

YOUTH HEALTH SURVEY REPORT

Assiniboine Regional Report

Grades 6 – 12

August 2007



Acknowledgements

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Assiniboine Schools Youth Health Survey Report

The **Assiniboine Regional Health Authority (ARHA)** Regional Planning Committee has established a Chronic Disease Prevention Initiative in partnership with 12 communities across the Region. This important initiative involves community-led actions to prevent chronic disease through promotion of physical activity, healthy eating and tobacco reduction. Although this initiative includes all age groups, participation of children and youth is crucial, as lifelong health behaviours are developed in the early years. “The common environmental stresses and behaviour patterns experienced or learned in childhood and adolescence contribute significantly to the incidence and prevalence of disease later in life, and conversely, learned patterns of healthy behaviour and stress management contribute to health throughout life.”¹ Studies have shown that early indicators of chronic disease begin in youth.²

This report presents the regional findings of a Youth Health Survey that was conducted with Grade 6 to Grade 12 students in schools within the **Assiniboine Regional Health Authority** from December 2006 through March 2007.

This survey was needed to establish baseline information on risk factors for chronic disease among youth in the community. Future surveys could be used to determine if there has been any improvement in risk factors over time.

Why are Schools and Communities Important for Health?

There are many factors that influence the health of children. Schools are in a unique position to have a positive impact on the health of children and families.

*The concept of health-promoting schools emerges from a global movement that recognizes two key ideas: healthy children are better able to learn and schools can directly influence the health of students. A health-promoting school embraces the view that promoting children’s health is a shared responsibility with parents, the health sector, and the community. It strives to be a healthy setting for learning and working. Schools, in partnership with parents and the greater community, can provide an ideal setting for practices that enhance both health and learning.*³

Schools can have a **significant protective influence** on the health of children and youth through policy (nutrition, tobacco, and physical activity policies) as well as through the school culture. It has been found that adolescents who feel connected to their school communities are less likely to engage in risky activities than those who do not feel connected to their school.⁴

*Supportive school environments that foster resilience and focus on asset development, protective factors and social connectedness, reduce the risk of health-related problems and support the healthy growth and development of children and youth.*⁵

Early and sustained efforts are considered the most beneficial to the health of children and youth. It has been found that risk behaviour in youth, such as inadequate exercise, drug and alcohol misuse and smoking, tend to begin in late preadolescence and rise to a peak in the senior high school grades.⁶

It is important to note that, even though schools are ideally positioned to influence the health of children, they cannot do it alone. The health of children is a shared responsibility. There is a role to play for families, health authorities, human service providers, non-government organizations and the community, in partnership with the students and staff.

The International Union for Health Promotion and Education tells us that conditions for successful programs include:

- An organizational culture that promotes a safe, healthy learning and working environment for students and education staff
- An environment that fosters partnerships within the school and greater community
- Interventions that are substantial and sustained over several school years, and relevant to changes in young peoples' social and cognitive development
- Decision-making processes that give voice to all members of the school and greater community and respects their contribution.⁷

Partnerships with families and community groups (such as Chronic Disease Prevention Initiative or CDPI groups) are an effective way of pooling resources, as well as fostering community involvement and support. We encourage you to share the findings of your report with others. The following communities in the **Assiniboine Region** have CDPI groups:

1. Erickson
2. Hamiota
3. Keeseekoowenin
4. Killarney
5. Minnedosa
6. Neepawa
7. Rivers
8. Rosburn
9. Shoal Lake
10. Treherne
11. Virden
12. Waywayseecappo

Health is directly linked to educational achievement, quality of life and economic productivity. Research...demonstrates that school health programs can simultaneously reduce common health problems, increase the efficiency of the education system and advance public health, education and social and economic development in each nation.

From The World Health Organization Fact Sheet: Helping Schools Become Health Promoting Schools (1998)

A comprehensive study in Europe⁸ estimated the following cost-benefit of school health programs:

