.)?

- ☐ Never
☐ Less than once a week
☐ 1-3 times per week
☐ 4 or more times per week

26. In the **past month** (30 days), how often have you played sports or been physically active **without** a coach or instructor present (e.g., biking, skateboarding, skipping, hiking, road hockey, etc.)?

- ☐ Never
☐ Less than once a week
☐ 1-3 times per week
☐ 4 or more times per week

Participation in Physical Activities Inside and Outside of School

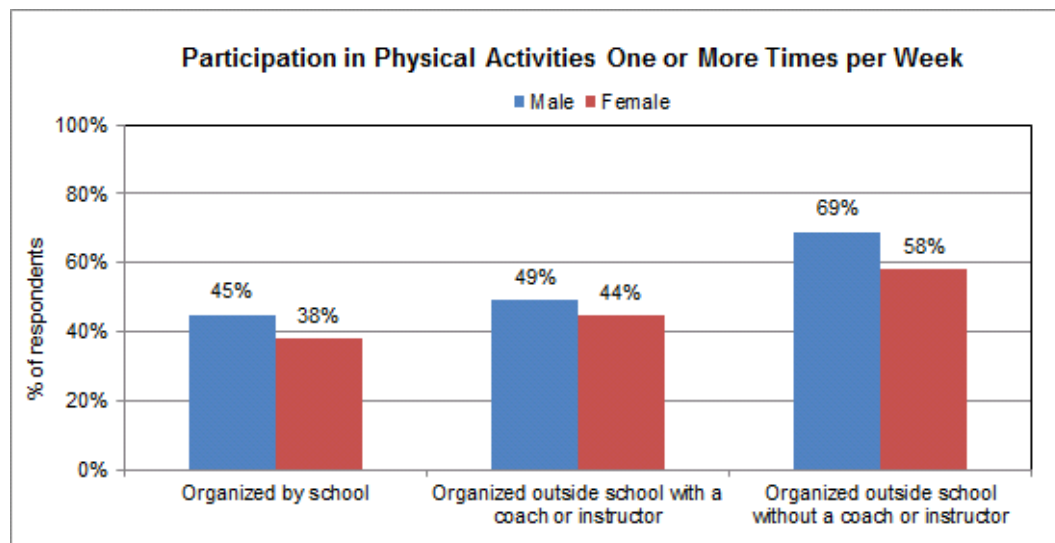
Student participation in extracurricular activities is associated with students having a positive body image, better self-esteem and overall improved mental health (Smith et al., 2011).

We asked students how often they participated in activities organized within and outside of school, and when the activities took place outside of school, how often they were with a coach or without a coach or instructor present.

Overall, 55% of students reported that in the past month they participated in before school, lunch time or after school physical activities organized by their school.

57% of students reported that in the past month they participated in physical activity organized outside of their school **with** a coach.

83% of students reported that in the past month they participated in physical activity organized outside of their school **without** a coach or instructor present.



27. In a typical **week**, how many days did you partly or fully actively travel to or from school (e.g., walking, biking, skateboarding)?

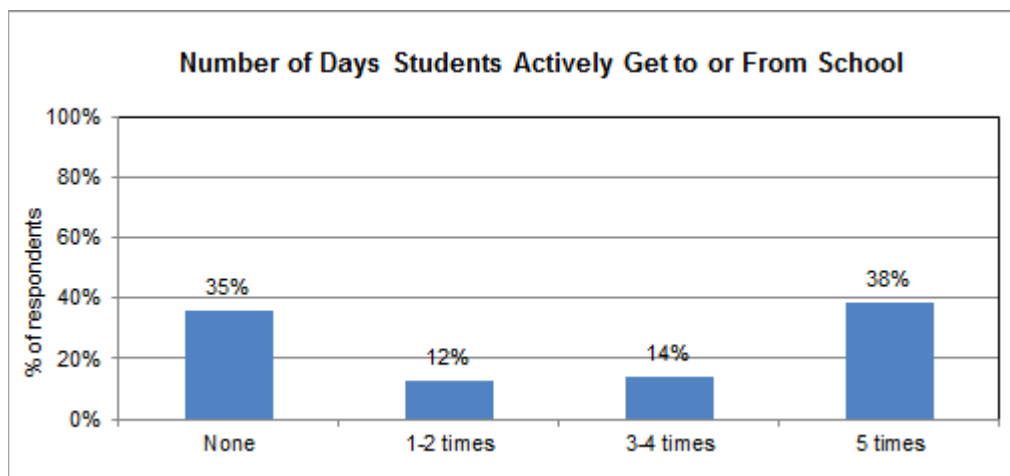
- ☐ None
- ☐ 1 day
- ☐ 2 days
- ☐ 3 days
- ☐ 4 days
- ☐ 5 days

Active Travel to/from School

Students who get to or from school actively are more physically active than those who do not (Pabayo et al., 2012). Studies have found that students who travel to and from school actively are also more physically active outside of those trips (Pabayo et al., 2012).

35% of Canadians aged 10 to 16 report using active transportation to get or from school (Active Healthy Kids Canada, 2012).

Students reported on the number of days they actively traveled (either fully or partly) to school during a typical week.



Parents' Physical Activity

Studies have shown that youth who perceive at least one of their parents as active are more likely to be physically fit (Voss & Sandercock, 2012). Parents' behavioural modeling and encouragement and support of their child's physical activity increase youth physical activity (Voss & Sandercock, 2012).

47% of students reported that their parents were 'often' active outside of work and 40% of students reported that their parents were 'never' or 'rarely' active. 13% of students reported that they 'didn't know'.

28. In a typical **week**, how often is your parent/caregiver physically active (**outside of work**)? This can include walking, running, going to the gym, doing yard work, etc.

- ☐ Never
- ☐ Rarely
- ☐ Often
- ☐ I don't know

30. What stops you from being more physically active?

Choose all that apply.

- ☐ I believe I am active enough
- ☐ I do not like being physically active
- ☐ The activities available do not interest me
- ☐ I do not think physical activity is important
- ☐ It costs too much
- ☐ It's hard to find time to be physically active
- ☐ I do not have a place to be active
- ☐ It's not safe to be active in my neighbourhood
- ☐ It's hard to get to activities
- ☐ My friends are not active
- ☐ My family is not active
- ☐ Medical reasons
- ☐ Other responsibilities (e.g., work, family, etc.)

32. What helps you by physically active or choose to be physically active?

Choose all that apply.

- ☐ I am not physically active
- ☐ Family support
- ☐ Friend support
- ☐ School programs
- ☐ Community programs
- ☐ Sport Manitoba funding
- ☐ Desire to be fit and healthy
- ☐ Desire to look a certain way

Barriers to Students' Physical Activity

We asked students to report what stops them from being physically active and what helps them to be physically active.

41% of students believe that they are active enough.

The boys in your schools reported these barriers to physical activity most frequently:

- 1) Other responsibilities (30%)
- 2) The activities available do not interest me (24%)
- 3) It's hard to find time to be physically active (23%)
- 4) It costs too much (11%)

The girls in your schools reported these barriers to physical activity most frequently:

- 1) Other responsibilities (40%)
- 2) It's hard to find time to be physically active (40%)
- 3) The activities available do not interest me (31%)
- 4) It costs too much (18%)

Facilitators to Students' Physical Activity

12% of students report that they are not physically active.

The boys in your schools reported these facilitators to physical activity most frequently:

- 1) Desire to be fit and healthy (64%)
- 2) Desire to look a certain way (37%)
- 3) Family support (33%)
- 4) Friend support (32%)

The girls in your schools reported these facilitators to physical activity most frequently:

- 1) Desire to be fit and healthy (64%)
- 2) Desire to look a certain way (51%)
- 3) Family support (36%)
- 4) Friend support (34%)

Environmental and policy approaches to increasing physical activity can have especially positive impacts as they benefit all people in the environment rather than focusing on changing the behaviour of one person at a time (Brownson et al., 2001).





Youth and Screen Time

“Screen time”, such as sedentary time spent watching TV, playing computer games, and doing other similar activities, is one of many complex and interactive factors contributing to overweight and obesity (PHAC & JCSH, 2008b). Studies show that too much screen time is linked to declining levels of fitness and nutrition, and sleeping problems (Screen Smart, 2010). One study found that youth who watched TV for more than four hours a day were twice as likely to be obese (Must & Tybor, 2005). Too much other sedentary activity aside from screen time can also be unhealthy.

Television and video games have also been linked to violent and aggressive behaviours, substance use and abuse and body image issues. Most of these negative health impacts are the consequence of the inappropriate advertising and messaging that are part of the media environment (Janssen, 2008).

Minimizing screen time and other sedentary activity can help teens:

- *Maintain a healthy body weight*
- *Improve their self-confidence*
- *Do better in school*
- *Improve their fitness*
- *Have more fun with their friends*
- *Have more time to learn new skills*

(Canadian Society for Exercise Physiology, n.d.)

The Canadian Sedentary Behaviour Guidelines recommend that youth aged 12 to 17 years should minimize the time they spend being sedentary each day by:

- *Limiting recreational screen time to no more than two hours per day (lower levels are associated with additional health benefits)*
- *Limiting sedentary (motorized) transport, extended sitting and time spent indoors throughout the day*

(Canadian Society for Exercise Physiology, n.d.)

Canadian studies show more than 60% of students report watching two or more hours of television per day (PHAC & JCSH, 2008b). 10 to 16 year-olds get an average of 6 hours and 37 minutes of screen time per day. This largest source of screen time is television (2 hours and 39 minutes), followed by computers (2 hours and 7 minutes) and video games (1 hour and 51 minutes) (Active Healthy Kids Canada, 2012).

35. In a typical week, mark how many hours **(outside of school)** you spend in front of a screen, for example, watching TV/movies, playing video/computer games, chatting, text messaging and surfing the internet (e.g., Facebook, Twitter, etc.).

Time Spent in Front of a Screen

We asked students how much time they spent outside of school hours in front of a screen (including TV, computer, texting, etc.).

53% of students reported spending more than two hours per day in front of a screen on weekdays (Monday to Thursday).

67% of students reported spending more than two hours per day in front of a screen on weekends (Friday to Sunday).



Ideas for Action

What Can Schools Do?

Effective and promising policies for physical activity in schools can include:

- Raising the quantity of physical education (PE) with a goal of daily PE, and ensure that students are active for a large percentage of class time
- Providing a variety and choice of physical activities that meet specific needs for all students
- Determining the qualifications that PE teachers and physical activity leaders must have
- Integrating physical activity and lessons about physical, psychological and social benefits of physical activity into other curricula beyond PE class
- Providing adequate, regular and appropriate training for educators, as well as support for implementation
- Exposing youth to a wide variety of physical activities and sports at school (through PE, lunch periods, intramural and interschool sports programs and other extracurricular activities) that meet the needs, interests and abilities of all students, and seek students' input for activities
- Ensuring that there is safe walking and cycling to school
- Providing funding to ensure that adequate facilities and equipment are available for physical activity, including bike racks
- Establishing partnerships with municipalities and youth organizations to optimize use of school and community facilities such that community members access schools after hours and students have community-based physical activity opportunities (recreation centres, playgrounds and parks) during school hours

(Craig et al., 2001; Lagarde & LeBlanc, 2010)

Safe Routes to School programs have been effective in increasing students' overall energy expenditures by focusing on active travel. These programs aim to:

- Educate youth about the health and environmental benefits of active travel
- Bring together citizen groups and professionals to make streets safer for walking and biking along school routes

(Rye et al., 2008)

What Can Communities Do?

The Guide to Community Preventive Services reports strong evidence for the following strategies:

- Community-wide campaigns to increase knowledge about physical activity benefits, ways to increase physical activity, overcoming barriers and increasing participation in community activities
- Individualized health behaviour programs to teach skills and provide social support
- Social support interventions such as buddy systems, contracts with others to complete specified levels of physical activity, walking groups or other groups to provide support
- Community scale urban design and land use policies which consider everyday walking/travel distances, continuity of sidewalks, aesthetics and safety
- Creation of, or enhanced access to places for physical activity such as walking trails, exercise facilities, and other existing nearby facilities, combined with promotion of their use
- Prompts to encourage use of stairs such as motivational signs placed in or near stairwells or at the base of elevators promoting the benefits of taking the stairs

(Community Preventive Services Task Force, 2010)

What Can Parents Do?

Studies suggest that families have the potential to increase youth physical activity through the following practices:

- Talking to their child about being physically active
- Providing transportation to places where their child can be active
- Paying for their child's participation on a sports team or membership to a gym
- Being physically active, model a healthy lifestyle
- Having physical activity equipment/resources in the home
- Implement household rules on screen time

(Bauer, Berge, & Neumark-Sztainer, 2011; Summerbell et al., 2005, Active Healthy Kids Canada, 2012)

Sun/UV Safety



Why We Study Youth Sun/UV Safety

Ultraviolet (UV) rays come from the sun and from indoor tanning equipment. Overexposure to UV rays has been linked to the following negative health effects: sunburns, premature skin aging, skin cancer, eye problems, and weakening of the immune system (Health Canada, 2011a). It is estimated that one in seven Canadians will develop some form of skin cancer in their lifetime, making it the most common type of cancer (Bandi et al., 2010).

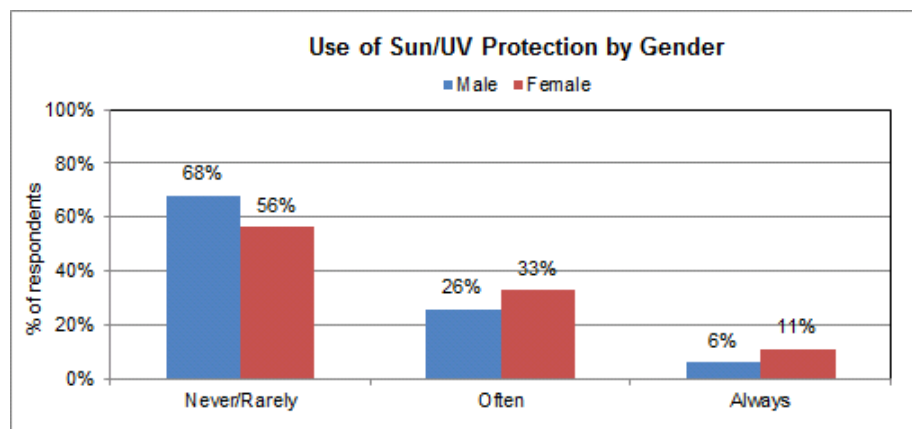
Prevention of sun/UV damage is most important in youth because the effects of sun/UV exposure are cumulative over the lifetime.

Sun/UV Protection

We asked students about their sun/UV protection habits. Overall, 38% of students 'often' or 'always' use sun/UV protection.

33. When you are outside for more than 30 minutes on a sunny day, how often do you seek shade, cover up or wear sunscreen with an SPF of 15 or higher?

- ☐ Never
- ☐ Rarely
- ☐ Often
- ☐ Always



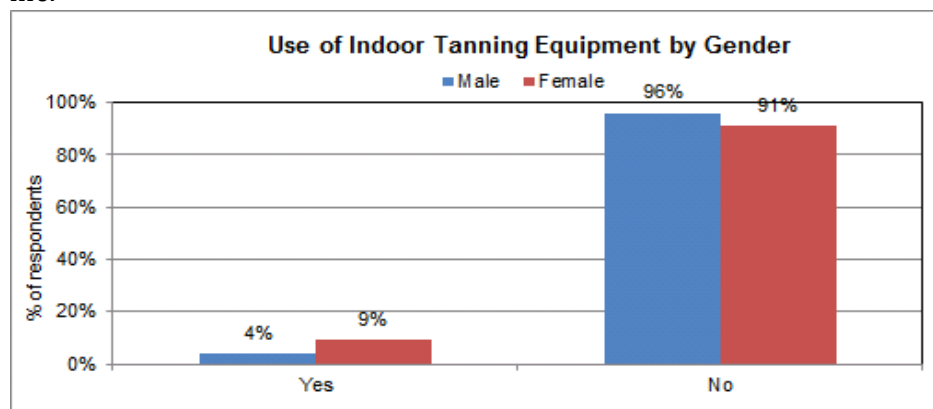
34. Have you ever used any artificial tanning equipment such as a tanning bed, sunlamp or tanning light?

- ☐ Yes
- ☐ No

Artificial Tanning

Artificial tanning equipment can be even riskier than the sun; some machines can emit UV levels up to five times stronger than the Australian summer midday sun (WHO, 2003). Use of artificial tanning equipment, even one time, before the age of 35 is associated with a 75% increase in the risk of melanoma, the most serious form of skin cancer (WHO, 2009).

Overall, 7% of students have used artificial tanning equipment at least once in their life.



Ideas for Action

What Can Schools Do?

Programs should have multiple components that include:

- Addressing peer norms and knowledge
- Aligning sun/UV safety with other healthy behaviours such as promoting sun/UV safety while taking part in physical activity outdoors
- An emphasis on the practice of multiple sun/UV protection behaviours

(Andreeva et al., 2008; Bandi et al., 2010; Canadian Strategy for Cancer Control, 2006)

Resource: The Canadian Cancer Society's SunSense Program provides lesson plans and resources for all ages available at [http://www.cancer.ca/Manitoba/Prevention/Sun and UV/MB-Sun safe communities.aspx?sc_lang=en](http://www.cancer.ca/Manitoba/Prevention/Sun%20and%20UV/MB-Sun%20safe%20communities.aspx?sc_lang=en) (Canadian Cancer Society, 2012).

What Can Communities Do?

Communities can create policies and environment changes to discourage and decrease sun/UV exposure. Some ideas include:

- Creating shade structures near public recreation sites, such as near playground equipment and sports fields' spectator and bench areas
- Coordinating beach umbrella lending programs at public beaches
- Implementing and enforcing bylaws banning youth use of indoor tanning equipment

What Can Youth Do?

Youth can protect themselves by:

- Avoiding exposure and seeking shade during peak hours (11 am to 4 pm, and when the UV index is more than 3)
- Covering up with clothing (e.g. a wide-brimmed hat and sunglasses)
- Wearing a good amount of sunscreen that protects against UVA and UVB rays, is SPF 15 or higher
- Reapplying sunscreen after swimming and sweating
- Avoiding indoor tanning

(Canadian Cancer Society, 2012; CancerCare Manitoba, 2012)

Healthy Eating and Healthy Weights

Why We Study Youth Eating Habits

Eating patterns are established early in life and have an impact on lifelong health (Janssen, 2008).

Healthy eating during childhood contributes to:

- *Optimal health, growth and cognitive development*
- *Good academic performance*
- *Reduced risk of becoming overweight or obese*
- *Reduced risk of chronic disease later in life, such as heart disease, cancer, diabetes and osteoporosis*

(Health Canada, 2012a)

Foods Youth Eat

We asked students how many times* they ate certain foods or drank certain beverages the previous day.

36. Yesterday, how many times did you eat or drink the following:
- a. 100% fruit juice
 - b. Fruit (not counting fruit juice)
 - c. Green salad
 - d. Carrots
 - e. Potatoes (not including french fries or potato chips)
 - f. Other vegetables (not counting carrots, potatoes or salad)
 - g. Whole grains (e.g. whole grain bread, pasta, cereal or brown rice)
 - h. Cheese/yogurt
 - i. Meat or fish (not fried), eggs, nuts, meat alternatives
 - j. Salty or sugary snacks (e.g. potato chips, granola bars, chocolate or cookies)
 - k. Fast food (e.g. hot dogs, hamburgers, fries, pizza or chicken nuggets)
 - l. Water
 - m. Milk (white, chocolate or soy)
 - n. Pop/soda (non diet), slurpees, slushies
 - o. Diet Pop/soda
 - p. Sports drinks (Gatorade, etc.)
 - q. Energy drinks (Red Bull, etc.)
 - r. Coffee/lattes/iced coffee
 - s. Creatine/other supplements
 - t. Meal replacement bars or shakes (Vector, Powerbars)
- | | |
|----------------------------|-----------------------------|
| <input type="checkbox"/> 0 | <input type="checkbox"/> 5 |
| <input type="checkbox"/> 1 | <input type="checkbox"/> 6 |
| <input type="checkbox"/> 2 | <input type="checkbox"/> 7 |
| <input type="checkbox"/> 3 | <input type="checkbox"/> 8+ |
| <input type="checkbox"/> 4 | |

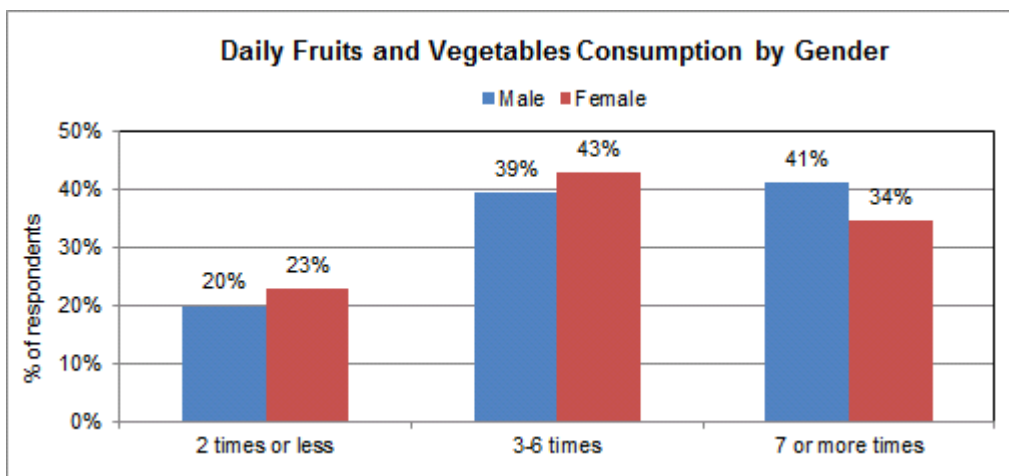
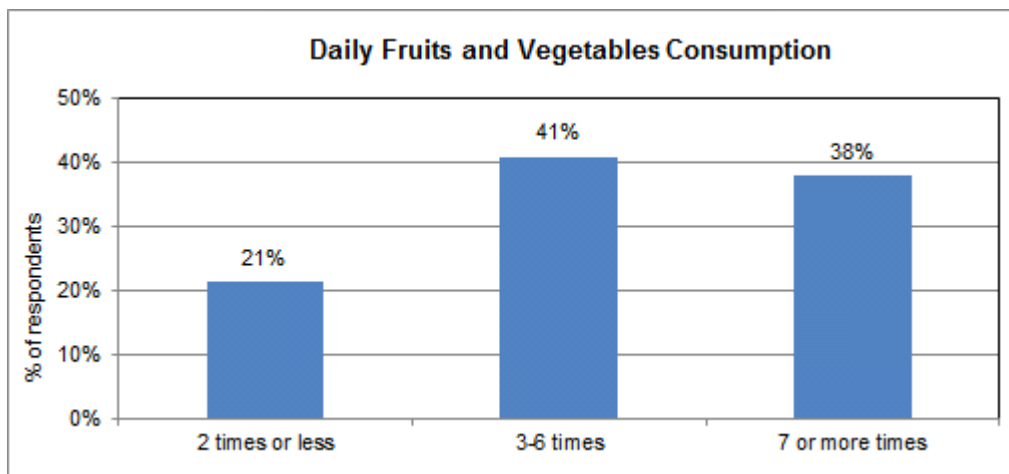
**It should be noted that the food frequency measured above and Canada's Food Guide are not directly comparable, as the Food Guide is concerned with daily recommended servings (quantities) and food frequency measures the number of times a food is actually eaten with no consideration for how much is eaten (Janssen, 2008).*



Fruits and Vegetables

Eating fruit and vegetables has many positive health impacts including lower risk of heart disease, stroke, cancer, overweight and obesity, and may reduce risk of cataracts, chronic obstructive pulmonary disease and hypertension (Dehghan, Akhtar-Danesh, & Merchant, 2011; Van Duyn & Pivonka, 2000).

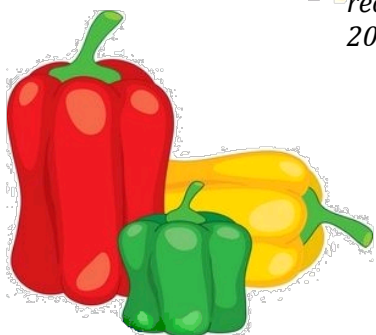
Canada's Food Guide recommends that young people eat seven (females) or eight (males) servings of fruits and vegetables per day (Health Canada, 2011b). The majority of Canadian students report eating less than one serving per day (Janssen, 2008).



- Although 100% fruit juice can be part of a healthy diet, it lacks dietary fiber and when consumed in excess can contribute extra calories. The majority of the fruit*
- recommended should come from whole fruits (Dietary Guidelines for Americans, 2010).*

Defining Daily Fruit and Vegetable Consumption

Daily fruit and vegetable consumption was defined as the sum of times that a student drank 100% fruit juice, and ate fruit (not including fruit juice), green salad, carrots, potatoes (not including french fries or potato chips) and other vegetables (not including salad, carrots or potatoes).



Whole grains

Youth need six (females) or seven (males) servings of grains per day, and it is recommended that at least half of these are whole grains (Health Canada, 2011b). Eating whole grains regularly is associated with lower risk of heart disease and diabetes, and a longer, healthier life (Lang & Jebb, 2003).

33% of students reported eating whole grains three or more times per day.

Milk and Dairy

Youth need three to four servings of milk or alternatives (e.g. yogurt, cheese, soy) per day to promote optimal bone health (Health Canada, 2011b). The Canadian nutrition survey found that by ages 10 to 16, 61% of boys and 83% of girls do not meet their recommended minimum of three servings per day (Garriguet, 2004).

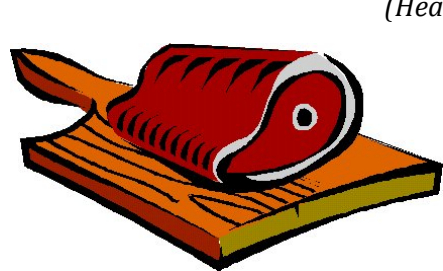
- 21% of students reported consuming milk (white, chocolate or soy) three to four times per day.
- 65% reported consuming milk (white, chocolate or soy) less than three times per day.
- 14% reported consuming milk (white, chocolate or soy) more than four times per day.

65% of boys and 52% of girls reported consuming dairy (milk, cheese and yogurt) three or more times per day.

Meat, Fish, Eggs, Nuts and Meat Alternatives

Youth need two (females) or three (males) servings of meat or alternatives per day (Health Canada, 2011b).

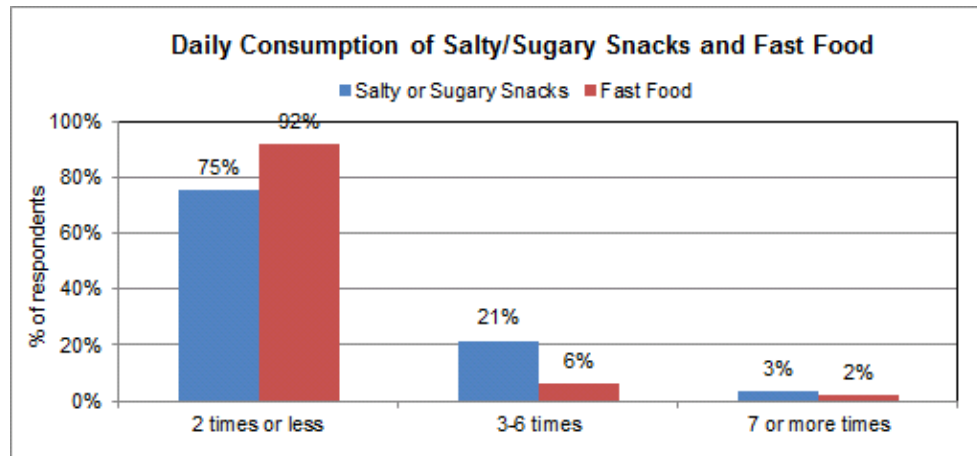
- 36% of students consumed meat and alternatives (including fish, eggs and nuts) two to three times per day.
- 50% consumed meat and alternatives less than two times per day.
- 14% consumed meat and alternatives more than three times per day.



Salty and Sugary Snacks and Fast Foods



With the already demanding schedule of youth and their families, more youth are eating unhealthy snacks, fast food, and pre-prepared/instant food in lieu of balanced meals. Fast and pre-prepared/instant food items don't necessarily follow recommended portion sizes, tend to be higher in fat, sodium, sugar, and calories in general, and have lower nutritional value (Booth, Pinkston, & Carlos Poston, 2005). Access to fast and pre-prepared/instant food items at school, in convenience stores, and at recreational facilities also increases youth's intake (He et al., 2012).

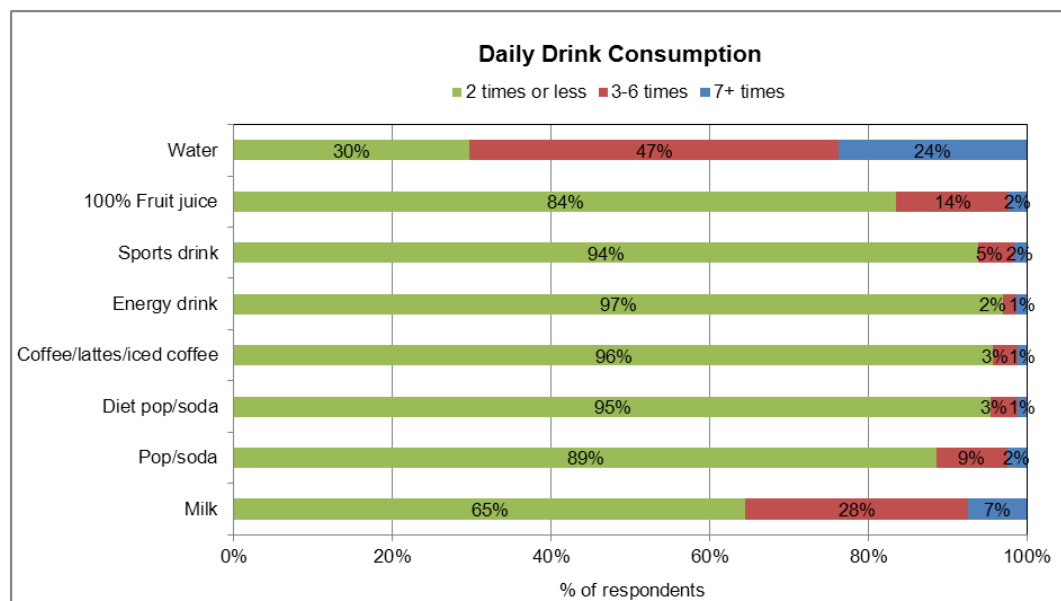


Drinks



Research has shown a link between soft drink consumption and higher body weight. Sugar-sweetened beverages have a low satiety potential compared to solid food, so that total energy intake may be greater with fluid calories than solid calories (Canadian Obesity Network, 2010).

Canadian students report eating fewer sweets and drinking fewer non-diet soft drinks than in the past. This reduction has coincided with the widespread introduction of healthy eating policies in schools across the country (Janssen, 2008; PHAC & JCSH, 2008b).



Creatine/Other Supplements/M meal Replacement Bars or Shakes

While adults may experience athletic improvements with the use of dietary supplements, the benefits for youth aren't yet known (Evans et al., 2012). At this point, there is no research to conclude if creatine is safe to take by those under 18 years of age (Sports Nutrition Advisory Committee & Coaching Association of Canada, 2011). The Sport Nutrition Advisory Committee recommends that athletes should individually have their diet assessed by a Registered Dietitian who specializes in sports nutrition to determine if extra protein is warranted (Sports Nutrition Advisory Committee & Coaching Association of Canada, 2011).

8% of students reported consuming creatine or other supplements at least once per day. (Note: $\geq 10\%$ of students did not have a valid response.)

14% of students reported consuming a meal replacement bar or shake at least once per day. (Note: $\geq 10\%$ of students did not have a valid response.)

Breakfast Habits

Eating breakfast, at home or school, improves youth's memory, concentration levels, problem-solving abilities and creative thinking; it reduces hunger and maintains a healthy weight (Garriguet, 2004; Healthy Child Manitoba, 2006).

A study showed that only half of B.C. teens always eat breakfast on school days (Poon et al., 2006).

We asked students about their breakfast habits. Overall, 25% reported that they do not usually eat breakfast.

Of those students who reported eating breakfast 94% reported eating breakfast at home, and 6% reported eating breakfast at school.

Almost half (48%) of Manitoba schools who participated in the Manitoba School Nutrition survey provide breakfast programs (Government of Manitoba, 2009a).

We asked students why they do not usually eat breakfast.

- 66% reported they do not have time for breakfast.
- 30% reported they cannot eat early in the morning.
- 5% responded there is not always enough food in the home.



37. Where do you usually eat breakfast?

- ☐ At home
- ☐ At school
- ☐ I do not usually eat breakfast

38. What is the main reason you do not usually eat breakfast?

- ☐ I do eat breakfast
- ☐ I do not have time for breakfast
- ☐ I cannot eat early in the morning
- ☐ There is not always enough food in my home

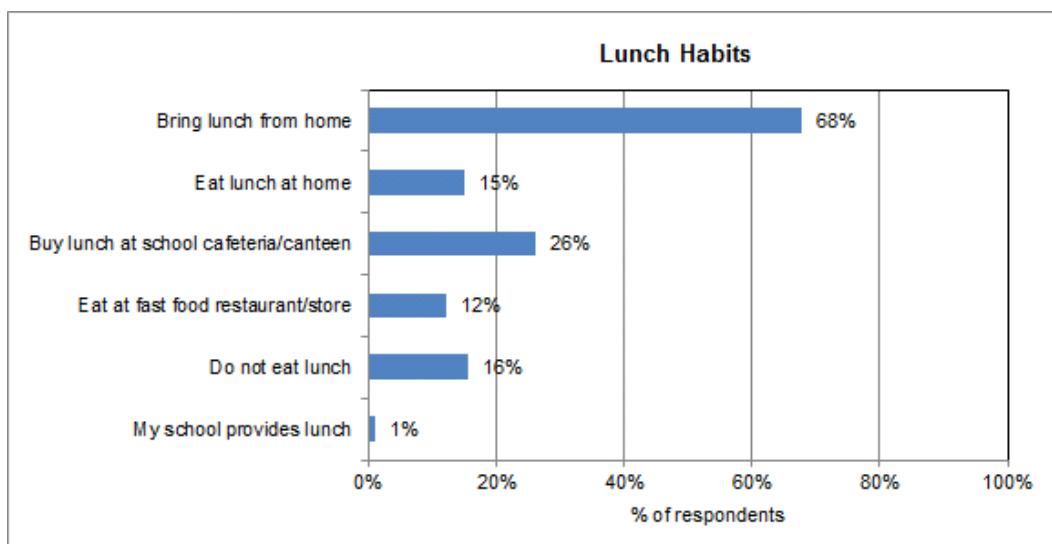
Lunch Habits

The 2009 Manitoba Schools Nutrition Survey reported that 95% of Manitoba schools with cafeterias follow some nutrition guidelines or standards, an increase from 57% in 2006 (Government of Manitoba, 2009a). Schools can encourage students to eat home-prepared lunches or healthy choices from the school cafeteria by providing adequate microwaves for reheating food, offering a wide selection of healthy choices in the cafeteria, minimizing cafeteria lines, and by demonstrating that staying on-site for lunch would allow them to participate in school lunch time activities (Beaulieu & Godin, 2012).

39. For lunch on school days do you:
(Choose all that apply.)

- ☐ Bring lunch from home
- ☐ Eat lunch at home
- ☐ Buy lunch at the school cafeteria/canteen
- ☐ Eat at a fast food restaurant or store
- ☐ Don't eat lunch
- ☐ My school provides lunch

We asked students about their lunch habits on school days.



Dinner Habits

A longitudinal Canadian study found that youth regularly having dinners together with their family each evening not only promotes better eating behaviours and physical health, but also relates to better cognitive, emotional, and social competencies. This study also showed that in Grade 6, over two-thirds of students indicated they sat down to dinner with their families on average five or more times a week. This percentage declined to just over half of Grade 10 students (King & Hoessler, n.d.).

40. How often do you eat dinner (the evening meal) with the people you live with?

- ☐ Never
- ☐ Rarely
- ☐ Often
- ☐ Always

We asked students about how often they had dinner with the people that they live with.

85% of students reported that they 'often' or 'always' eat dinner with the people they live with.

Youth and Healthy Weight

Currently, one in four youth in Canada are overweight or obese. Overweight and obesity among youth has been rising steadily in Canada in recent decades. Increases were highest among youth aged 12 to 17 years with overweight and obesity more than doubling for this age group, from 14 to 29% between 1979 and 2004 (PHAC, n.d.-b).

"The most widespread consequences of childhood obesity are psychosocial. Obese children become targets of early and systematic discrimination. As they mature, the effects of discrimination become more culture-bound and insidious." (Dietz, 1998)

Increasingly, obese youth are being diagnosed with a range of health conditions previously seen almost exclusively among adults, including high cholesterol, high blood pressure, Type 2 diabetes, sleep apnea and joint problems (PHAC, n.d.-b). Being overweight or obese in early childhood significantly increases the likelihood of being overweight or obese in adolescence and adulthood, with all the accompanying health problems (PHAC, n.d.-b).

Body Mass Index

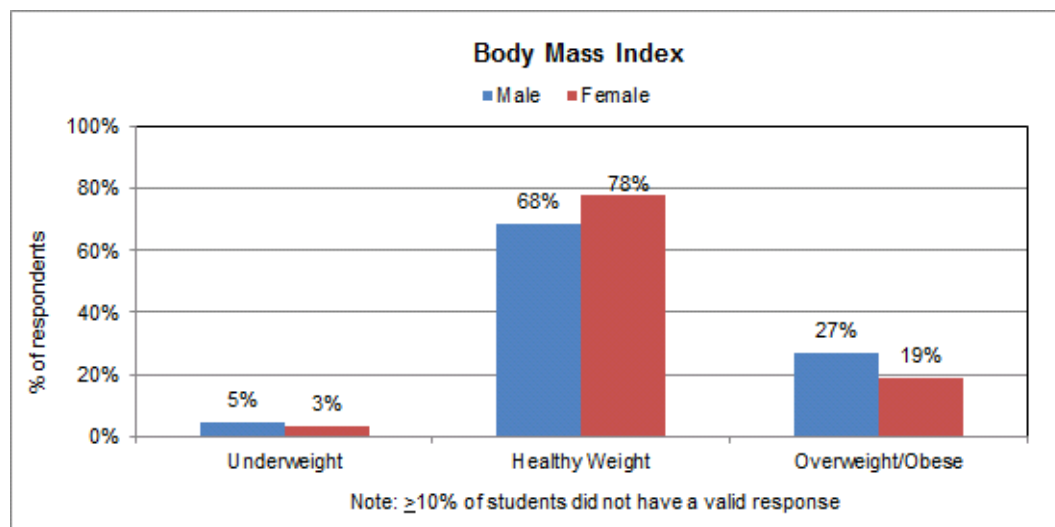
We asked students to report their weight and height. We then calculated their Body Mass Index (BMI) using the CDC's BMI guidelines for Children and Teens (2011a).

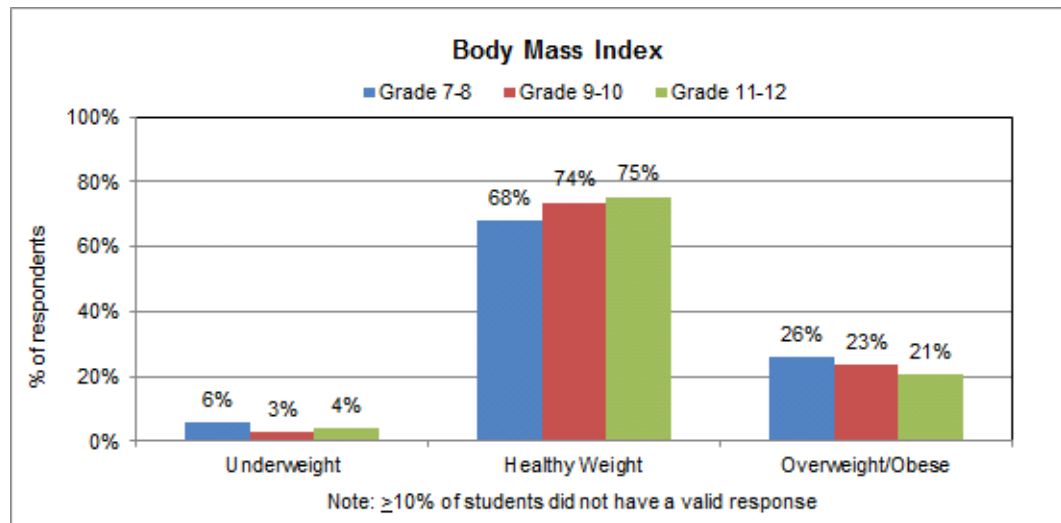
Body Mass Index (BMI) is a ratio calculated using a person's weight in kilograms and height in meters squared (kg/m^2). It measures excess weight and not excess body fat (Statistics Canada, 2010). BMI is an inexpensive and easy-to-perform method of screening for weight categories that may lead to health problems. For youth, BMI is age- and sex-specific and is often referred to as BMI-for-age (CDC, 2011a).