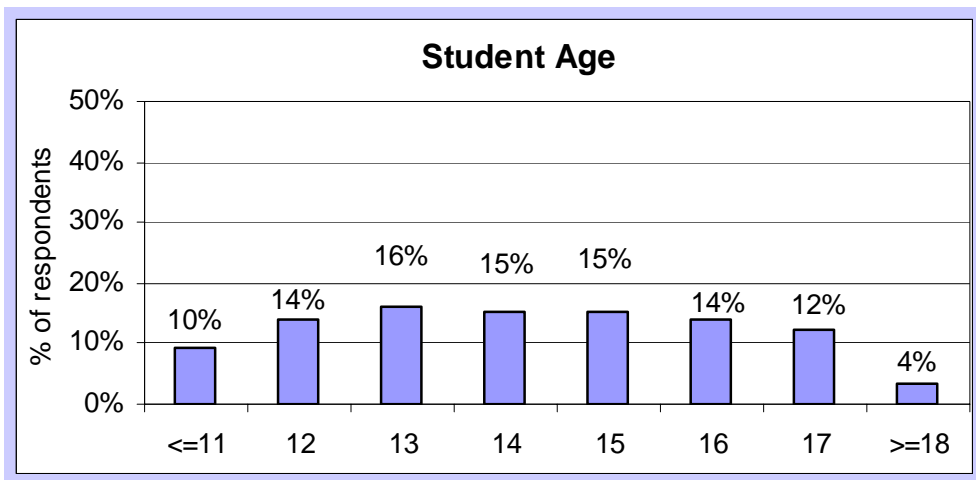
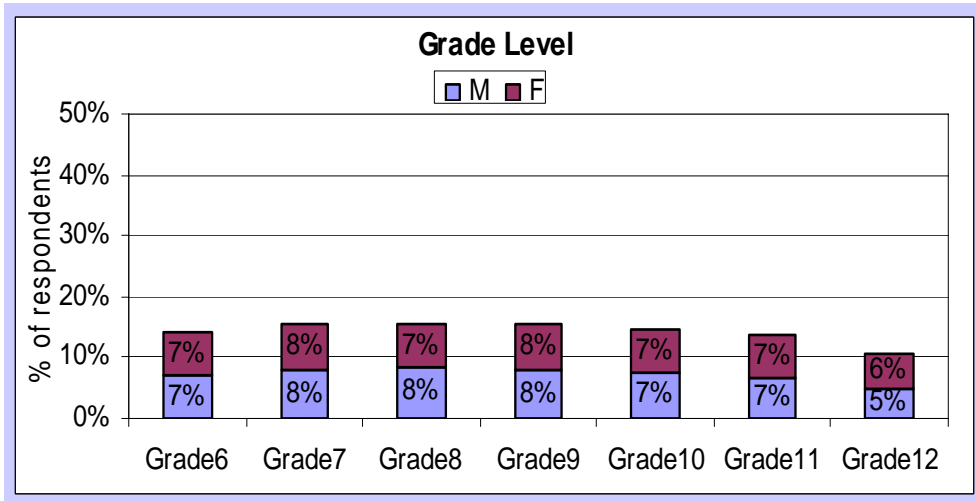
- \$1 spent on preventing tobacco use can save \$19 in treatment costs for the consequences of smoking,
- \$1 spent on preventing alcohol and drug abuse can save \$6 in money spent on treating the consequences of that behaviour,
- For the integrated education program as a whole, nearly \$14 was saved for every dollar spent.

Included in this report are a number of resources and links to programs that could be adapted for any school or community. "Numerous studies report the effectiveness of school health promotion in influencing the knowledge, attitudes and behaviours of students from kindergarten to Grade 12 and beyond."⁹

If you are interested in learning more about advancing chronic disease prevention in your school or community, please contact the Assiniboine Regional Health Authority Health Promotion Team by calling the Corporate Office at 483-5000, the Regional Office at 759-4500, or call our toll-free line at 1-888-682-2253.

Overall, in the schools within the **Assiniboine Regional Health Authority** 80% of students in grades 6 to 12 completed this survey.

Following is the demographic profile of the students who completed the survey. The students who responded were 50% male and 49% female, 1% did not state their gender.



Report Highlights

- 46% of female students and 58% of male students participate in the recommended amount of physical activity daily.
- 52% of girls are active at the recommended rate in grade 6, but this decreases to 32% by grade 12.
- 55% of boys are active at the recommended rate in grade 6, and this increases to 57% by grade 12.
- Students are most active after school followed by at lunch.
- Girls would like to see more community opportunities for swimming, soccer, tennis and football.
- Boys would like more community opportunities for football, lacrosse, hockey and swimming.
- Students prefer to participate in recreation activities on weekends followed by on weekdays after 5 pm.
- Only 11% of students eat 5 or more fruits and vegetables in a day.
- 67% of boys and 68% of girls fall within the recommended healthy weight category.
- 14% of boys and 13% of girls are currently smoking. Smoking rates increase substantially between grades 6 and 12, with 31% of all grade 12 students smoking.
- 87% of students think that all public spaces should be smoke free.
- 60% of students indicated that their school had a clear set of rules about smoking for students.
- 42% of female smokers and 29% of male smokers have plans to quit smoking sometime in the future.
- 8% of students in grade 6 had at least one drink of alcohol in the last 30 days, but this increases to 80% by grade 12.
- 10% of students report using any illegal drugs in the last 30 days.
- 79% of students strongly agree or agree that they feel close to people in the school.
- 81% of students strongly agree or agree that they feel part of the school.
- 76% of students strongly agree or agree that they are happy to be at the school.
- 84% of students strongly agree or agree that they feel safe in their school.
- 31% of students report that they had felt hopeless in the past 12 months.