Overall, 73% of students fall within the healthy weight category for their age and sex, 4% fall within the underweight category for their age and sex, and 23% fall within the overweight/obese category for their age and sex. (Note: $\geq 10\%$ of students did not have a valid response.)

7. Without my shoes on, I believe my weight is:

8. Without my shoes on, I think I am this tall:





The behavioural patterns contributing to the rise in obesity include increased consumption of high energy density foods, low consumption of fruits and vegetables and a shift to less active travel and more sedentary leisure time activities. Walkable neighbourhoods, areas with a low density of fast food outlets, and restrictions on the promotion of energy-dense foods all contribute to lower risk of obesity (Allender et al., 2011; Kesten, Griffiths, & Cameron, 2011).

Ideas for Action

What Can Schools Do?

School Food and Nutrition Policies

In 2005, the Manitoba government mandated, and then proclaimed in 2008 through an amendment to the Public Schools Act, all publicly-funded Manitoba schools to develop written school food and nutrition policies as part of their school plan (Legislative Assembly of Manitoba, 2008). The Manitoba School Nutrition Survey (Government of Manitoba, 2009a) revealed that over 95% of Manitoba's schools have developed nutrition guidelines to determine which foods are served and sold at school.

The *Manitoba School Nutrition Handbook* (Government of Manitoba, 2009b) was developed as a resource and provides guidelines to schools. The handbook helps schools to:

- Promote healthy eating consistent with what is taught in the school curriculum
- Make the healthy choice the easy choice for students
- Support students in establishing lifetime healthy eating habits

School Breakfast Programs

Eating breakfast improves youth's memory, concentration, problem-solving abilities and creative thinking (Government of Manitoba, 2009c). Breakfast programs have been linked with improvements in students' meal patterns and nutritional outcomes, and ensures that students from low-income households have access to a healthy meal at the start of the day (Bartfeld & Ahn, 2011). Establishing partnerships with local partners can help off-set the cost for breakfast programs.

Preventing and Reducing Obesity

Obesity is a sensitive issue and it is important to minimize harm, avoid stigmatization and victim-blaming. Avoid using the term 'obesity' publicly and present interventions as healthy eating and physical activity programs (Flynn et al., 2006; King et al., 2011; Wadden & Didie, 2003).

School-based interventions that have shown significant reductions in youth's weight include the following components:

- Combined healthy eating and physical activity interventions
- Interventions that include family involvement
- Longer term interventions (at least one year)
- Computer or technology-based and peer-modeling strategies
- Interventions that include both educational and environmental components, such as
 - Organized physical activity opportunities during breaks, before and after school
 - After school activity space and equipment
 - Increased physical education class time
 - Available/accessible healthy food
 - Restrictions on unhealthy food
 - Food pricing policies
- Opportunities to develop links between school, home and community activities (Ayliffe & Glanville, 2010; De Bourdeaudhuij et al., 2011; Dobbins & McRae, 2012; Flynn et al., 2006; Khambalia et al., 2012; Lobstein & Baur, 2005)

Home Economics

Home economics education can play a key role in giving youth the knowledge and ability to make healthy eating a part of their lifestyle. Home economics education can help youth to:

- Gain exposure to new, healthy foods
- Recognize and identify fresh, ripe, in-season fruit and vegetables
- Plan balanced and healthy meals
- Create food budgets
- Develop “food literacy” (ability to read, understand and use nutrition labels)
- Gain food preparation skills

(Fordyce-Voorham, 2011)

What Can Communities Do?

Community Programs

- Food preparation classes can broaden the variety of foods that people consume, as well as increase preparation competency using available foods. For example, canning and pickling classes can enable community members to preserve and use foods available in their area.
- Community gardens increase fruit and vegetable consumption, increase physical activity, make use of unused land, and can become a forum for discussing wider social issues (Twiss et al., 2003).

Policy Solutions

To reduce population obesity overall, a comprehensive, multi-sectoral, population-based solution is needed. Regular school-based physical education, comprehensive school health programs, reduced television viewing time and community-wide interventions can contribute to obesity reduction (Canadian Population Health Initiative, 2004; Wadden & Didie, 2003).

Some policy solutions include:

- Subsidy programs to support healthy eating
- Food labeling to help consumers understand the health implications of their choices
- Regulation of marketing to youth, particularly for unhealthy foods and beverages
- Financial incentives to promote physical activity (tax credits)
- Financial disincentives, such as a tax on “unhealthy” foods and beverages

(PHAC, n.d.-c)

What Can Parents Do?

Parents can encourage healthy eating by:

- Offering a variety of foods at meals by following Canada’s Food Guide
- Ensuring youth have the opportunity to eat a healthy breakfast
- Packing a healthy lunch
- Making time for meals together whenever possible
- Including youth in planning and preparing meals

(Government of Manitoba, 2009c)

Tobacco Use

Why We Study Youth Smoking

- *An estimated 150 million youths worldwide use tobacco; approximately half of these young smokers will die of tobacco-related diseases in later life (Bancej et al., 2007).*
- *Every \$1 spent on preventing tobacco use results in \$19 saved in treatment costs for smoking-related health problems (St. Leger & Nutbeam, 2000).*
- *17% of all deaths in Canada are attributed to smoking (Health Canada, 2011d).*
- *More deaths are caused each year by tobacco use than by all deaths from HIV, illegal drug use, alcohol use, motor vehicle injuries, suicides, and murders combined (CDC, 2011b).*
- *The youth smoking rate has decreased over the past decade from 22% in 2001 to 12% in 2011 (Health Canada, 2012b). Continued cessation and prevention programs are needed to further decrease the number of youth smokers and ensure that youth non-smokers don't start smoking.*

Youth Smoking Behaviours

- *Most people, who have ever smoked, started smoking in their teenage years (Bridge & Turpin, 2004).*
- *The average age at which students smoke their first whole cigarette is 13.4 years (Health Canada, 2012c).*
- *The earlier the age of onset of tobacco smoking, the greater the risk the youth will become nicotine dependent (Ziedonis, 2006).*
- *76% of individuals who have ever smoked a whole cigarette will go on to become a current smoker (Health Canada, 2011d).*
- *By the time most teen smokers decide to quit they find they cannot (McVea, 2006).*
- *Symptoms of nicotine dependence among youth can appear within days or weeks of smoking even two cigarettes per week (Alouf, Feinson, & Chidekel, 2006).*

Abstaining from smoking is associated with:

- *Lower likelihood of trying alcohol and marijuana*
 - *Higher likelihood of staying in school*
 - *Higher levels of school engagement*
 - *Greater academic motivation and achievement*
- (Andrews, 1991; Ellickson et al., 1998; Ellickson, Tucker, & Klein, 2008; Thomas, Baker, & Lorenzetti, 2007)*



Who Smokes?

It is estimated that adolescent smokers who reach a consumption level of at least 100 cigarettes will continue to smoke for another 16 to 20 years (Pierce & Gilpin, 1996).

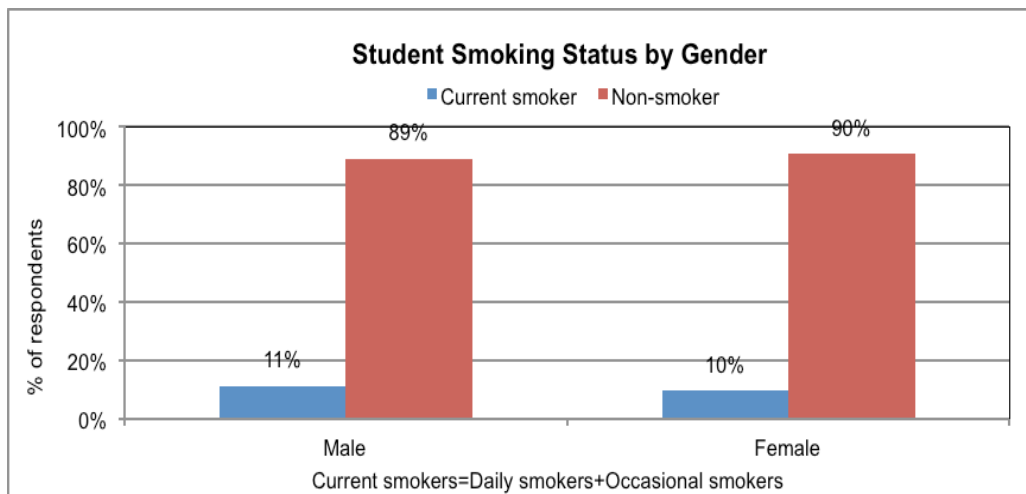
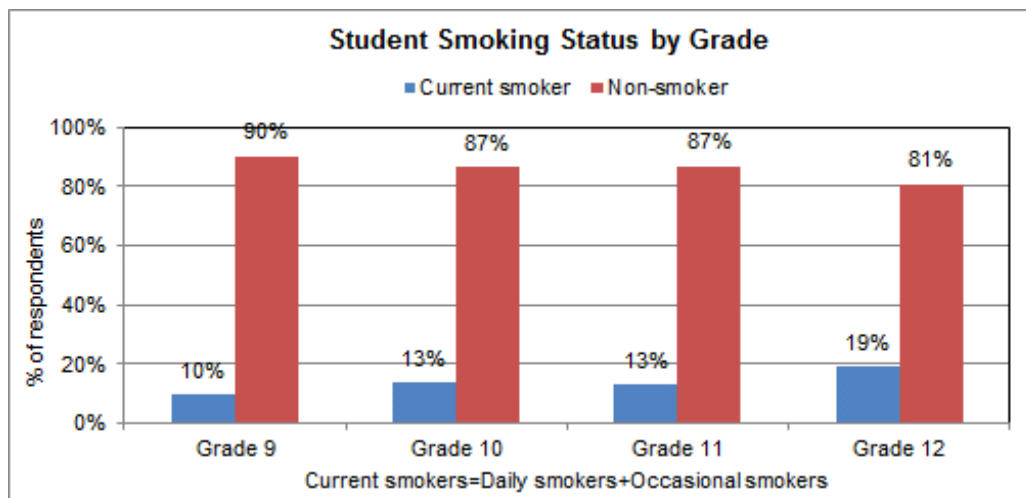
42. Have you smoked 100 or more whole cigarettes in your entire life?

- ☐ Yes
☐ No

43. During the past month, did you smoke a cigarette, even just a few puffs?

- ☐ Yes, every day
☐ Yes, almost every day
☐ Yes, some days
☐ No

Questions 42 and 43 were used to define occasional, daily and non-smokers. Overall, 10% of students are current smokers (this includes both daily and occasional smokers).



Student Susceptibility to Future Smoking

The intention to smoke is considered to be the best single predictor that an individual will smoke (Tingen, Andrews, & Stevenson, 2009). Youth are at increased risk for smoking if their peers, siblings, or parents smoke. Smoking bans in the house, vehicle and school can reduce the risk that students will begin smoking (Hackbarth, 2012; Leatherdale & Manske, 2005; Schultz et al., 2010).

44. At any time during the next year do you think you will smoke a cigarette?

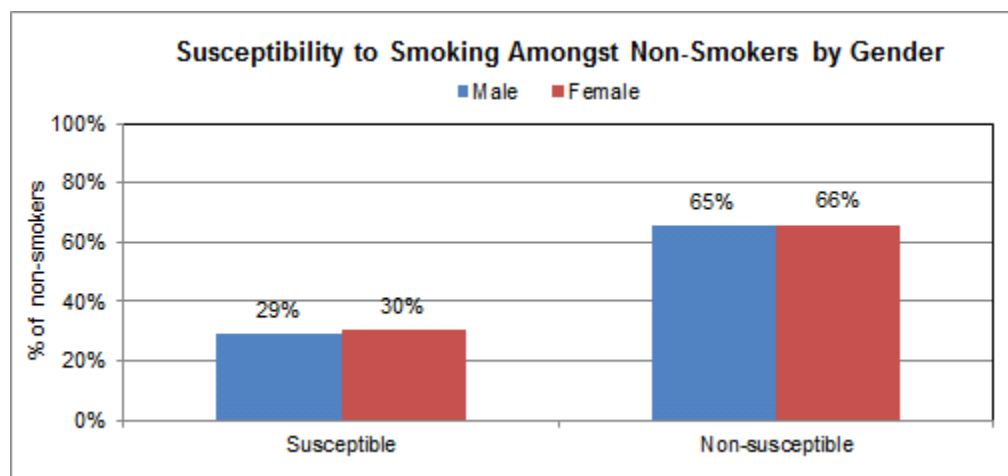
- ☐ Definitely yes
- ☐ Probably yes
- ☐ Probably not
- ☐ Definitely not

We asked students if they thought they might smoke in the future.

38% of all students were susceptible to smoking. In particular, 30% of the students categorized as non-smokers were susceptible to future smoking.

45. Do you think in the future you might try smoking cigarettes?

- ☐ Definitely yes
- ☐ Probably yes
- ☐ Probably not
- ☐ Definitely not



46. If one of your best friends was to offer you a cigarette would you smoke it?

- ☐ Definitely yes
- ☐ Probably yes
- ☐ Probably not
- ☐ Definitely not

Defining Susceptibility to Smoking

Q44, Q45, and Q46 were used to determine a student's susceptibility:

Not susceptible to smoking = Students answered 'Definitely not' to each of questions Q44, Q45 and Q46.

Susceptible to smoking = Students answered 'Definitely yes', 'Probably yes' or 'Probably not' to any of the three questions (Q44, Q45, Q46).

Missing Susceptibility = If any of the three questions were left blank (Q44, Q45, Q46), susceptibility was missing for that student.

Other Tobacco Products

47. During the **past month** (30 days) did you use chewing tobacco, snuff, or dip such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits or Copenhagen?

- ☐ Yes, every day
- ☐ Yes, almost every day
- ☐ Yes, some days
- ☐ No

In a 2011 survey, 5% of Canadian youth aged 15 to 19 reported ever using smokeless tobacco (Health Canada, 2012c). This compares to 1% of youth aged 15 to 19 in 2008 (Health Canada, 2010a).

2% of students reported using smokeless tobacco (chewing tobacco, snuff or dip) in the past month.

In a 2011 survey, 6% of Canadian youth aged 15 to 19 reported smoking any type of cigar in the past 30 days (Health Canada, 2012b). This compares to 4% of youth aged 15 to 19 in 2008 (Health Canada, 2010a). Reducing the appeal of little cigars to youth is an important goal of the Cracking Down on Tobacco Marketing Aimed at Youth Act, which came into force in 2010 (Health Canada, 2012b).

48. During the **past month** (30 days) did you smoke cigars, cigarillos, or little cigars?

- ☐ Yes, every day
- ☐ Yes, almost every day
- ☐ Yes, some days
- ☐ No

7% of students reported smoking cigars or cigarillos within the last month.

How Students Obtain Cigarettes

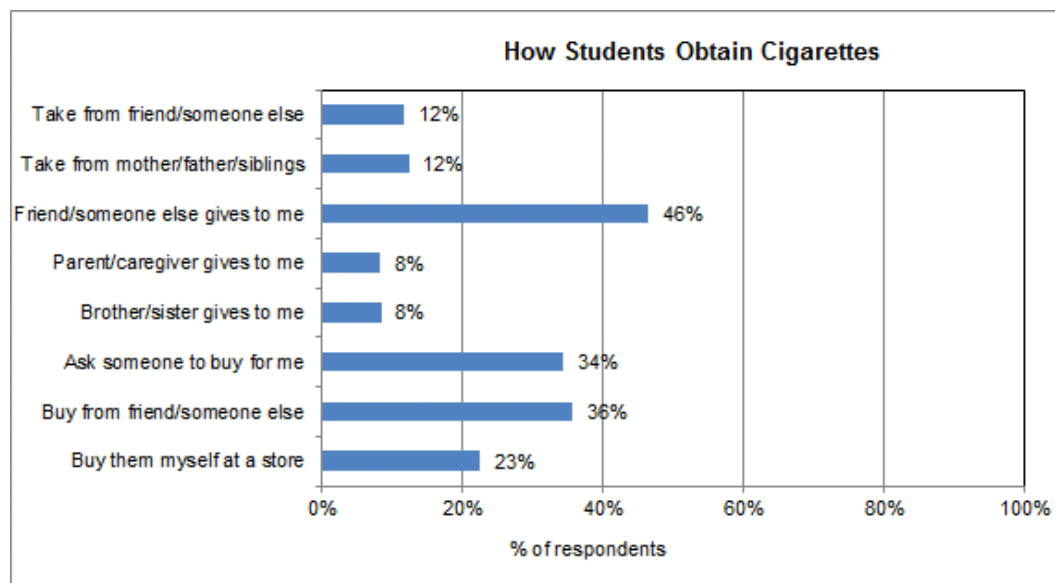
Canadian surveys have shown that students obtain cigarettes by a number of methods: purchasing them directly from stores, requesting others to purchase from stores on their behalf, purchasing from individuals, being given cigarettes freely from friends, and getting them at home.

Most youth smokers (52%) get cigarettes from small grocery stores, while 12% get cigarettes from a gas station, and 28% get cigarettes from parents, siblings or friends (Health Canada, 2012b). Despite the fact that 84% of retailers refused to sell cigarettes to minors, 56% of Canadian students who were too young to legally purchase cigarettes did so from a retail store (Health Canada, 2010b; Health Canada, 2012b).

We asked students how they obtained cigarettes.

49. Where do you usually get your cigarettes? **Choose all that apply.**

- ☐ I do not smoke
- ☐ I buy them myself at a store
- ☐ I buy them from a friend or someone else
- ☐ I ask someone to buy them for me
- ☐ My brother or sister gives them to me
- ☐ My parent or caregiver gives them to me
- ☐ A friend or someone else gives them to me
- ☐ I take them from my mother, father or siblings
- ☐ I take them from a friend or someone else



Exposure to Second-Hand Smoke

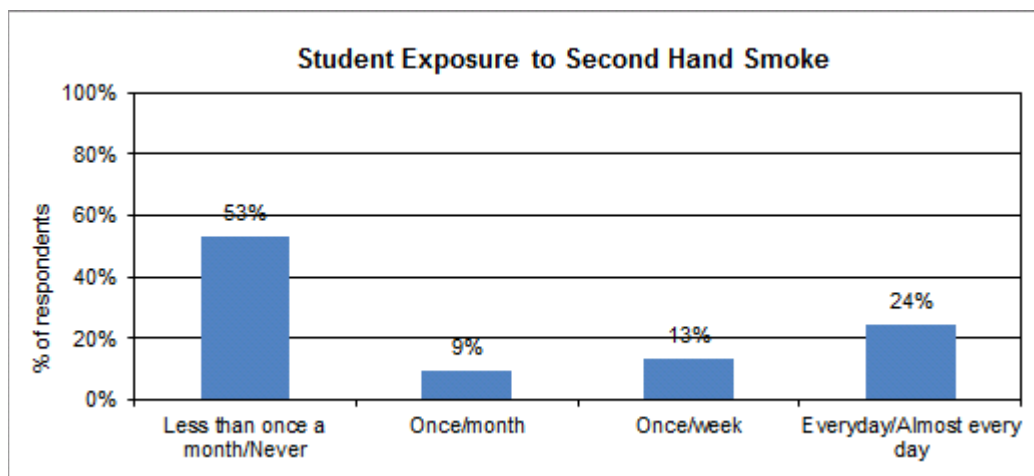
50. How often are you exposed to second-hand smoke?