Physical Activity

Assiniboine Regional Report

Why We Study Youth Physical Activity

Physical Inactivity in Youth is a Public Health Epidemic

- Behaviors started in childhood and adolescence tend to carry over to adulthood.
- In 2005, 28% of Canadian youth, 31% of Manitoba youth, and approximately 23% of Assiniboine youth were considered physically inactive.¹⁰
- Fewer than 10% of Manitoba children aged 5 to 12 years meet Canada's Physical Activity Guide (PAG) recommendations of 60 minutes of moderate plus 30 minutes of vigorous activity daily.¹¹ Boys are more likely than girls to meet the PAG goals.
- Approximately 8% of Manitoba youth from ages 13 to 17 meet the PAG recommended amount of daily physical activity.¹²

Benefits of physical activity:

- *promotes normal growth and bone development;*
- *fosters psychological well being, self-esteem and social development;*
- *helps maintain healthy weight in children and teens;*
- *reduces the risk of several chronic diseases – including diabetes, high blood pressure, heart disease and cancer.*¹³

Moving toward action:

Recent research from Nova Scotia, Ontario and British Columbia demonstrates the benefits of comprehensive school health programs that employ community engagement practices in increasing physical activity and other healthy behaviours in schools.¹⁴

School / community programming is effective when a combination of approaches is used including:

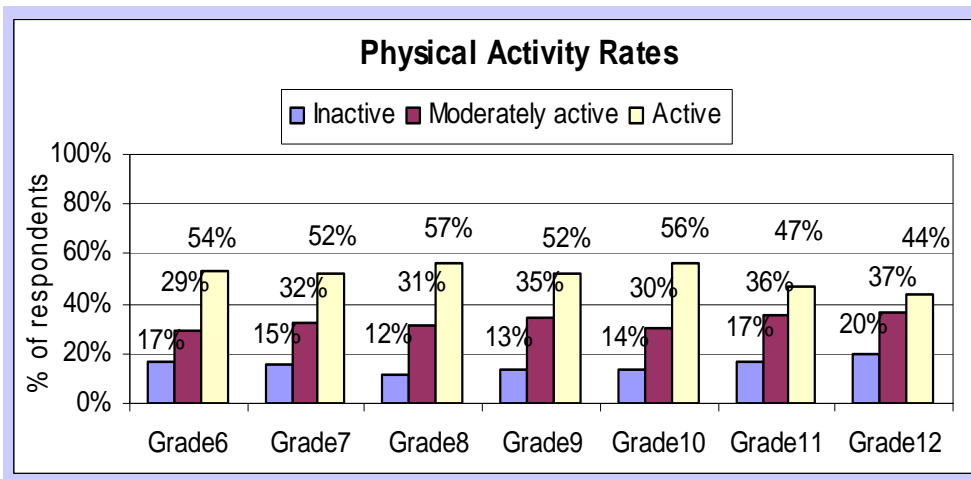
- Education
- Accessible facilities
- Physical activity programming (intramurals, intervarsity and a variety of sports / activities)

By working together through coordinated efforts between school and community we can achieve greater impact on the health of young people.

Physical Activity Levels

We asked the students in the schools within the **Assiniboine Regional Health Authority** to report how much physical activity they do each day of the week. The graphs below show us the percentage of students who are inactive, the percentage of students who are moderately active and the percentage who are active enough for optimal growth and development.

Based on student reports, 54% of grade 6 students in the schools within the **Assiniboine Regional Health Authority** are active, but this decreases to 44% by grade 12. The number of inactive students in grade 6 is 17%, and this increases to 20% by grade 12.