- ☐ Every day
- ☐ Almost every day
- ☐ About once a week
- ☐ About once a month
- ☐ Less than once a month
- ☐ Never

Second-hand smoke exposure in youth is associated with asthma, altered lung function and growth, infections, cardiovascular effects, behaviour problems, sleep difficulties, increased cancer risk, and a higher likelihood of starting to smoke (Alouf, Feinson, & Chidekel, 2006; Treyster & Gitterman, 2011).

Youth are less likely to smoke if smoking is “denormalized” through vehicle and home smoking bans, regardless of their parents’ smoking status (Schultz et al., 2010).

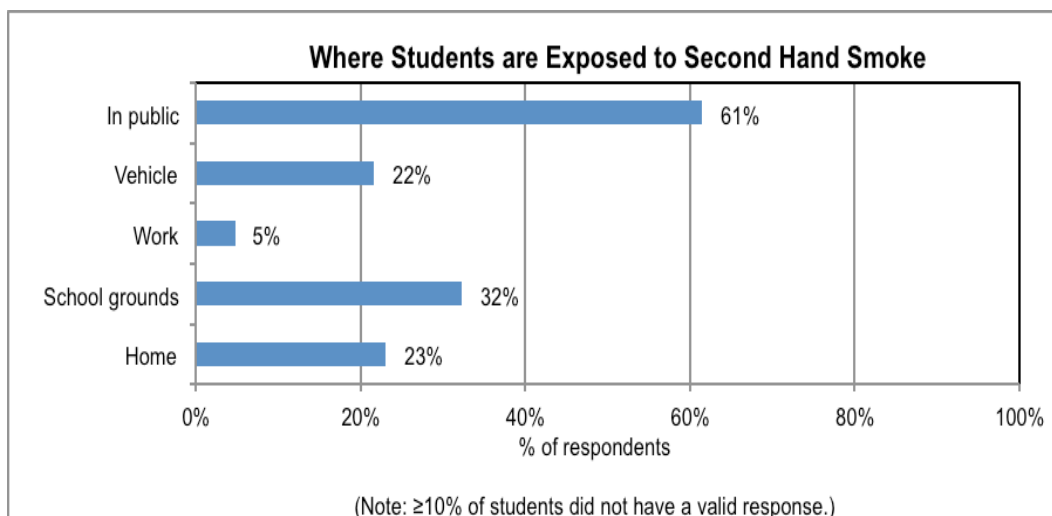
Students were asked how often they were exposed to second-hand smoke.

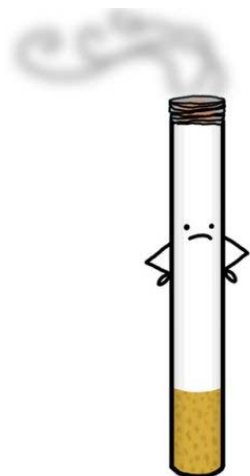


51. During the **past month** (30 days) were you exposed to second hand smoke. (In your home; On school grounds; While at work; In a vehicle; In public)

- ☐ Yes
- ☐ No
- ☐ Don't work

Students were asked where they were exposed to second-hand smoke in the past month.





Stopping Tobacco Use

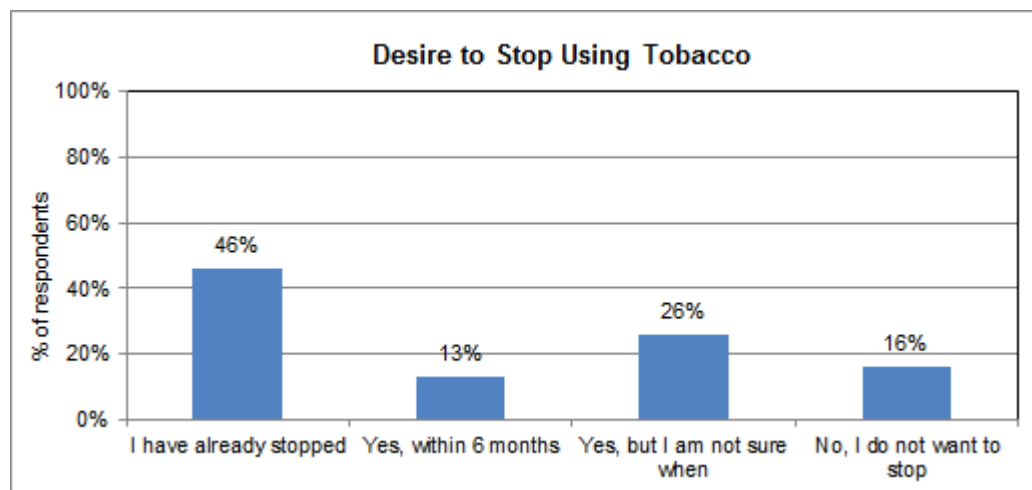
Those who start smoking before age 18 are more likely to become established smokers and are less likely to be able to quit (Dobbins et al., 2008; Kuper, Adami, & Boffeta, 2002; Ziedonis et al., 2006). Young smokers want to quit smoking and make frequent attempts (McVea, 2006; Pbert et al., 2011). Even young smokers who only smoke once in a while can have difficulty quitting (Ziedonis et al., 2006).

Youth are more vulnerable than adults to the consequences of nicotine and subsequent addiction. For this reason cessation interventions at the early stages of tobacco addiction would likely be beneficial in motivating them to quit, helping them to do so successfully, and protecting them against the threat of ongoing addiction (Tingen, Andrews, & Stevenson, 2009).

38% of students reported that they would like to stop using tobacco.

52. Do you want to stop your use of tobacco?

- ☐ I have never used tobacco
- ☐ I have already stopped (for at least the last month)
- ☐ Yes, within a month
- ☐ Yes, within 6 months
- ☐ Yes, but I am not sure when
- ☐ No, I do not want to stop



School Smoking Policy

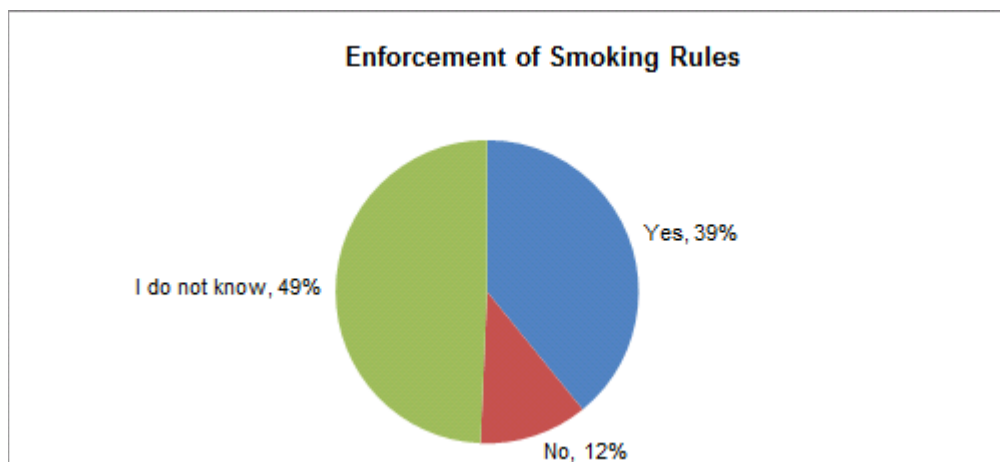
53. If students are caught breaking the smoking rules at this school, do they get into trouble?

- ☐ Yes
- ☐ No
- ☐ I don't know

75% of Canadian and 74% of Manitoba students reported that their schools had clear smoking rules (Propel Centre for Population Health Impact, 2009).

The introduction and enforcement of smoke-free school policies can act as an important facilitator to school-based prevention interventions (Bauld, Branding, & Templeton, 2009; Lovato et al., 2010). Students are more likely to smoke if there is a large number of students smoking on the school periphery (Lovato et al., 2010). The smoking bans need to be strongly enforced to be effective (Hackbarth, 2012).

We asked students if someone would get into trouble if they were caught breaking the smoking rules in their school.



Ideas for Action

Collaboration between schools, community, public health and parents is needed to prevent and reduce youth tobacco use.

What Can Schools Do?

Research has shown that successful efforts include education (coordinated curriculum), a supportive environment (clear, enforced rules about smoking), services and students who know people care (University of Waterloo, 2007).

Effective smoke free programs include the following key components:

- A Multi-faceted approach including active learning, awareness of influences to smoke, skill building, deconstructing media messages promoting tobacco use, and youth involvement in developing and implementing the intervention
- Adapted to the needs and cultures of various minority groups
- Adapted to fit specifically with different education curricula
- Take advantage of electronic media and communication
- School-based/group-based
- Are At least five sessions in duration, but ideally maintained until age 18
- Use of motivational enhancement (personalized feedback), cognitive behaviour techniques (self-awareness of tobacco use, enhancing motivation to quit, helping to prepare for quitting and developing strategies to stay quit) and social influence approaches
- Offer tobacco cessation supports early in the progression of their smoking behaviour as cessation interventions with youth double the odds of quitting tobacco
- Involve youth in a meaningful way in program development and implementation
- Enforce smoke-free school policies

(Bancej et al., 2007; Dino et al., 2011; Dobbins et al., 2008; Grimshaw & Stanton, 2006; Hackbarth, 2012; McVea, 2006; Sussman, Sun, & Dent, 2006; Ziedonis et al., 2006)

What Can Communities Do?

School programs should be implemented in conjunction with other community-wide tobacco control initiatives such as:

- Policies to increase taxation on tobacco products
- Smoking bans in public places frequented by youth
- Restrictions on advertising and promotion of tobacco products
- Media campaigns that target tobacco industry manipulation tactics
- Policies that restrict youth access to tobacco (should include random retail inspections combined with merchant education)

(Hackbarth, 2012)

Schools that prohibit smoking near school grounds, are located where tobacco prices are high and include tobacco prevention initiatives have the lowest smoking rates, confirming that community level policies affect youth consumption (Forster, Widome, & Bernat, 2007; Hackbarth, 2012).

What Can Parents Do?

Parental involvement is recommended for:

- Establishing smoke-free homes and vehicles
- Influencing social associations
- Talking to teens about smoking
- Reinforcing that most people do not smoke
- Reinforcing that most people who do smoke try to quit unsuccessfully

(Alouf, Feinson, & Chidekel, 2006; Schultz et al., 2010; Tingen, Andrews, & Stevenson, 2009)

What Can Youth Do?

Young smokers prefer peer-delivered cessation messages that emphasize the long term health consequences of smoking and some social and short term health effects (Latimer et al., 2012).

Additional resources and links to existing programs for schools, communities, parents and youth can be found on the Manitoba Government Tobacco Control and Cessation website:

<http://www.gov.mb.ca/healthyliving/smoking.html>

Alcohol, Marijuana and Other Drug Use

Why We Study Youth Alcohol, Marijuana and Other Drug Use

"Youth are not only more likely than adults to engage in risky alcohol and drug use, but also disproportionately experience greater harms from that use." (Young et al., 2011)

Youth who delay alcohol and drug use are more likely to experience:

- *Greater academic achievement and optimal brain development*
 - *Greater participation in youth activities and reduced interpersonal conflicts*
 - *Optimal physical development and health, and reduced risk of bodily harm*
 - *Lower risk of alcohol dependency and use and abuse of other drugs*
- (Bonnie & O'Connell, 2004; Health Canada, 2001; Young et al., 2011)*

Alcohol

Acute consequences of youth drinking can include unintentional injury or death associated with:

- *Driving while drunk*
 - *Homicide and violence*
 - *Suicide attempts*
 - *Sexual assault*
 - *Burns and drowning*
 - *Risky sexual health behaviours and*
 - *Vandalism and property damage*
- (Bonnie & O'Connell, 2004)*



Prevention efforts aimed at deterring or delaying alcohol use are most appropriate for junior and early high school years, whereas efforts to reduce frequency of alcohol use are more appropriate for students in the final years of high school (Young et al., 2011).

Marijuana and Other Drugs

Marijuana is the most widely used illegal drug by youth. The negative impacts associated with marijuana use include:

- *Impaired attention span, concentration, and memory*
 - *Lung irritation and the ingestion of tar, a known cancer-causing agent*
 - *A dependence syndrome*
 - *Increased risk of motor vehicle crashes*
 - *Cardiovascular disease*
 - *Adverse effects on youth psychosocial development and mental health*
- (DeCorby, McRae, & Dobbins, 2012; Hall & Degenhardt, 2009; Young et al., 2011)*

Misuse of drugs other than marijuana can also have considerable negative impacts, such as addiction, increased risky behaviour and injury, and decreased mental, physical and emotional health.



54. During the **past month** (30 days), on how many days did you have at least one drink of alcohol? (One drink of alcohol is defined as a bottle of beer, a glass of wine, a shot of liquor or a cooler)

- ☐ I have never drank alcohol
☐ I have drank alcohol, but not in the past month
☐ 1 or 2 days
☐ 3 to 5 days
☐ 6 to 9 days
☐ 10 or more days

Youth Alcohol Use

Alcohol use is almost twice as prevalent as marijuana use among Canadian students (Young et al., 2011). A study found 46 to 62% (ranging by province) of Canadian students and 55% of Manitoba students reported past-year alcohol use (Young et al., 2011). In Grade 7, three out of ten Canadian students have used alcohol but this increases dramatically to nine in ten students by Grade 12 (Young et al., 2011).

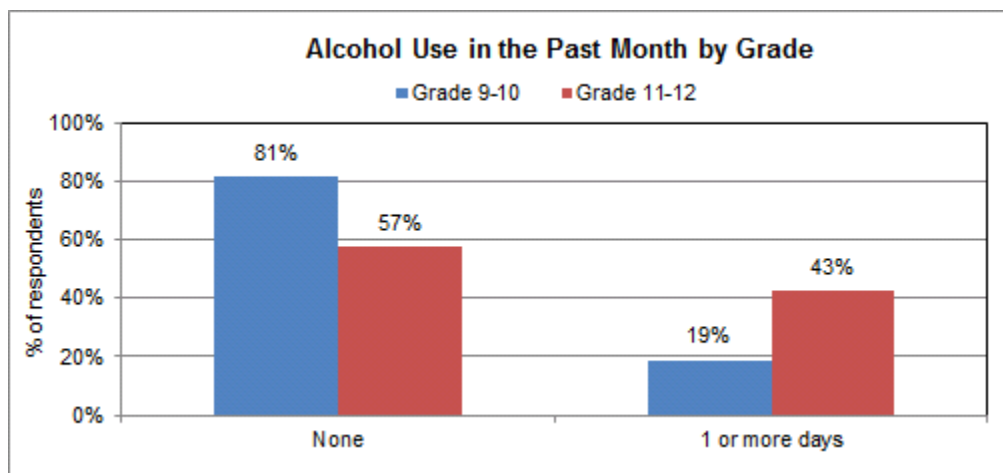
*We asked students about their alcohol use. *One drink of alcohol was defined as a bottle of beer, a glass of wine, a shot of liquor, or a cooler.*

Overall, 47% of students reported having at least one drink of alcohol in their **lifetime**.

Past Month Use of Alcohol

21% of all grades 7 to 12 students reported having consumed at least one drink of alcohol in the **past month**.

23% of the students who consumed alcohol in the **past month**, reported drinking alcohol on six or more days.



Youth Binge Drinking

55. During the **past month** (30 days), on how many days did you have 5 or more drinks of alcohol within a couple of hours? (One drink of alcohol is defined as a bottle of beer, a glass of wine, a shot of liquor or a cooler)

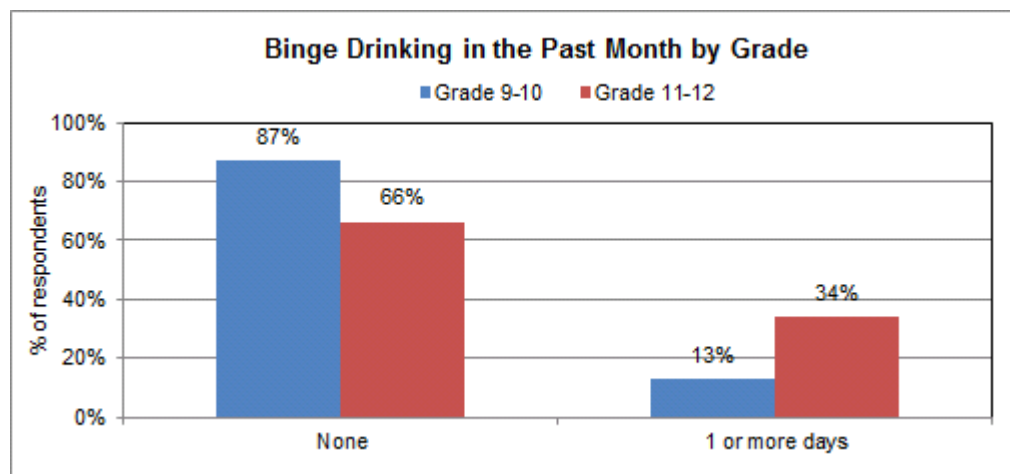
- ☐ I have never drank alcohol
- ☐ I have drank alcohol, but not in the past month
- ☐ 1 or 2 days
- ☐ 3 to 5 days
- ☐ 6 to 9 days
- ☐ 10 or more days

According to the *Atlantic Alcohol Risk Continuum*, 11.5% of Manitoba's Grade 7/8 students and 17% of Manitoba's Grade 9 to 12 students meet the criteria of being high risk for alcohol dependency (Friesen, Lemaire, & Patton, 2008).

Binge drinking is defined as five or more drinks within a couple of hours. 19 to 30% of Canadian students (ranging by province) and 27% of Manitoba students reported drinking five or more drinks on a single occasion within the month prior to being surveyed (Young et al., 2011).

We asked students about drinking five or more drinks within a couple of hours.

16% of all grades 7 to 12 students reported consuming five or more drinks of alcohol within a couple of hours on at least one day in the past month.



56. In the **past month** (30 days), how many times have you...
 (Used marijuana/ hashish [pot, weed, etc.]; Used cocaine or crack; Used methamphetamines [speed, crystal meth, crank or ice]; Used ecstasy; Used LSD or other hallucinogens [shrooms, acid, etc.]; Taken a prescription or over-the-counter drug to get high [painkillers, Ritalin, Oxycontin, Xanax, etc.])
☐ 0 times
☐ 1-2 times
☐ 3-9 times
☐ 10 or more times

57. In the **past year** (12 months), how many times have you...
 (Used marijuana/ hashish [pot, weed, etc.]; Used cocaine or crack; Used methamphetamines [speed, crystal meth, crank or ice]; Used ecstasy; Used LSD or other hallucinogens [shrooms, acid, etc.]; Taken a prescription or over-the-counter drug to get high [painkillers, Ritalin, Oxycontin, Xanax, etc.])
☐ 0 times
☐ 1-2 times
☐ 3-9 times
☐ 10 or more times

Youth Marijuana and Other Drug Use

Aside from alcohol and cannabis, ecstasy is the most prevalent drug (4 to 7% report lifetime use) followed by inhalants (2 to 4% report lifetime use) used by Canadian youth (Young et al., 2011).

We asked students about their substance use.

Use in Past Year

It is estimated that between 17 and 32% of Canadian (ranging by province) and 22% of Manitoba students reported past-year marijuana use (Young et al., 2011).

In the **past year**, 23% of all students reported using an illegal, prescription or over-the-counter drug for the purposes of getting high. 20% of all students reported using marijuana or hashish in the past year.

Use in Past Month

It is estimated that between 9 and 17% of Canadian (ranging by province) and 13% of Manitoba students reported past-month marijuana use (Young et al., 2011).

In the **past month**, 16% of all students reported using an illegal, prescription or over-the-counter drug for the purposes of getting high.

The most common type of drug used in the past month was marijuana/hashish (14%).

Ideas for Action

What Can Schools and Communities Do?