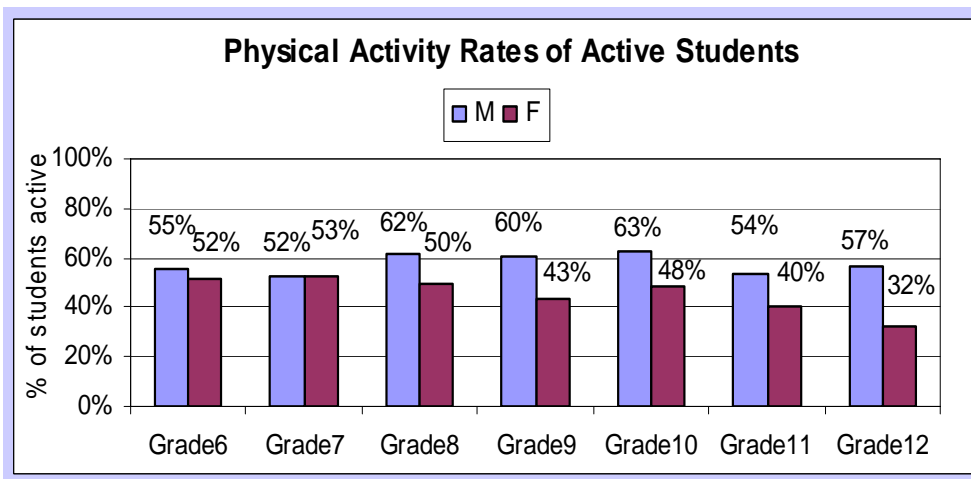


Physical activity is measured in kilocalories per kilogram per day (KKD).
KKD is a measure of how much energy a person has expended in a day.

It is recommended that youth expend at least 6 to 8 KKD for optimal growth and development¹⁵.

This could mean 60 minutes of biking, raking leaves, dancing, or brisk walking, combined with 30 minutes of aerobics, hockey, basketball or jogging.

The following graph shows the proportion of male and female students who are considered "active" based on their responses.



How to take action:

There is *strong evidence* showing that school-based interventions are effective in increasing physical activity and physical fitness among children and youth. Effective interventions use approaches that include one or more of the following:

1. Modified Physical Education (PE) Programs:
 - increased length of PE class
 - alternative activities to increase students' interest in PE class
 - increased moderate and vigorous physical activity engaged in during PE class
2. Additional classroom physical activity breaks led by classroom teachers as a complement to the PE class
3. Self-management programs including goal setting, self-monitoring and problem solving
4. Family-involvement programs

(From the Knowledge Exchange Network package *Effective School-based Interventions in Physical Activity*. Further information can be found at www.mb.cancer.ca. Follow the Knowledge Exchange Network Link.)

We also asked the students how many of their closest friends are physically active. 72% of the active students reported that 4 or 5 of their closest friends were physically active. Students who are active and moderately active are more likely than inactive students to have 4 or 5 of their closest friends who are active.

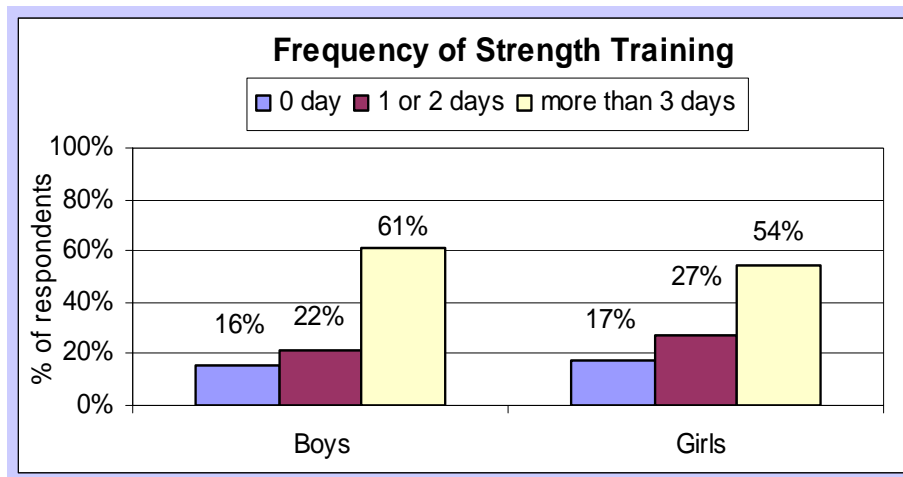
# friends who are physically active	Active Students	Moderately Active Students	Inactive Students
0	2%	3%	8%
1	2%	4%	7%
2	7%	11%	15%
3	16%	22%	24%
4 or 5	72%	58%	42%

Strength Training in Youth

Strength training helps develop and maintain strong muscles, healthy bones, healthy body weight and can enhance body image. Strength training is different from sports such as power lifting and body building. Strength training involves resistance training to enhance one's ability to exert or resist force, while weight or power lifting is a competitive sport that emphasizes maximum lifting ability, and body building focuses on appearance.