"To maximize effectiveness, school-based strategies work best when situated alongside community-wide strategies that reach young people in other parts of the system..." (Canadian Centre on Substance Abuse [CCSA], 2010a)

A recent review showed strong evidence for the following characteristics of effective alcohol and drug abuse prevention programs:

- Comprehensive, school-based alcohol and marijuana interventions
- Programs that include skill development (e.g. refusal skills, self management skills, and social skills)
- Programs for students 10 to 15 years of age
- Programs of at least one-year duration

(DeCorby, McRae, & Dobbins, 2012; Lemstra et al., 2010)

Building on Our Strengths: Canadian Standards for School-Based Youth Substance Abuse Prevention provides a practical evidence-based process to guide school actions. These are the steps:

- A. Assess the situation
 - Do we know the prevention activities already in place and how well they are working?
 - Have we determined student substance use patterns and harms?
 - Do we know the factors that strengthen our students or alternatively place some at risk for substance abuse?
 - Have we clarified the perceptions and expectations of all concerned?
 - Have we assessed our school's resources and capacity to act?
 - B. Prepare a plan and build capacity
 - Do our goals address priority harms and relevant factors for our students?
 - Have we engaged students in the initiative?
 - Are we strengthening links with parents and other partners?
 - Do we conduct professional development and support on an ongoing basis?
 - Have we taken steps to sustain the initiative?
 - C. Implement a comprehensive initiative
 - Do we take steps to cultivate a positive health - promoting climate for all in our school?
 - Are we delivering developmentally appropriate classroom instruction at all levels?
 - Have we implemented targeted activities as needed?
 - Have we prepared, implemented and maintained relevant policies?
 - D. Evaluate the initiative
 - Did we conduct a process evaluation of our initiative?
 - Did we conduct an outcome evaluation of our initiative?
 - Have we fully accounted for costs associated with the initiative?
- (CCSA, 2010a)

Resource:

A similar checklist entitled *Stronger Together* is available for community-based groups. Both the school and community documents are available online at www.ccsa.ca (CCSA, 2010b)

A directory of youth addictions services in Manitoba is available online at www.gov.mb.ca/healthyliving/addictions/youth

Youth have suggested the following solutions for decreasing underage drinking:

- Provide varied, affordable, accessible sport and recreation options, including youth clubs and facilities, and transportation for rural youth
- Involve and include youth in the broader community
- Involve youth in creating the solutions
- Offer non-judgmental information on alcohol and the associated risks
- Provide parents with support and information
- Consider the impact of advertising and provide counter social marketing
- Decrease easy access to alcohol
- Use technology solutions such as a card-based purchase system and breathalizers in cars
- Increase the consequences of underage drinking

(Shrans, Schellinck, & Zou, 2009)

What Can Parents Do?

The following factors about parenting have been found to be associated with delaying alcohol initiation in teens:

- Parental modeling
- Limiting availability of alcohol to the child
- Parental monitoring
- Parent-child relationship quality
- Parental involvement and general communication
- Disapproval of youth drinking
- General discipline

(Ryan, Jorm, & Lubman, 2010)

Resource: The *Strengthening Families for the Future* program is an example of an effective prevention program for families where youth are at risk; see

http://www.camhx.ca/Publications/CAMH_Publications/strengthen_families.html

(Centre for Addiction and Mental Health, 2009)

Youth Safety and Injury Prevention

Why We Study Youth Safety

Injury is the number one cause of death for children in Canada, accounting for 30% of all deaths with an average of 300 deaths for children younger than 14 years of age, every year (Mackay et al., 2011). "That is to say 25 children die from injury every month, the equivalent of one classroom of children per month." (Mackay et al., 2011)

Most injuries sustained by children and youth are both predictable and preventable (Canadian Pediatric Society, 2012). According to the College of Physicians and Surgeons of Manitoba (2006), 66% of teen deaths occurring in 2006 were preventable.

Vehicle accidents are the leading cause of death among young people aged 15 to 24 (CDC, 2009). It is generally accepted that because teens are the least experienced drivers as a group, they have a higher risk of being involved in an accident compared with more experienced drivers. Furthermore, when this lack of experience is combined with the use of alcohol or other substances that impact cognitive and motor abilities, the results can be tragic (National Institute on Drug Abuse, 2010). Impaired driving is one of the more serious consequences of alcohol and drug use.

Graduated Driver Licensing programs were enforced across Canada to ease novice drivers into the driving environment, allowing them to gradually gain experience under lower risk conditions. The novice driver phase is marked by a number of restrictions including zero alcohol consumed when driving and prohibiting driving after certain hours at night (Transport Canada, 2011). Nova Scotia's, Ontario and B.C.'s Graduated Driver Licensing programs were assessed, and were deemed the cause of a 15 to 30% reduction of collisions (Transport Canada, 2011).

Drinking and Driving

Of the 16 to 19 year-old drivers in Manitoba car crashes in 2007, 71% of those that were killed and 34% of those seriously injured had been drinking (Traffic Injury Research Foundation of Canada, 2010). It's important to note that significant impairment occurs at very low blood alcohol concentration levels (Ogden & Moskowitz, 2004).

58. During the **past month** (30 days), how many times did you **drive** a car or other vehicle after you had been drinking alcohol?

- ☐ I have never done this
☐ I have done this, but not in the past month
☐ 1 time
☐ 2 or 3 times
☐ 4 or more times

59. During the **past month** (30 days), how many times did you **ride in** a car or other vehicle **driven by someone** who had too much to drink?

- ☐ I have never done this
☐ I have done this, but not in the past month
☐ 1 time
☐ 2 or 3 times
☐ 4 or more times

Driving after Drinking

*12 to 20% of Canadian (ranging by province) and 19% of Manitoba Grade 12 students reported **driving** in the past year within an hour after drinking alcohol (Young et al., 2011).*

We asked students about their experiences with driving after drinking alcohol.

Overall, 5% of students reported that they have **driven** a car or other vehicle after drinking alcohol at least once in their lifetime.

In the past month, 2% of students reported having **driven** a car or other vehicle one or more times after drinking alcohol.

Riding in a Vehicle with Someone Who Had Too Much to Drink

*26 to 38% of Canadian (ranging by province) and 38% of Manitoba students reported **riding in** a vehicle during the past year with someone that had been drinking (Young et al., 2011).*

We asked students about their experiences being a passenger with a driver that had too much to drink.

Overall, 14% reported **riding in** a car or other vehicle at least once in their lifetime driven by someone who had too much to drink.

In the past month, 6% of students reported **riding in** a car or other vehicle driven by someone who had too much to drink.



Illegal Drugs and Driving

Marijuana affects the areas of the brain that control the body's movements, balance, coordination, memory, and judgment, as well as sensations. Studies have shown that the higher the marijuana levels, the higher the risk of motor vehicle crashes (National Institute on Drug Abuse, 2010).

60. During the **past month** (30 days), how many times did you **drive** a car or other vehicle after you had been using illegal drugs including marijuana?

- ☐ I have never done this
☐ I have done this, but not in the past month
☐ 1 time
☐ 2 or 3 times
☐ 4 or more times

Driving after Using Illegal Drugs

*In a cross-Canada study, between 3.3 and 6% of Canadian students (ranging by province) and 5.5% of Manitoba students reported **driving** in the past year within an hour after using marijuana (Young et al., 2011).*

We asked students about their experiences with driving after using illegal drugs.

Overall, 5% of students reported that they had **driven** a car or other vehicle at least once in their **lifetime** after using illegal drugs.

In the **past month**, 3% of students reported that they had **driven** a car or other vehicle after using illegal drugs.

(Note: ≥10% of students did not have a valid response.)

Riding in a Vehicle With Someone Who Had Been Using Illegal Drugs

*An estimated 18 to 26% of Canadian students (ranging by province) and 22% of Manitoba students have been a **passenger** with someone in the past year who had been using marijuana (Young et al., 2011).*

We asked students about their experiences being a passenger with a driver that had been using illegal drugs.

Overall, 14% of students reported **riding in** a car or other vehicle at least once in their **lifetime** driven by someone who had been using illegal drugs.

In the **past month**, 9% of students reported **riding in** a car or other vehicle driven by someone who had been using illegal drugs.

(Note: ≥10% of students did not have a valid response.)

61. During the **past month** (30 days), how many times did you **ride in** a car or other vehicle **driven by someone** who had been using illegal drugs including marijuana?

- ☐ I have never done this
☐ I have done this, but not in the past month
☐ 1 time
☐ 2 or 3 times
☐ 4 or more times

Youth Use of Safety Equipment

We asked students about their use of protective equipment.

Use of a Helmet while Cycling

"A properly fitted bike helmet decreases the risk of serious head injury by as much as 85% and brain injury by 88%." (Canadian Pediatric Society, 2012) 78% of people hospitalized with a severe head injury following a cycling accident in the last decade were not wearing a helmet when their injury occurred (Canadian Institute for Health Information, 2011).

In June 2012, Manitoba's Highway Traffic Amendment Act (Bicycle Helmets) received Royal Assent. This Bill mandates that cyclists under 18 years of age must wear a helmet when riding a bicycle (Legislative Assembly of Manitoba, 2012a).

- 12% of students who cycle reported 'always' wearing a helmet when they ride a bike.
- 10% report 'often'.
- 70% report 'never' or 'rarely'.
- 8% report 'only when an adult makes me'.

Use of a Helmet while Riding Snowmobiles, ATVs, Dirt Bikes, and Motorcycles

The number of serious injuries involving ATV injuries across Canada is growing, and almost 20% of these injuries involve trauma to the head (Canadian Pediatric Society, 2012). Head injuries are the leading cause of mortality and serious morbidity associated with snowmobiling (Canadian Pediatric Society, 2012).

As of 2010, Manitoba's Off Roads Vehicle Act mandated that drivers and passengers of off roads vehicles (including snowmobiles, ATVs, and dirt bikes) must wear a helmet at all times, unless they are using the off roads vehicle for farming, commercial fishing, hunting or trapping (Government of Manitoba, 2010).

- 50% of students who ride other vehicles (such as snowmobiles, ATVs, dirt bikes, or motorcycles) reported 'always' wearing a helmet.
- 13% report 'often'.
- 34% report 'never' or 'rarely'.
- 3% report 'only when an adult makes me'.



63. In general, do you wear... (A helmet when you ride a bike; A helmet when you ride other vehicles [e.g. snowmobile, ATV, dirt bike, motorcycle]; A seatbelt when riding in a car, truck or SUV; A life vest when you're in a small boat [e.g., canoe, raft, small motor boat])

- ☐ Never
- ☐ Rarely
- ☐ Often
- ☐ Always
- ☐ Only when an adult makes me
- ☐ I do not do this activity



Use of a Seatbelt

Motor vehicle traffic collisions are the leading cause of injury-related death among Canadians 1 to 24 years of age combined, and the leading cause of death overall for persons 15 to 24 (PHAC, 2012a). Passengers not wearing their seatbelt involved in collisions are three times more likely to be injured and 16 times more likely to have a fatal injury, as compared to passengers with their seatbelt on (PHAC, 2012a). A recent Canadian study has shown that overall 95% of people wear their seatbelts (PHAC, 2012a).

Manitoba's Highway Traffic Act mandates that seatbelts are worn by drivers and all passengers if available (Legislative Assembly of Manitoba, 2012b).

- 81% of students reported 'always' wearing a seatbelt when riding in a car, truck or SUV.
- 12% report 'often'.
- 5% report 'never' or 'rarely'.
- 2% report 'only when an adult makes me'.

Use of a Life Vest

Not wearing a life jacket is the most serious risk factor in fatal boating incidents (Life Saving Society, 2012). Approximately 90% of recreational boaters who have drowned in Canada were not wearing life jackets (Safe Kids Canada, 2007).

Federal legislation requires that life jackets are within reach on board. Safe Kids Canada (2007) recommends that Canada "amend the federal law on life jackets to require all boaters, children as well as adults, to wear a life jacket at all times when on board."

We asked students about wearing a life vest when in a small boat.

- 54% of students reported 'always' wearing a life vest when in a small boat.
- 21% reported 'often'.
- 20% reported 'never' or 'rarely'.
- 5% reported wearing a life vest 'only when an adult makes me'.



Ideas for Action

Research has shown that there are effective injury prevention practices, most often through a comprehensive approach of education, engineering and enforcement measures (Mackay et al., 2011).

What Can Schools Do?

Cycling Safety/Helmets

- Create/enforce a helmet policy for cycling on school property and at school cycling activities.
- Promote cycling safety (e.g. discourage wearing headphones and impaired cycling) and helmet use on your school website, newsletters, and in other communications to parents.
- Use the Manitoba Public Insurance [MPI] Cycling Champion facilitator training (n.d.-a) to train teachers and student leaders, use for public speaking assignments, and teach the younger grades. See http://www.mpi.mb.ca/english/rd_safety/BikeSafe/Champions.html
- Promote the Low Cost Bicycle Helmet Program to students and their families. Helmets are made available at reduced prices (Manitoba Healthy Schools, n.d.). See <http://www.gov.mb.ca/healthyschools/lcbh.html>

Personal Flotation Device (PFD) Use

- Ensure school policies require PFDs for boating (e.g. at school picnics and camps).
- Ensure swimming policies require PFDs for non-swimmers.

Alcohol/Substance Use and Impaired Driving

There is evidence to support that school based instructional programs reduce **riding** with drinking drivers (Elder et al., 2005). To maximize the effectiveness of school-based interventions on drinking/drugged **driving**, they must be part of a larger community effort that incorporates policy, organizational, and economic changes in addition to community-wide education (Elder et al., 2005).

Resources:

- Guest speakers from the Addictions Foundation of Manitoba or MPI
- Teens Against Drunk Driving (TADD) activities (e.g. start a TADD chapter at your school)
- Require safe grad planning/policies
- Launch a youth multimedia competition to engage youth in addressing the issue; see <http://www.isitworthit.ca/index-english.php> (No Regrets Peer Leadership Program, 2012)
- Manitoba School Board Association's *Safety Guidelines: Physical Activity in Manitoba Schools* (2012); see <http://www.mbschoolboards.ca/whatwedo/documents/2012%20Physical%20Education%20Guide.pdf>
- Active and Safe Kids Manitoba for resources on playground, bicycle, swimming, skateboarding, and ice skating safety; see <http://www.activesafekidsmanitoba.ca>
- Explore the MPI website for other resources:
 - *Road Safety Learning Resources for Schools* (n.d.-b); see http://www.mpi.mb.ca/english/rd_safety/learningresources/rslearningresourcesforschools.htm
 - SpeedWatch or SchoolZone Loan program (MPI, n.d.-c); see http://www.mpi.mb.ca/english/rd_safety/Speeding/s_programs.html
 - What's Your Hurry interactive website on speed and driving (MPI, 2007); see <http://www.whatsyourhurry.com/english/index.html>

Healthy Sexuality

Why We Study Youth Sexual Behaviours and Sexuality

We know that sexual attitudes and behaviors are established during the time leading up to and throughout adolescence. Healthy sexuality is a positive and life-affirming part of being human. However, sexual activity among teens can pose health risks such as unwanted pregnancy and sexually transmitted infections (STIs).

Teen Pregnancy

Manitoba's teen pregnancy rates are above the national average (McKay, 2006).

Some of the short and long term personal consequences of unintended teen pregnancies include:

- *Lack of readiness to be a parent*
- *Increased school drop-out rates*
- *Poor academic performance*
- *Risk for additional unintended pregnancies*
- *Adult poverty*
- *Reduced workforce readiness*
- *Decreased overall child and family wellbeing*

(Phillips, 2010)

Sexually Transmitted Infections (STIs)

STI rates among Canadian youth are unacceptably high and have been rising in recent years (McKay, 2005). Chlamydia and gonorrhea rates are highest among youth ages 15 to 24 years (PHAC, 2012b). In 2010, Manitoba's chlamydia and gonorrhea rates were the highest of Canada's provinces (PHAC, 2012b).

Many STIs have few or no noticeable symptoms so individuals may not be aware they are infected. These infections can lead to serious health complications if left untreated. For example, untreated chlamydia infection can lead to pelvic inflammatory disease, infertility, chronic pelvic pain, and ectopic pregnancy (McKay, 2005). HIV, though treatable, currently remains incurable, and, if not successfully managed, is associated with faster disease progression to acquired immune deficiency syndrome (AIDS) and related complications, and to mortality (Shepherd et al., 2010).

Healthy Teen Romantic Relationships

There are skills, knowledge and attitudes about relationships that can help youth develop as healthy emotional and sexual beings. This includes being able to recognize their sexual feelings as separate from the desires and pressures of others, accept these feelings, and exercise control over their sexual decision-making. Teens who have a greater sense of control in sexual situations are more likely to refrain from intercourse and also more likely to use condoms when they have sex.

Building good romantic relationships is also a component of healthy sexual development. This includes getting to know another person, building trust, dealing well with conflict, striving for power equality, and having fun. Good romantic relationships build positive sexual health outcomes (Schalet, 2011).

The following section was completed by students in grades 9 to 12, and in grades 7 to 12 at Elmwood High, but does not include students from St. Alphonsus or The King's School.

Gender Identity

Gender identity refers to one's sense of oneself as male, female, or transgender (American Psychological Association, 2012a). In conversation, several service providers in Manitoba are receiving an increasing number of requests from schools for consultation to help staff support the rising number of transgender students in their populations.

64. What is your gender identity?

- ☐ Female
- ☐ Male
- ☐ Trans

'Transgender' is an umbrella term for persons whose gender identity, gender expression, or behavior does not conform to that typically associated with the sex to which they were assigned at birth. Not everyone whose appearance or behavior is gender-nonconforming will identify as a transgender person (American Psychological Association, 2012a). Therefore, caution should be used when interpreting the results from question 64.

65. Have you ever questioned your gender identity?

- ☐ Yes
- ☐ No
- ☐ I don't know

We asked students about their gender identity.

2% of students reported that they identify as being transgender or identify with a different sex than what they reported in the demographic question of the survey.

5% of students reported that they have questioned their gender identity.

Sexual Orientation

Sexual orientation refers to the sex of those to whom one is sexually and romantically attracted (American Psychological Association, 2012b). Research indicates that approximately 2 to 10% of Canadians self-identify as non-heterosexual (PHAC, 2008).

66. Who are you attracted to?

Please choose one.

- ☐ Males
- ☐ Females
- ☐ Both males and females
- ☐ No one

We asked students about their sexual orientation.

7% reported they are attracted to both males and females or members of the same sex as they reported in the demographic question of the survey.

Gay, lesbian, bisexuals and transgender people may suffer extensive social stigma. These feelings and behaviours are likely the result of real and perceived discrimination—overhearing homophobic and transphobic comments, experiencing verbal, physical and sexual harassment, and a lack of perceived safety in public areas (Taylor et al., 2011).

67. How old were you when you first had sex?

- ☐ I have not had sex
- ☐ Less than 13 years of age
- ☐ 13 years old
- ☐ 14 years old
- ☐ 15 years old
- ☐ 16 years old
- ☐ 17 years old
- ☐ 18 or more years
- ☐ I don't know

Age of Initiation of Sexual Behaviours

Youth who delay sex are at lower risk of having multiple sex partners, which in turn leads to decreased risk of acquiring STIs, including HIV, and involvement in unplanned pregnancy (Habel et al., 2010; Rotermann, 2005). The average age that Canadian youth first have sex is 16.5 years (Rotermann, 2005).

When asked at what age they first had sex, 73% of students reported that they have not had sex. The most common age that students first reported having sex was 15 years old.

Comprehensive risk reduction programs that promote both abstinence and sexual risk reduction are effective in reducing sexual activity and increasing protective sexual behaviours among youth (Stanger-Hall & Hall, 2011).

Negative Sexual Experiences

Sexual assault refers to all incidents of unwanted sexual activity (Brennan & Taylor-Butts, 2008). Experiencing sexual assault and sexual abuse can be very emotionally traumatic and have long-lasting mental and emotional effects. A study of B.C. youth showed that youth who have been sexually abused reported higher rates of stress, despair, self-harm and suicidal thoughts (Smith et al., 2011). They were also less likely to report excellent general health, feeling safe at school, and plans to continue their education beyond high school (Smith et al., 2011).

68. Have you ever had sex when you didn't want to?

- ☐ I have not had sex
- ☐ Yes
- ☐ No
- ☐ I don't know

We asked students if they had ever had sex when they didn't want to.

18% of students who reported being sexually active, answered 'yes' when asked if they had ever had sex when they didn't want to.

69. If you have had sex, which method(s) did you and your partner use to prevent sexually transmitted infections (STIs) and/or pregnancy? **Choose all that apply.**

- ☐ I have not had sex
- ☐ No method was used to prevent pregnancy and/or STIs
- ☐ Withdrawal (pulling out before ejaculation)
- ☐ Birth control (pills, injection, patch or ring)
- ☐ Condoms (male or female)
- ☐ Morning after pill
- ☐ Sex dam
- ☐ Other method

Using Protection

Students were asked whether they had used protection for preventing STIs and/or pregnancy, and, if so, what method was used.

The most common method of protection against STIs and pregnancy that students reported using was condoms. 13% of students who reported being sexually active, indicated that they do not use any method to prevent STIs and pregnancy.

70. In general, when you have sex how often do you use condoms?

- ☐ I have not had sex
☐ Never
☐ Rarely
☐ Often
☐ Always

Winnipeg youth reported less condom use as they get older, from about 82% of 15 to 17 year-olds down to 67% among 18 and 19 year-olds (Prairie Research Associates, 2012). This is because youth often begin using hormonal methods for their birth control at older ages, and don't perceive themselves to be at risk of STIs in monogamous relationships (Hock-Long, 2012). Because many STIs are asymptomatic, young people may not know that they are carrying an infection from their last relationship. At least two forms of protection (birth control and condoms) should therefore always be encouraged—this is known as “dual protection”.

Students were asked about their use of condoms.

50% of students who reported being sexually active indicated that they always use a condom when having sex.

“Condoms used consistently and correctly provide protection against getting or spreading an STI—including HIV, the virus that causes AIDS.” (McKay, 2005)

A number of factors reduce the likelihood that a condom will be used—lower inhibitions with alcohol and substance use, being ‘in the moment’, embarrassment with discussing condom use, mis-perception of being in monogamous relationship—despite young people being knowledgeable about contraception as well as aware of how to access it (Brown & Guthrie, 2010; Hock-Long, 2012).

Students were asked about their reasons for not using condoms all the time.

The most common three reasons reported for not using a condom all of the time were:

- 1) I don't like how condoms feel (20%)
- 2) I use another form of protection (17%)
- 3) I trust my partner (14%)

Students were asked how often they felt comfortable talking to the persons(s) they are having sex with about using condoms or birth control.

72. How often do you feel comfortable talking to the person(s) you are having sex with about using condoms or birth control?

- ☐ I have not had sex
☐ Never
☐ Rarely
☐ Often
☐ Always

- 24% of students who reported being sexually active reported they are ‘never’ or ‘rarely’ comfortable talking to the person(s) they are having sex with about using condoms or birth control.
- 22% reported ‘often’.
- 55% reported ‘always’.

73. How often do you feel comfortable talking to the person(s) you are having sex with about STIs?

- ☐ I have not had sex
☐ Never
☐ Rarely
☐ Often
☐ Always

We also asked students who have had sex how comfortable they were talking to the person(s) they are having sex with about STIs.

- 44% of students reported they are 'never'/'rarely' comfortable talking to the person(s) they are having sex with about STIs;
- 17% reported 'often';
- 39% reported 'always'.

Youth sexual activities are more likely to be safe, wanted, and gratifying when relationships are equal – that is, not characterized by large age differences – and when youth feel satisfied, experience intimacy, and are able to discuss contraception openly within their relationships (Schalet, 2011).

74. In the past year, did you have unplanned sex after using alcohol or drugs? **Please choose one.**

- ☐ I have not had sex
☐ I did not have sex in the past year
☐ Yes, I had unplanned sex after using alcohol or drugs
☐ No, I did not have unplanned sex after using alcohol or drugs

Sex and Alcohol or Drugs

We asked students if they had unplanned sex after using alcohol or drugs.

34% of students who reported being sexually active report having unplanned sex after using alcohol or drugs in the past year.

Sex for Money, Food, Shelter, Drugs or Alcohol

Most research indicates that the average age of entry into the sex trade is between 16 and 20 years of age (Cool, 2004). Preventive measures need to address the factors, e.g. poverty, discrimination and abuse, that lead people to a situation where sex for food, money, shelter, drugs or alcohol becomes their only perceived, or real, option for survival.

75. Have you ever engaged in any type of sexual activity for money, food, shelter, drugs or alcohol?

- ☐ Yes
☐ No
☐ I don't know

We asked students if they engaged in any sexual activity for money, food, shelter, drugs or alcohol.

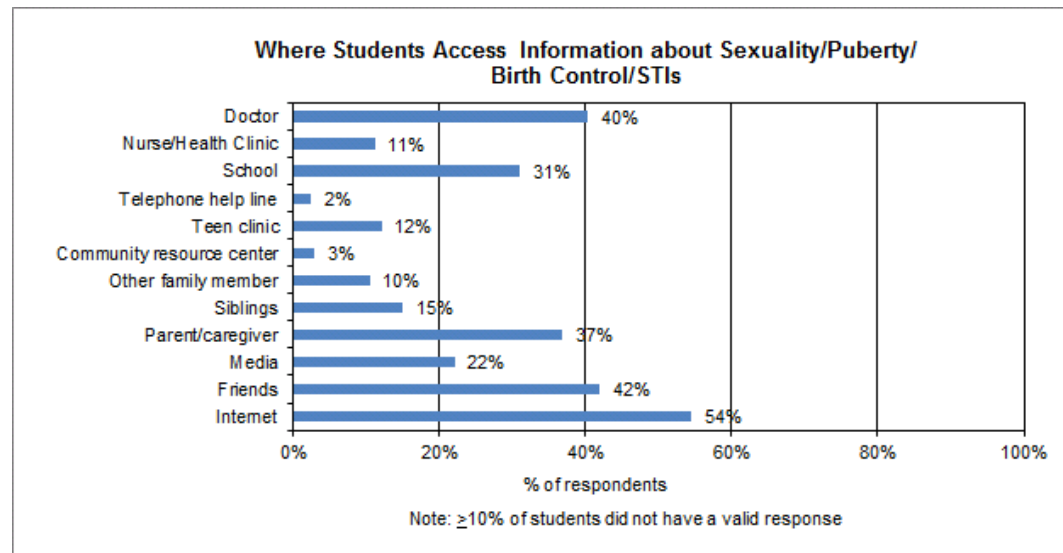
2% of students reported engaging in any type of sexual activity for money, food, shelter, drugs or alcohol.

Where Youth Prefer to Get Information About Sex

Adult acceptance of youth sexuality makes it easier for teens to recognize that they are sexual beings, plan sexual acts, negotiate sexual interactions, and ask for assistance when they need it (Schalet, 2011).

Students reported where they preferred to access information on sexuality/puberty/birth control/STIs.

76. What are your preferred sources of information about sexuality/puberty/birth control/STIs? **Choose all that apply.**
- ☐ Internet
 - ☐ Friend(s)
 - ☐ Media (TV, movies, magazines, books, pamphlets)
 - ☐ Parent/caregiver
 - ☐ Sibling(s)
 - ☐ Other family member
 - ☐ Community Resource Centre
 - ☐ Teen Clinic
 - ☐ Telephone help line
 - ☐ School (teacher, nurse or counselor, presenter)
 - ☐ Public health nurse/Women's Health Clinic/Nurse practitioner
 - ☐ Doctor



Text messaging technology provides a great opportunity to provide teens with free, confidential, and accurate information about their sexual health (Phillips, 2010).

Ideas for Action

What Can Schools Do?

Create Safe Places for Gay, Lesbian, Bisexual and Transgender Students

Providing information about gender identity and sexual orientation in health education can help to meet the needs of gay, lesbian, bisexual and transgender students as well as provide a context in which issues such as homophobia, transphobia, and discrimination based on gender identity or sexual orientation can be addressed (McKay, 2005; Taylor et al., 2011). Furthermore, school policies should include specific measures addressing anti-transphobia, anti-homophobia and anti-biphobia measures in order to effectively ensure a safe and respectful place for community learners (Taylor et al., 2011).

Gay-Straight Alliances (GSAs) aim to provide students with a safe space, an understanding adult, and committed peers in working towards making their schools more welcoming for students of all gender identities and sexual orientations (Taylor et al., 2011). Students from schools with GSAs tend to be more open with their peers about their gender identity and sexual orientation, and believe that their school community is supportive of transgender, gay, lesbian and bisexual people (Taylor et al., 2011).

In December 2012, The Public Schools Amendment Act (Safe and Inclusive Schools) was introduced to Manitoba's Legislative Assembly with a proposed requirement that school boards establish and implement a written policy concerning respect for human diversity (Legislative Assembly of Manitoba, 2012c). The policy would also need to accommodate pupils wanting to establish and lead organizations that use the name "gay-straight alliance".

Sexual Health Education

Health education should move beyond delay and STI and pregnancy prevention to include the skills, relationships, and resources youth need for healthy sexual development (Schalet, 2011).

Comprehensive sexual health education should be offered consistently from the beginning of elementary school through to the end of high school (PHAC, 2008). Sexual education programs in school are integral to providing youth with valid and reliable information contributing to their knowledge about sexuality and self-efficacy (Picot et al., 2012).

The 10 key ingredients of effective sexual health education are:

1. A realistic and sufficient allocation of classroom time to achieve program objectives
2. Provide teachers/educators with the necessary training and administrative support to deliver the program effectively
3. Employ sound teaching methods including the utilization of well-tested theoretical models to develop and implement programming
4. Use research to identify student characteristics, needs, and optimal learning styles to tailor instruction to students' ethnocultural background, sexual orientation, and developmental stage
5. Specifically target the behaviours that lead to negative sexual health outcomes, such as STI/HIV infection and unintended pregnancy
6. Deliver and consistently reinforce prevention messages related to sexual limit-setting (e.g. delaying first intercourse, choosing not to have intercourse), consistent condom use and other forms of contraception
7. Include program activities that address the individual's environment and social context including peer and partner pressures related to youth sexuality
8. Incorporate the necessary information, motivation and behavioural skills to effectively enact and maintain behaviours to promote sexual health

9. Provide clear examples and opportunities to practice (e.g. role plays) sexual limit setting, condom use negotiation, and other communication skills so that students are active participants in the program, not passive recipients
10. Incorporate appropriate and effective evaluation tools to assess program strengths and weaknesses in order to improve subsequent programming
(McKay & Bissell, 2010)

Access to school based health centers is associated with increased contraceptive use and STI screening (Ethier et al., 2011).

In addition, condom distribution programs can significantly increase condom use among teens that are sexually active. These programs also result in considerable cost savings related to medical costs for STI infections (McKay, 2005).

What Can Communities Do?

Programs must also address the influence of environmental factors on individual efforts to acquire and apply the knowledge, motivation and skills needed to maintain or enhance youth sexual health. Income and access to services are two of the many examples of the different ways in which the social environment, and particularly social inequality, can affect sexual health (PHAC, 2008).

What Can Parents Do?

Parent-teen communication has been shown to delay sexual intercourse and increase contraceptive use (Campero et al., 2011; Commendador, 2010). Talking to teens about sex and contraception won't encourage sexual activity and will result in lessening the chance that young people will experience unintended pregnancy or sexually transmitted infections (Carter, 2012).

With regards to gay, lesbian, bisexual and transgender youth, family acceptance and support can act as a buffer against the negative effects of discrimination (Diamond et al., 2011). Youth perceive this support as a form of protection and advocacy, giving a boost to their self-esteem, sense of competency, and resilience (Diamond et al., 2011).

What Can Youth Do?

Studies have found that peer-led health promotion programs are effective in that:

- Peer-led programs are more *cost-effective* than other methods
- Peers are a *credible* source of information
- Peer education is *empowering* for those involved
- Peer-led programs use an *already established* means of sharing information and advice
- Peers are more *successful* than professionals in passing on information because people identify with their peers
- Peer educators act as *positive role models*
- Peer education is *beneficial* to those involved in providing it
- Education presented by peers may be *acceptable* when other education is not
- Peer education can be used to educate those who are *hard to reach* through conventional methods
- Peers can *reinforce* learning through ongoing contact
(Turner & Shepherd, 1999)

List of References

- Active Healthy Kids Canada. (2012). *Is active play extinct? The Active Healthy Kids Canada 2012 report card on physical activity for children and youth*. Retrieved from <http://dvqdas9jty7g6.cloudfront.net/reportcards2012/AHKC%202012%20-%20Report%20Card%20Long%20Form%20-%20FINAL.pdf>
- Allender, S., Gleesen, E., Crammond, B., Sacks, G., Lawrence, M., Peeters, A., Loff, B., & Swinburn, B. (2011). Policy change to create supportive environments for physical activity and healthy eating: which options are the most realistic for government? *Health Promotion International*, 27(2): 261-274. doi:10.1093/heapro/dar018
- Alouf, B., Feinson, J.A., Chidekel, A.S. (2006). Preventing and treating nicotine addiction: a review with emphasis on adolescent health. *Delaware Medical Journal*, 78(7): 249-56. <http://www.medsocdel.org/Communications/DelawareMedicalJournal.aspx>
- American Psychological Association. (2012a). *Answers to your questions about transgender people, gender identity, and gender expression*. Retrieved from <http://www.apa.org/topics/sexuality/transgender.aspx?item=1>
- American Psychological Association. (2012b). *Sexual orientation, homosexuality and bisexuality*. Retrieved from <http://www.apa.org/helpcenter/sexual-orientation.aspx>
- Andreeva, V., Reynolds, K.D., Buller, D.B., Chou, C., & Taroch, A.L. (2008). Concurrent psychosocial predictors of sun safety among middle school youth. *Journal of School Health*, 78 (7): 374-382. doi: 10.1111/j.1746-1561.2008.00317.x
- Andrews, J. (1991). *Adolescent substance use and academic achievement and motivation*. Convention conducted at the Annual Convention of the American Psychological Association, San Francisco, California.
- Ayliffe, B., & Glanville, N.T. (2010). Achieving healthy body weight in teenagers: evidence-based practice guidelines for community nutrition interventions. *Canadian Journal of Dietetic Practice and Research*, 71(4): e78-86. doi: 10.3148/71.4.2010.205
- Bancej, C., O'Loughlin, J., Platt, R.W., Paradis, G., & Gervais, A. (2007). Smoking cessation attempts among adolescent smokers: a systematic review of prevalence studies. *Tobacco Control*, 16(6). doi:10.1136/tc.2006.018853
- Bandi, P., Cokkinides, V.E., Weinstock, M.A., & Ward, E. (2010). Sunburns, sun protection and indoor tanning behaviours, and attitudes regarding sun protection benefits and tan appeal among parents of U.S. adolescents – 1998 compared to 2004. *Pediatric Dermatology*, 27(1): 9-18. DOI: 10.1111/j.1525-1470.2009.01074.x
- Bartfeld, J., & Ahn, H. (2011). The school breakfast program strengthens household food security among low-income households with elementary school children. *The Journal of Nutrition*, 141: 470-75.
- Bauer, K.W., Berge, J.M., & Neumark-Sztainer, D. (2011). The importance of families to adolescents' physical activity and dietary intake. *Adolescent Medicine State of the Art Reviews*, 22(3): 601-13. <http://www2.aap.org/sections/adolescenthealth/AMSTARs.cfm>
- Bauld, L., Branding, J., & Templeton, L. (2009). *Facilitators and barriers to the delivery of school based interventions to prevent the uptake of smoking among children: a systematic review of qualitative research*. Retrieved from <http://www.health-evidence.ca/articles/show/20288>
- Beaulieu, D., & Godin, G. (2012). Development of an intervention programme to encourage high school students to stay in school for lunch instead of eating at nearby fast-food restaurants. *Evaluation and Program Planning*, 35: 382-89. doi: 10.1016/j.evalprogplan.2012.01.004
- Bond, L., Carlin, J.B., Thomas, L., Rubin, K., & Patton, G. (2001). Does bullying cause emotional problems? A prospective study of young teenagers. *British Medical Journal*, 323(7311): 480-484. doi: 10.1136/bmj.323.7311.480
- Bonnie, R.J., & O'Connell, M.E. (Eds.) (2004). *Reducing underage drinking: a collective responsibility*. Retrieved from <http://www.nap.edu/openbook.php?isbn=0309089352>
- Booth, K.M., Pinkston, M.M., & Carlos Poston, W.S. (2005). Obesity and the Built Environment. *Journal of the American Dietetic Association*, 105: S110-S117. doi: 10.1016/j.jada.2005.02.045
- Borgonovi, F. (2008). Doing well by doing good. The relationship between formal volunteering and self-reported health and happiness. *Social Science & Medicine*, 66(11): 2321-2334. doi:10.1016/j.socscimed.2008.01.011
- Boyce, W.F., King, M.A., & Roche, J. (Eds.) (2008). *Healthy settings for young people in Canada*. Retrieved from <http://www.phac-aspc.gc.ca/hp-ps/dca-dea/publications/yjc/pdf/youth-jeunes-eng.pdf>
- Brennan, S., & Taylor-Butts, A. (2008). *Sexual assault in Canada 2004-2007*. Retrieved from <http://www.statcan.gc.ca/pub/85f0033m/85f0033m2008019-eng.pdf>
- Bridge, J., & Turpin, B. (2004). *The cost of smoking in British Columbia and the economics of tobacco control*. Retrieved from <http://www.gpiatlantic.org/pdf/health/tobacco/costoftobacco-bc.pdf>
- British Columbia Ministry of Health. (2007). *Core public health functions for BC. Evidence review: mental health promotion*. Retrieved from http://www.phabc.org/pdfcore/Mental_Health_Promotion-Evidence_Review.pdf
- Brown, S., & Guthrie, K. (2010). Why don't teenagers use contraception? A qualitative interview study. *European Journal of Contraception and Reproductive Health Care*, 15(3): 197-204.
- Brownson, R.C., Baker, E.A., Housemann, R.A., Brennan, L.A., & Bacak, S.J. (2001). Environmental and policy determinants of physical activity in the United States. *American Journal of Public Health*, 91(12): 1995-2003. <http://ajph.aphapublications.org/>
- Buford, T.W., Kreider, R B, Stout, J.R., Greenwood, M., Campbell, B., Spano, M., Ziegenfuss, T., Lopez, Ht., Landis, J., & Antonio, J. (2007). International Society of Sports Nutrition position stand: creatine supplementation and exercise. *Journal of the International Society of Sports Nutrition*, 4 (6). doi:10.1186/1550-2783-4-6.
- Campero, L., Walker, D., Atienzo, E.E., & Gutierrez, J.P. (2011). A quasi-experimental evaluation of parents as sexual health educators resulting in delayed sexual initiation and increased access to condoms. *Journal of Adolescence*, 34(2): 215-223. doi:10.1016/j.adolescence.2010.05.010

- Canadian Cancer Society [Website]. (2012). *SunSense program*. Retrieved from http://www.cancer.ca/Manitoba/Prevention/Sun%20and%20UV/MB-Sun%20safe%20communities.aspx?sc_lang=en
- Canadian Centre on Substance Abuse. (2010a). *Building on our strengths: Canadian standards for school-based youth substance abuse prevention (Version 2.0)*. Retrieved from <http://www.ccsa.ca/2010%20CCSA%20Documents/ccsa-011815-2010.pdf>
- Canadian Centre on Substance Abuse. (2010b). *Stronger together: Canadian standards for community-based youth substance abuse prevention*. Retrieved from http://www.ccsa.ca/2010%20CCSA%20Documents/2010_CCSA_Community-based_Standards_en.pdf
- Canadian Institute for Health Information. (2011). *Summer is peak season for wheel- and water- related injuries*. Retrieved from http://www.cihi.ca/CIHI-ext-portal/internet/en/Document/types+of+care/RELEASE_21JULY11
- Canadian Obesity Network. (2010). *Research links soft drinks with obesity and diabetes*. Retrieved from <http://www.obesitynetwork.ca/page.aspx?page=2295&app=209&cat1=580&tp=12&lk=no&menu=50>
- Canadian Pediatric Society. (2012). *Are we doing enough? A status report on Canadian public policies and child and youth health*. Retrieved from <http://www.cps.ca/advocacy/StatusReport2012.pdf>
- Canadian Population Health Initiative. (2004). *Improving the health of Canadians*. Retrieved from https://secure.cihi.ca/free_products/IHC2004rev_e.pdf
- Canadian Society for Exercise Physiology. (2012). *Canadian physical activity guidelines*. Retrieved from www.csep.ca/guidelines
- Canadian Society for Exercise Physiology. (n.d.). *Canadian sedentary behaviour guidelines for youth 12 - 17 years*. Retrieved from http://www.csep.ca/GMFiles/Guidelines/SBGuidelinesChildandYouth_E.pdf
- Canadian Strategy for Cancer Control. (2006). *Strategic directions for the primary prevention of skin cancer in Canada*. Retrieved from http://www.partnershipagainstcancer.ca/wp-content/uploads/3.2.1.14-PPAG_SUN_Strategic_Directions_final.pdf
- CancerCare Manitoba [Website]. (2012). *Sun/UV safety: Department of Epidemiology and Cancer Registry statistics*. Retrieved from http://www.cancercare.mb.ca/home/prevention_and_screening/prevention/sun_and_uv_safety/
- Carter, D. (2012). Comprehensive sex education for teens is more effective than abstinence. *American Journal of Nursing*, 112(3): 15. doi: 10.1097/01.NAJ.0000412622.87884.a3
- Centers for Disease Control and Prevention. (1997). Guidelines for school and community programs to promote lifelong physical activity among young people. *Morbidity and Mortality Weekly Report*, 46(RR-6). Retrieved from <http://www.cdc.gov/mmwr/PDF/rr/rr4606.pdf>
- Centers for Disease Control and Prevention. (2009). *10 leading causes of injury deaths by age group highlighting unintentional injury deaths, United States – 2009*. Retrieved from http://www.cdc.gov/injury/wisqars/pdf/Leading_Causes_injury_Deaths_Age_Group_Highlighting_Unintentional_Injury%20Deaths_US_2009-a.pdf
- Centers for Disease Control and Prevention. (2011a). *About BMI for children and teens*. Retrieved from http://www.cdc.gov/healthyweight/assessing/bmi/childrens_bmi/about_childrens_bmi.html
- Centers for Disease Control and Prevention. (2011b). *Smoking and tobacco use: tobacco-related mortality*. Retrieved from http://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/tobacco_related_mortality/
- Centre for Addiction and Mental Health. (2009). *Strengthening families for the future*. Retrieved from http://www.camh.ca/Publications/CAMH_Publications/strengthen_families.html
- Chen, M.Y., Wang, E.K., & Jeng, Y.J. (2006). Adequate sleep among adolescents is positively associated with health status and health-related behaviors. *BioMed Central Public Health*, 6:59. doi:10.1186/1471-2458-6-59.
- College of Physicians and Surgeons of Manitoba. (2006). *The Child Health Standards Committee Annual Report – 2006*. Retrieved from http://cpsm.mb.ca/cj39alckF30a/wp-content/uploads/standards/2006_CHSC_Report.pdf
- Commendador, K. A. (2010). Parental influences on adolescent decision making and contraceptive use. *Pediatric Nursing*, 36(3): 147-56. Retrieved from <http://www.pediatricnursing.net/>
- Community Preventive Services Task Force. (2010). *Guide to community preventive services: promoting physical activity*. Retrieved from www.thecommunityguide.org/pa
- Cool, J. (2004). *Prostitution in Canada: an overview*. Retrieved from <http://publications.gc.ca/collections/Collection-R/LoPBdP/PRB-e/PRB0443-e.pdf>
- Craig, C.L., Cameron, C., Russell, S.J., & Beaulieu, A. (2001). *Increasing physical activity: building a supportive recreation and sport system*. Canadian Fitness and Lifestyle Research Institute. Retrieved from <http://64.26.159.200/pdf/e/99pam.pdf>
- De Bourdeaudhuij, I., Van Cauwenberghe, E., Spittaels, H., Oppert, J.M., Rostami, C., Brug, J., Van Lenthe, F., Lobstein, T., & Maes, L. (2011). School-based interventions promoting both physical activity and healthy eating in Europe: a systematic review within the HOPE project. *Obesity Review*, 12(3): 205-16. doi: 10.1111/j.1467-789X.2009.00711.x
- DeCorby, K., McRae, L., & Dobbins, M. (2012). *School-based marijuana and alcohol prevention programs targeting adolescents aged 10-15: evidence and implications for public health*. Retrieved from http://www.health-evidence.ca/documents/20397/Lemstra_2010_Summary_Statement_-_English.pdf
- Dehghan, M., Akhtar-Danesh, N., & Merchant, A.T. (2011). Factors associated with fruit and vegetable consumption among adults. *Journal of Human Nutrition and Dietetics*, 24(2): 128-134. doi: 10.1111/j.1365-277X.2010.01142.x
- Diamond, G.M., Shilo, G., Jurgensen, E., D'Augelli, A., Samarova, V., & White, K. (2011). How depressed and suicidal sexual minority adolescents understand the causes of their distress. *Journal of Gay and Lesbian Mental Health*, 15(2): 130-51.
- Dietz, W.H. (1998). Health consequences of obesity in youth: childhood predictors of adult disease. *Pediatrics*, 101 (S2): 518-25. <http://pediatrics.aappublications.org/>

- Dino, G.A., Pignataro, R., Breland, A., Murray, P.J., & Horn, K. (2011). Adolescent smoking cessation: promising strategies and evidence-based recommendations. *Adolescent Medicine State of the Art Reviews*, 22(3): 614-30. <http://www2.aap.org/sections/adolescenthealth/AMSTARs.cfm>
- Dobbins, M., DeCorby, K., Manske, S., & Goldblatt, E. (2008). Effective practices for school-based tobacco use prevention. *Preventive Medicine*, 46(4):289-97. doi: 10.1016/j.ypmed.2007.10.003
- Dobbins, M., & McRae, L. (2012). *Interventions for preventing obesity in children: evidence and implications for public health*. Hamilton, ON: McMaster University. Retrieved from http://www.health-evidence.ca/documents/15329/Waters_2011_Summary_Statement_-_English.pdf
- Elder, R., Nichols, J., Shults, R., Sleet, D., Barrios, L., & Compton, R. (2005). Effectiveness of school-based program for reducing drinking and driving and riding with drinking drivers: a systematic review. *American Journal of Preventive Medicine*, 28(5S): 288-304. doi:10.1016/j.amepre.2005.02.015
- Ellickson, P.L., Bui, K.V.T., Bell, R.M., & McGuigan, K. (1998). Does early drug use increase the risk of dropping out of high school? *Journal of Drug Issues*, 28(2): 357-80. <http://www2.criminology.fsu.edu/~jdi/>
- Ellickson, P.L., Tucker, J.S., Klein, D.J. (2008). Reducing early smokers' risk for future smoking and other problem behavior: Insights from a five-year longitudinal study. *Journal of Adolescent Health*, 43(4): 394-400. doi:10.1016/j.jadohealth.2008.03.004
- Ellis, J., & Small-McGinley, J. (2000). *School Based Mentorship: Programs Supporting Children and Youth*. Retrieved from <http://www.mentorship.ualberta.ca/mpk.html>
- Ethier, K.A., Dittus, P.J., DeRosa, C.J., Chung, E.Q., Martinez, E., & Kerndt, P.R. (2011). School-based health center access, reproductive health care, and contraceptive use among sexually experienced high school students. *Journal of Adolescent Health*, 48(6): 562-65. doi:10.1016/j.jadohealth.2011.01.018
- Evans, M.W., Ndetan, H., Perko, M., Williams, R., Walker, C. (2012). Dietary supplement use by children and adolescents in the United States to enhance sport performance: results of the National Health Interview Survey. *The Journal of Primary Prevention*, 33(1): 3-12. DOI: 10.1007/s10935-012-0261-4
- Flynn, M., McNeil, D., Maloff, B., Mutasingwa, D., Wu, M., Ford, C., & Tough, S. (2006). Reducing obesity and related chronic disease risk in children and youth: a synthesis of evidence with 'best practice' recommendations. *Obesity Reviews*, 7S1: 7-66. doi: 10.1111/j.1467-789X.2006.00242.x
- Fordyce-Voorham, S. (2011). Identification of essential food skills for skill-based healthful eating programs in secondary schools. *Journal of Nutrition Education and Behaviour*, 43(2): 116-122. doi:10.1016/j.jneb.2009.12.002
- Forster, J.L., Widome, R., & Bernat, D.H. (2007). Policy interventions and surveillance as strategies to prevent tobacco use in adolescents and young adults. *American Journal of Preventive Medicine*, 33 (6):S335-S339. doi: 10.1016/j.amepre.2007.09.014
- Freeman, J.G., King, M., Pickett, W., Craig, W., Elgar, F., Janssen, I., & Klinger, D. (Eds.) (2011). *The health of Canada's young people: a mental health focus*. Retrieved from <http://www.phac-aspc.gc.ca/hp-ps/dca-dea/publications/hbsc-mental-mentale/assets/pdf/hbsc-mental-mentale-eng.pdf>
- Friedli, L., & Parsonage, M. (2007). *Mental health promotion: building an economic case*. Retrieved from http://www.chex.org.uk/media/resources/mental_health/Mental%20Health%20Promotion%20-%20Building%20an%20Economic%20Case.pdf
- Friesen, K., Lemaire, J., & Patton, D. (2008). *Alcohol and other drugs: students in Manitoba – 2007*. Retrieved from <http://www.afm.mb.ca/Research/documents/2007ManitobaSchoolStudentSurvey-Nov08.pdf>
- Garriguet, D. (2004). *Overview of Canadians' eating habits*. Retrieved from <http://www.statcan.gc.ca/pub/82-620-m/82-620-m2006002-eng.pdf>
- Gilliland, M.J., Windle, M., Grunbaum, J.A., Yancey, A., Hoelscher, D., Tortolero, S.R., & Schuster, M.A. (2007). Body image and children's mental health related behaviors: results from the Healthy Passages Study. *Journal of Pediatric Psychology*, 32(1): 30-41. doi:10.1093/jpepsy/jsl008
- Government of Manitoba. (2009a). *Manitoba School Nutrition Survey report*. Retrieved from http://www.gov.mb.ca/healthyschools/foodinschools/documents/2009_manitoba_school_nutrition_survey_report.pdf
- Government of Manitoba. (2009b). *Manitoba School Nutrition Handbook*. Retrieved from <http://www.gov.mb.ca/healthyschools/foodinschools/documents/handbook.pdf>
- Government of Manitoba. (2009c). *Guidelines for foods available in K to 12 schools in Manitoba*. Retrieved from <http://www.gov.mb.ca/healthyschools/foodinschools/documents/k12food.pdf>
- Government of Manitoba. (2010). *Manitoba laws: the off roads vehicle act*. Retrieved from <http://web2.gov.mb.ca/laws/statutes/ccsm/o031e.php>
- Greig, A., Constantin, E., Carsley, S., & Cummings, C. (2010). Preventive health care visits for children and adolescents aged 6 to 17 years: the Greig Health Record – technical report. *Paediatric Child Health*, 15(3): 157-9.
- Grimshaw, G., & Stanton, A. (2006). Tobacco cessation interventions for young people (Review). *Cochrane Database of Systematic Reviews*, 18(4). doi: 10.1002/14651858.CD003289.pub4
- Habel, M.A., Dittus, P.J., De Rosa, C.J., Chung, E.Q., & Kerndt, P.R. (2010). Daily participation in sports and students' sexual activity. *Perspectives on Sexual and Reproductive Health*, 42(4): 244-50. doi: 10.1363/4224410.
- Hackbarth, D.P. (2012). Preventing adolescent tobacco use and assisting young people to quit: population-, community-, and individually focused evidence-based interventions. *Nursing Clinics of North America*, 47(1): 119-40. doi:10.1016/j.cnur.2011.10.004
- Hall, W., & Degenhardt, L. (2009). Adverse health effects of non-medical cannabis use. *The Lancet*, 374(9698): 1383-91. doi:10.1016/S0140-6736(09)61037-0
- He, M., Tucker, P., Gilliland, J., Irwin, J.D., Larsen, K., & Hess, P. (2012). The influence of local food environments on adolescents' food purchasing behaviours. *International Journal of Environmental Research and Public Health*, 9(4): 1458-71. doi: 10.3390/ijerph9041458
- Health Canada. (2001). *Preventing substance use problems among young people – a compendium of best practices*. Retrieved from <http://www.hc-sc.gc.ca/hc-ps/pubs/adp-apd/prevent/index-eng.php>
- Health Canada. (2010a). *Canadian Tobacco Use Monitoring Survey (CTUMS): summary of annual results for 2008*. Retrieved from http://www.hc-sc.gc.ca/hc-ps/tobac-tabac/research-recherche/stat/ctums-esutc_2008/ann_summary-sommaire-eng.php

- Health Canada (2010b). *Evaluation of retailers' behaviour towards certain youth access to tobacco restriction -- 2009*. Retrieved from http://www.hc-sc.gc.ca/hc-ps/tobac-tabac/research-recherche/eval/2009_result-eng.php
- Health Canada, (2011a). *Ultraviolet radiation*. Retrieved from <http://www.hc-sc.gc.ca/ewh-semt/radiation/ultraviolet/index-eng.php>
- Health Canada. (2011b). *Eating well with Canada's food guide*. Retrieved from http://www.hc-sc.gc.ca/fn-an/alt_formats/hpfb-dgpsa/pdf/food-guide-aliment/print_eatwell_bienmang-eng.pdf
- Health Canada. (2011c). *Smoking and mortality*. Retrieved from <http://www.hc-sc.gc.ca/hc-ps/tobac-tabac/legislation>
- Health Canada. (2011d). *Canadian Tobacco Use Monitoring Survey (CTUMS): summary of annual results for 2011*. Retrieved from: http://www.hc-sc.gc.ca/hc-ps/tobac-tabac/research-recherche/stat/_ctums-esutc_2011/ann_summary-sommaire-eng.php
- Health Canada. (2012a). *Healthy eating after school; integrating healthy eating into after-school physical activity initiatives*. Retrieved from http://www.hc-sc.gc.ca/fn-an/alt_formats/pdf/pubs/nutrition/heas-saae/heas-saae-eng.pdf
- Health Canada (2012b). *Canadian Tobacco Use Monitoring Survey (CTUMS): summary of annual results for 2011*. Retrieved from http://www.hc-sc.gc.ca/hc-ps/tobac-tabac/research-recherche/stat/_ctums-esutc_2011/ann_summary-sommaire-eng.php
- Health Canada. (2012c). *Summary of results of the 2010-11 Youth Smoking Survey*. Retrieved from http://www.hc-sc.gc.ca/hc-ps/tobac-tabac/research-recherche/stat/_survey-sondage_2010-2011/result-eng.php
- Healthy Child Manitoba. (2006). *Manitoba school nutrition handbook: getting started with guidelines and policies*. Retrieved from <http://www.gov.mb.ca/healthyschools/foodinschools/documents/handbook.pdf>
- Herrman, H., & Jané-Llopis, E.J. (2005). Mental health promotion in public health. *Promotion & Education*, 12: 42-47. doi:10.1177/10253823050120020107
- Hock-Long, L., Henry-Moss, D., Carter, M., Hatfield-Timajchy, K., Erickson, P.I., Cassidy, A., Macaуда, M., Singer, M., & Chittams, J. (2012). Condom Use with Serious and Casual Heterosexual Partners: Findings from a Community Venue-Based Survey of Young Adults. *AIDS and Behavior* (Epub ahead of print, March 30)
- Janssen, I. (2008). Healthy living and healthy weight. In W. Boyce, M. King, & J. Roche (Eds.), *Healthy Settings for Young People in Canada*. Retrieved from <http://www.phac-aspc.gc.ca/hp-ps/dca-dea/publications/yjc/pdf/youth-jeunes-eng.pdf>
- Joint Consortium for School Health. (2012). *Comprehensive school health framework*. Retrieved from <http://www.jcsh-cces.ca/index.php/school-health>
- Kesten, J.M., Griffiths, P.L., & Cameron, N. (2011). A systematic review to determine the effectiveness of interventions designed to prevent overweight and obesity in pre-adolescent girls. *Obesity Reviews*, 12: 997-1021. doi:10.1111/j.1467-789X.2011.00919.x
- Keyes, C.L. (2006). Mental health in adolescence: is America's youth flourishing? *American Journal of Orthopsychiatry*, 76(3): 395-402. doi:10.1037/0002-9432.76.3.395
- Keyes, C. L. (2009). *Brief Description of the Mental Health Continuum Short Form (MHC-SF)*. Retrieved from http://www.sociology.emory.edu/downloads/MHC-SF_Brief_Description.pdf
- Khambalia, A.Z., Dickinson, S., Hardy, L.L., Gill, T., & Baur, L.A. (2012). A synthesis of existing systematic reviews and meta-analyses of school-based behavioural interventions for controlling and preventing obesity. *Obesity Reviews*, 13(3): 214-33. doi: 10.1111/j.1467-789X.2011.00947.x
- King, L., Gill, T., Allender, S., & Swinburn, B. (2011). Best practice principles for community-based obesity prevention: development, content and application. *Obesity Review*, 12(5):329-38. doi: 10.1111/j.1467-789X.2010.00798.x
- King, M., & Hoessler, C. (n.d.). *The health of Canada's young people: a mental health focus*. Retrieved from <http://www.phac-aspc.gc.ca/hp-ps/dca-dea/publications/hbsc-mental-mentale/family-famille-eng.php>
- Kirkwood, T., Bond, J., May, C., McKeith, I., & Teh, M. (2008). *Mental capital through life: future challenges*. Retrieved from http://www.bis.gov.uk/assets/biscore/corporate/migratedD/%20ec_group/99-08-F0_on
- Kuper, H., Adami, H.O., & Boffeta, P. (2002). Tobacco use, cancer causation, and public health impact. *Journal of Internal Medicine*, 251(6): 455-66. doi: 10.1046/j.1365-2796.2002.00993.x
- Lagarde, F., & LeBlanc, C. Policy options to support physical activity in schools. (2010). *Canadian Journal of Public Health*, 101(8): S9-S13. Retrieved from <http://journal.cpha.ca/index.php/cjph/article/view/1911/2210>
- Lang, R., & Jebb, S.A. (2003). Who consumes whole grains, and how much? *Proceedings of the Nutrition Society*, 62(1): 123-27. doi: 10.1079/PNS2002219
- Latimer, A.E., Krishnan-Sarin, S., Cavallo, D.A., Duhig, A., Salovey, P., & O'Malley, S.A. (2012). Targeted smoking cessation messages for adolescents. *Journal of Adolescent Health*, 50(1): 47-53. doi:10.1016/j.jadohealth.2011.04.013
- Leatherdale, S., & Manske, S. (2005). The relationship between student smoking in the school environment and smoking onset in elementary school students. *Cancer Epidemiology, Biomarkers & Prevention*, 14: 1762-65. doi: 10.1158/1055-9965.EPI-05-0065
- Legislative Assembly of Manitoba. (2008). *The public schools amendment act: trans fat and nutrition*. Retrieved from <http://web2.gov.mb.ca/bills/39-2/pdf/b002.pdf>
- Legislative Assembly of Manitoba. (2012a). *Bill 37: the highway traffic amendment and summary convictions amendment act (bicycle helmets)*. Retrieved from <http://web2.gov.mb.ca/bills/40-1/pdf/b037.pdf>
- Legislative Assembly of Manitoba. (2012b). *Bill 8: the highway traffic amendment act (use of child safety seats)*. Retrieved from <http://web2.gov.mb.ca/bills/40-1/b008e.php>
- Legislative Assembly of Manitoba. (2012c). *Bill 18: the public schools amendment act (safe and inclusive schools)*. Retrieved from <http://web2.gov.mb.ca/bills/40-2/pdf/b018.pdf>
- Lemstra, M., Bennett, N., Nannapaneni, U., Neudorf, C., Warren, L., Kershaw, T., & Scott, C. (2010). A systematic review of school-based marijuana and alcohol prevention programs targeting adolescents aged 10-15. *Addiction Research and Theory*, 18(1): 84-96. doi: 10.3109/16066350802673224

- Lifesaving Society. (2012). *Canadian drowning report*. Retrieved from http://www.lifesaving.org/download/CLS%20Drowning%202012E_WEB.pdf
- Lobstein, T., & Baur, L.A. (2005). Policies to prevent childhood obesity in European Union. *European Journal of Public Health*, 15 (6): 576-79. doi: 10.1093/eurpub/cki068
- Lovato, C.Y., Zeisser, C., Campbell, H.S., Watts, A.W., Halpin, P., Thompson, M., Eyles, J., Adlaf, E., & Brown, K.S. (2010). *American Journal of Preventive Medicine*, 39(6): 507-14. doi: 10.1016/j.amepre.2010.08.019
- Loughlin, C.A., & Barling, J. (1998). Teenagers' part-time employment and their work-related attitudes and aspirations. *Journal of Organizational Behaviour*, 19 (2): 197-207. doi: 10.1002/(SICI)1099-1379(199803)19:2<197::AID-JOB832>3.0.CO;2-N
- MacKay, M., Vincenten, J., Brussoni, M., Towner, L., & Fuselli, P. (2011). *Child safety good practice guide: good investments in unintentional child injury prevention and safety promotion - Canadian edition*. Retrieved from <http://www.safekidscanada.ca/Professionals/Documents/34968-GoodPracticeGuide.pdf>
- Manitoba Healthy Schools. (n.d.). *Low Cost Bike Helmet Initiative*. Retrieved from <http://www.gov.mb.ca/healthyschools/lcbh.html#UKVVXGcsGws>
- Manitoba Labour and Immigration. (2011). *Manitoba immigration facts, 2010 statistical report*. Retrieved from <http://www.gov.mb.ca/immigration/pdf/manitoba-immigration-facts-report-2010.pdf>
- Manitoba Public Insurance [Website]. (n.d.-a). *Cycling champion*. Retrieved from http://www.mpi.mb.ca/english/rd_safety/BikeSafe/Champions.html
- Manitoba Public Insurance [Website]. (n.d.-b). *Road safety learning resources for schools*. Retrieved from http://www.mpi.mb.ca/english/rd_safety/learningresources/rslearningresourcesforschools.html
- Manitoba Public Insurance [Website]. (n.d.-c). *Speeding: programs*. Retrieved from http://www.mpi.mb.ca/english/rd_safety/Speeding/s_programs.html
- Manitoba Public Insurance. (2007). *What's your hurry?* Retrieved from <http://www.whatsyourhurry.com/english/index.html>
- Manitoba School Boards Association. (2012). *Safety guidelines: physical activity in Manitoba schools*. Retrieved from <http://www.mbschoolboards.ca/whatwedo/documents/2012%20Physical%20Education%20Guide.pdf>
- Marsh, H., & Kleitman, S. (2005). Consequences of employment during high school: character building, subversion of academic goals, or a threshold? *American Educational Research Journal*, 42(2): 331-69. doi: 10.3102/00028312042002331
- McKay, A. (2005). *Sexual health education in the schools: questions and answers*. Retrieved from http://www.sieccan.org/pdf/SHES_QA.pdf
- McKay, A. (2006). Trends in teen pregnancy in Canada with comparisons to U.S.A. and England/Wales. *The Canadian Journal of Human Sexuality*, 15(3-4): 157-61. Retrieved from http://www.beststart.org/events/detail/bsannualconf08/presentations/PC1_mckay.pdf
- McKay, A., & Bissell, M. (2010) *Sexual health education in the schools: questions and answers (3rd edition)*. Retrieved from http://sieccan.org/pdf/she_q&a_3rd.pdf
- McVea, K.L. (2006). Evidence for clinical smoking cessation for adolescents. *Health Psychology*, 25(5): 558-62. doi: 10.1037/0278-6133.25.5.558
- Mental Health Commission of Canada. (2009). *Toward recovery and well-being: a framework for a mental health strategy for Canada (draft for public discussion)*. Retrieved from http://www.mentalhealthcommission.ca/SiteCollectionDocuments/Key_Documents/en/2009/Mental_Health_ENG.pdf
- Mental Health Commission of Canada. (2012). *Changing directions, changing lives: the mental health strategy for Canada*. Retrieved from <http://strategy.mentalhealthcommission.ca/pdf/strategy-text-en.pdf>
- Messias, D.K., & Rubio, M. (2004). Immigration and health. In Joyce J. Fitzpatrick (Ed.), *Annual Review of Nursing Research*, 22: 101-34. New York, NY: Springer Publishing Company.
- Millman, R.P., Working Group on Sleepiness in Adolescents/Young Adults, & AAP Committee on Adolescence. (2005). Excessive sleepiness in adolescents and young adults: causes, consequences, and treatment strategies. *Pediatrics*, 115(6): 1774 -86. doi: 10.1542/peds.2005-0772
- Morrison, W., & Kirby, P. (2010). *Schools as a setting for promoting positive mental health: better practices and perspectives*. Retrieved from <http://eng.jcsh-cces.ca/upload/PMH%20July10%202011%20WebReady.pdf>
- Must, A. & Tybor, D.J. (2005). Physical activity and sedentary behavior: a review of longitudinal studies of weight and adiposity in youth. *International Journal of Obesity*, 29: S84-S96. doi:10.1038/sj.ijo.0803064
- National Institute on Drug Abuse. (2010). *DrugFacts: drugged driving*. Retrieved from <http://www.drugabuse.gov/publications/drugfacts/drugged-driving>
- Naylor, P.J., & McKay, H.A. (2009). Prevention in the first place: schools a setting for action on physical inactivity. *British Journal of Sports Medicine*, 43(1):10-13. doi:10.1136/bjsm.2008.053447
- Ogden, E.J., & Moskowitz, H. (2004). Effects of alcohol and other drugs on driver performance. *Traffic Injury Prevention*, 5(3):185-98.
- Pabayo, R., Maximova, K., Spence, J.C., Vender Ploeg, K., Wu, B., & Veugelers, P.J. (2012). The importance of active transportation to and from school for daily physical activity among children. *Preventive Medicine*, 55(3): 196-200. doi: 10.1016/j.ypmed.2012.06.008
- Pate, R.R., & O'Neill, J.R. (2009). After-school interventions to increase physical activity among youth. *British Journal of Sports Medicine*, 43(1):14-18. doi:10.1136/bjsm.2008.055517
- Pbert, L., Druker, S., DiFranza, J.R., Gorak, D., Reed, G., Magner, R., Sheetz, A.H., & Osganian, S. (2011). Effectiveness of a school nurse-delivered smoking-cessation intervention for adolescents. *Pediatrics*, 128(5):926-36. doi: 10.1542/peds.2011-0520
- Phillips, K.R. (2010). BrdsNBz: a text-messaging forum for improving the sexual health of adolescents in North Carolina. *North Carolina Medical Journal*, 71(4): 368-71. Retrieved from <http://www.ncmedicaljournal.com/>
- Picot, J., Shepherd, J., Kavanagh, J., Cooper, K., Harden, A., Barnett-Page, E., Jones, J., Clegg, A., Hartwell, D., & Frampton, G.K. (2012). Behavioural interventions for the prevention of sexually transmitted infections in young people aged 13-19 years: a systematic review. *Health Education Research*, 27(3): 495-512. doi: 10.1093/her/cys014

- Pierce, J.P., & Gilpin E. (1996). How long will today's new adolescent smoker be addicted to cigarettes? *American Journal of Public Health*, 86(2): 253-56. Retrieved from <http://ajph.aphapublications.org/>
- Poon, C., Chittenden, M., Saewyc, E., Murphy, A., & The McCreary Centre Society. (2006). *Promoting healthy bodies: physical activity, weight, and tobacco use among B.C. youth*. Retrieved from http://www.mcs.bc.ca/pdf/promoting_healthy_bodies_web.pdf
- Prairie Research Associates (2012). *Report on Survey of Winnipeg Youth Regarding the Heads Up?! Campaign*. Winnipeg Regional Health Authority, Population and Public Health. Winnipeg.
- Propel Center for Population Health Impact. (2009). *Smoking profile for Manitoba youth: Youth smoking survey 2008/2009*. Retrieved from http://www.yss.uwaterloo.ca/results/yss08_provincial_report_MB.pdf
- Public Health Agency of Canada & Joint Consortium of School Health. (2008a). *Emotional health among Canadian youth*. Retrieved from <http://www.phac-aspc.gc.ca/hp-ps/dca-dea/stages-etapes/ado/fact-feuil/pdf/emotion-eng.pdf>
- Public Health Agency of Canada & Joint Consortium of School Health. (2008b). *Healthy living and healthy weight among Canadian youth*. Retrieved from <http://www.phac-aspc.gc.ca/hp-ps/dca-dea/stages-etapes/ado/fact-feuil/pdf/weight-poids-eng.pdf>
- Public Health Agency of Canada. (2008). *The Canadian guidelines for sexual health education*. Retrieved from <http://www.phac-aspc.gc.ca/publicat/cgshe-ldnemss/pdf/guidelines-eng.pdf>
- Public Health Agency of Canada. (2011). *What determines health?* Retrieved from <http://www.phac-aspc.gc.ca/ph-sp/determinants/index-eng.php#determinants>
- Public Health Agency of Canada. (2012a). *Injury in review, 2012 edition: spotlight on road and transport safety*. Retrieved from <http://www.safekidscanada.ca/Professionals/Newsroom/News/Injury-in-review.aspx>
- Public Health Agency of Canada (2012b). *Reported cases and rates of sexually transmitted infections by province/territory and sex, 1991-2010*. Received via personal communication from Stephanie Totten (PHAC) on July 10th, 2012.
- Public Health Agency of Canada. (n.d.-a). *Canadian Best Practices Portal*. Retrieved from <http://66.240.150.14/intervention/search-eng.html>
- Public Health Agency of Canada. (n.d.-b). *Curbing childhood obesity: a federal, provincial and territorial framework for action to promote healthy weights*. Retrieved from <http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/framework-cadre/index-eng.php>
- Public Health Agency of Canada. (n.d.-c). *Obesity in Canada; Opportunities for Intervention*. Retrieved from <http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/oic-oac/interv-eng.php>
- Public Safety Canada. (2008). *Bullying prevention: nature and extent of bullying in Canada*. Retrieved from http://www.publicsafety.gc.ca/res/cp/res/_fi/2008-BP-01-eng.pdf
- Rotermann, M. (2005). *Sex, condoms, and STDs among young people*. Retrieved from <http://www.statcan.gc.ca/pub/82-003-x/2004003/article/7838-eng.pdf>
- Roth, G., Kanat-Maymon, Y., & Bibi, U. (2011). Prevention of school bullying: the important role of autonomy-supportive teaching and internalization of pro-social values. *British Journal of Educational Psychology*, 81(4): 654-66. doi: 10.1348/2044-8279.002003
- Rothstein, D. (2007). High school employment and youths' academic achievement. *Journal of Human Resources*. 42(1):194-213. <http://www.ssc.wisc.edu/jhr/home.html>
- Ryan, S.M., Jorm, A.F., & Lubman, D.I. (2010). Parenting factors associated with reduced adolescent alcohol use: a systematic review of longitudinal studies. *Australian and New Zealand Journal of Psychiatry*, 44(9). doi: 10.1080/00048674.2010.501759
- Rye, J.A., O'Hara Tompkins, N., Eck, R., & Neal, W.A. (2008). Promoting youth physical activity and healthy weight through schools. *West Virginia Medical Journal*, 104(2): 12-15. <http://www.wvmsa.com/journal.aspx>
- Saewyc, E., Wang, N., Chittenden, M., Murphy, A., & The McCreary Centre Society. (2006). *Building resilience in vulnerable youth*. Retrieved from http://www.mcs.bc.ca/pdf/vulnerable_youth_report.pdf
- Safe Kids Canada. (2007). *Child and youth unintentional injury: 1994 – 2003, 10 years in review*. Retrieved from <http://www.safekidscanada.ca/OrderCentre/tabid/157/List/1/CategoryID/1/Level/a/ProductID/80/language/en-CA/Default.aspx>
- Salvy, S.J., Wojcikowicz Bowker, J., Roemmich, J.N., Romero, N., Kieffer, E., Paluch, R., & Epstein, L.H. (2008). Peer influence on children's physical activity: an experience sampling study. *Journal of Pediatric Psychology*, 33(1): 39-49. doi: 10.1093/jpepsy/jsm039
- Schneider, S.K., O'Donnell, L., Stueve, A., & Coulter, R.W. (2012). Cyberbullying, school bullying, and psychological distress: a regional census of high school students. *American Journal of Public Health*, 102(1):171-77. doi: 10.2105/AJPH.2011.300308
- Schrans, T., Schellinck, T., & Zou, Y. (2009). *Child and youth drinking: the context of alcohol use among adolescents in Nova Scotia*. Retrieved from http://www.gov.ns.ca/hpp/publications/child_and_youth_drinking.pdf
- Schalet, A.T. (2011). Beyond abstinence and risk: a new paradigm for adolescent sexual health. *Women's Health Issues*, 21(3 Suppl): S5-7. doi: 10.1016/j.whi.2011.01.007
- Schultz, A.S., Nowatzki, J., Dunn, D.A., & Griffith, E.J. (2010). Effects of socialization in the household on youth susceptibility to smoking: a secondary analysis of the 2004/05 Canadian Youth Smoking Survey. *Chronic Disease in Canada*, 30(3):71-77. Retrieved from http://www.phac-aspc.gc.ca/publicat/cdic-mcbc/30-3/ar_01-eng.php
- Screen Smart [Website]. (2010). Retrieved from http://www.screensmart.ca/screens_health
- Shepherd, J., Kavanagh, J., Picot, J., Cooper, K., Harden, A., Barnett-Page, E., Jones, J., Clegg, A., Hartwell, D., Frampton, G.K., & Price, A. (2010). The effectiveness and cost-effectiveness of behavioural interventions for the prevention of sexually transmitted infections in young people aged 13-19: a systematic review and economic evaluation. *Health Technology Assessment*, 14(7): 1-230. doi: 10.3310/hta14070
- Smith, A., Poon, C., Stewart, D., Hoogeven, C., Saewyc, E., & the McCreary Centre Society. (2011). *Making the right connections: promoting positive mental health among BC youth*. Retrieved from http://www.mcs.bc.ca/pdf/making_the_right_connections.pdf

- Sports Nutrition Advisory Committee & Coaching Association of Canada. (2011). *Protein and related sports supplements*. Retrieved from http://www.coach.ca/files/SN_TIP_SHEET_JAN_2011_Protien_en.pdf
- Staff, J., Schulenberg, J., & Bachman, J. (2010). Adolescent work intensity, school performance, and academic engagement. *Sociology of Education*, 83: 183-200. doi: 10.1177/0038040710374585
- St. Leger, L., & Nutbeam, D. (2000). Effective health promotion in schools. In the International Union for Health Promotion and Education's (Ed) *The evidence of health promoting effectiveness: shaping public health in a new Europe, part 2 evidence book*. Retrieved from http://www.iuhpe.org/uploaded/Publications/Books_Reports/EHP_part2.pdf
- St. Leger, L., Young, I., Blanchard, C., & Perry, M. (2010). *Promoting health in schools: from evidence to action*. Retrieved from http://www.iuhpe.org/uploaded/Activities/Scientific_Affairs/CDC/School%20Health/PHis_EtA_EN_WEB.pdf
- Statistics Canada. (2010). *Body mass index for children and youth - 2007 to 2009*. Retrieved from <http://www.statcan.gc.ca/pub/82-625-x/2010001/article/11090-eng.htm>
- Stanger-Hall, K.F., & Hall, D.W. (2011). Abstinence-only education and teen pregnancy rates: why we need comprehensive sex education in the U.S. *PLoS ONE*, 6(10): e24658. doi:10.1371/journal.pone.0024658
- Summerbell, C.D., Waters, E., Edmunds, L., Kelly, S.A.M., Brown, T., Campbell, K.J. (2005). Interventions for preventing obesity in children. *Cochrane Database of Systematic Reviews*, 3. doi: 10.1002/14651858.CD001871.pub2
- Sussman, S., Sun, P., & Dent, C.W. (2006). A meta-analysis of teen cigarette smoking cessation. *Health Psychology*, 25(5): 549-557. doi: 10.1037/0278-6133.25.5.549
- Taylor, C. & Peter, T., with McMinn, T.L., Schachter, K., Beldom, S., Ferry, A., Gross, Z., & Paquin, S. (2011). *Every class in every school: the first national climate survey on homophobia, biphobia, and transphobia in Canadian schools*. Retrieved from <http://www.uwinnipeg.ca/index/cms-filesystem-action/pdfs/media-releases/homophobia-exec-summary.pdf>
- Thomas, R., Baker, P., & Lorenzetti, D. (2007). Family-based programmes for preventing smoking by children and adolescents. *Cochrane Database of Systematic Reviews*, 1. doi: 10.1002/14651858.CD004493.pub2
- Tingen, M.S., Andrews, J.O., & Stevenson, A.W. (2009). Primary and secondary tobacco prevention in youth. *Annual Review of Nursing Research*, 27: 171-93. doi: 10.1891/0739-6686.27.171
- Traffic Injury Research Foundation of Canada. (2010). *The alcohol-crash problem in Canada: 2007*. Retrieved from http://www.ccmta.ca/english/committees/rsrp/strid/pdf/alcohol_crash07_e.PDF
- Transport Canada. (2011). *Road safety in Canada*. Retrieved from <http://www.tc.gc.ca/eng/roadsafety/tp-tp15145-1201.htm>
- Treyster, Z., & Gitterman, B. (2011). Second hand smoke exposure in children: environmental factors, physiological effects, and interventions within pediatrics. *Reviews on Environmental Health*, 26(3):187-195. doi:10.1515/reveh.2011.026
- Turner, G., & Shepherd, J. (1999). A method in search of a theory: peer education and health promotion. *Health Education Research*, 14(2): 235-47. doi: 10.1093/her/14.2.235
- Twiss, J., Dickinson, J., Duma, S., Kleinman, T., Paulsen, H., & Rilveria, L. (2003). Community gardens: lessons learned from California Healthy Cities and Communities. *American Journal of Public Health*, 93(9): 1435-38.
- University of Waterloo. (2007). *2006-2007 smoking statistics and trends in Canadian students*. Retrieved from http://www.yss.uwaterloo.ca/results/yss2006-2007_national_smoking_profile_en.pdf
- Van Duyn, M.A., & Pivonka, E. (2000). Overview of the health benefits of fruit and vegetable consumption for the dietetics professional: selected literature. *Journal of the American Dietetic Association*, 100(12): 1511-21. doi: 10.1016/S0002-8223(00)00420-X
- Voss, C., & Sandercock, G.R.H. (2012). Associations between perceived parental physical activity and aerobic fitness in schoolchildren. *Journal of Physical Activity and Health*, in press. Retrieved from http://journals.human Kinetics.com.proxy1.lib.umanitoba.ca/AcuCustom/SiteName/Documents/DocumentItem/jpah_2011_0140-inpress.pdf
- Wadden, T., & Didie, E. (2003). What's in a name? Patients' preferred terms for describing obesity. *Obesity Research*, 11(9): 1140-46. <http://www.nature.com/oby/>
- Weare, K., & Nind, M. (2011). Mental health promotion and problem prevention in schools: what does the evidence say? *Health Promotion International*, 26(S1):29-69. doi: 10.1093/heapro/dar075
- Wolfson, A.R., & Carskadon, M.A. (2003). Understanding adolescents' sleep patterns and school performance: a critical appraisal. *Sleep Medicine Review*, 7(6): 491-506.
- World Health Organization. (1999). *Improving health through schools: national and international strategies*. Retrieved from http://www.who.int/school_youth_health/media/en/94.pdf
- World Health Organization. (2003). *Artificial tanning sunbed: risks and guidance*. Retrieved from <http://www.who.int/uv/publications/en/sunbeds.pdf>
- World Health Organization. (2009). *Ultraviolet radiation and human health (fact sheet)*. Retrieved from <http://www.who.int/mediacentre/factsheets/fs305/en/index.html>
- Young, M.M., Saewyc, E., Boak, A., Jahrig, J., Anderson, B., Doiron, Y., Taylor, S., Pica, L., Laprise, P., & Clark, H. (2011). *Cross-Canada report on student alcohol and drug use*. Retrieved from http://www.ccsa.ca/2011%20CCSA%20Documents/2011_CCSA_Student_Alcohol_and_Drug_Use_en.pdf
- Ziedonis, D., Haberstroh, S., Hanos Zimmermann, M., Miceli, M., & Foulds, J. (2006). Adolescent tobacco use and dependence: assessment and treatment strategies. *Adolescent Medicine Clinics*, 17(2): 381-410. doi:10.1016/j.admecli.2006.03.009