It is recommended that youth strength train 2-3 days per week as part of a physical activity program. All students should be taught how to strength train properly so that they do not over train and hurt themselves.

In the schools within the **Assiniboine Regional Health Authority**, 61% of the boys and 54% of the girls reported that they strength train more than 3 days of the week.



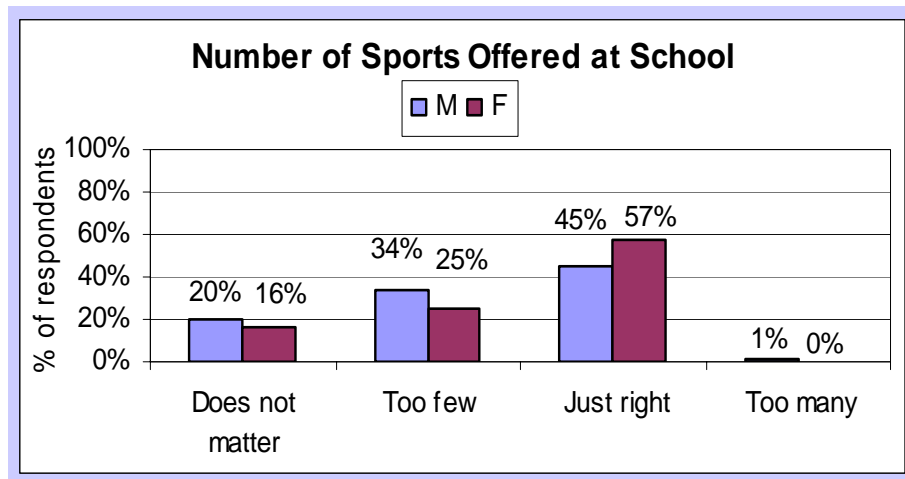
When Students are Active

Students reported the time of day when they are most physically active:

- 8% are active before school
- 62% are active after school
- 28% are active at recess
- 29% are active at lunch

Satisfaction with the Number of School Sports

45% of boys and 57% of girls in the schools within the Assiniboine Regional Health Authority stated they felt that the number of sports offered at their school was just right but 34% of boys and 25% of girls felt that there were too few sports offered at school.



How to Take Action: Promoting school sports

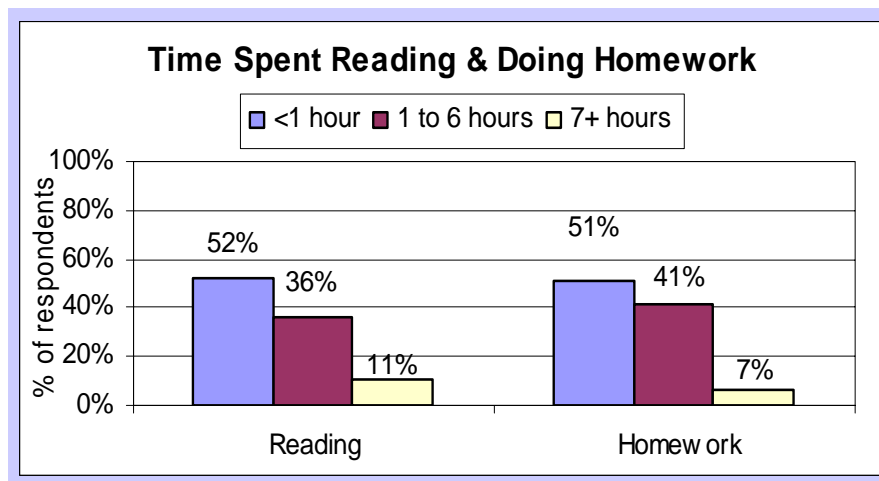
- Focus on promoting participation in varsity and intramural sports by offering a balance of both in a variety of sports and activity programs
- Even varsity teams can include lots of students:
 - Individual events, like track & field can include everyone interested in some meets, while using rotating or performance-based criteria for other meets
 - Practice squads can expand participation in team-based events and develop skilled players for subsequent years
- Have students create their own intramural leagues for credit. Organizing and running an intramural program can be a great project for a senior student looking for experience in sport management
- Increasing participation is likely easiest through intramural activities since everyone at school is eligible to participate
- Offering other non-traditional sports such as kickboxing, dancing and golf.

Exposing children to a wide variety of physical activities and sports at school, and seeking their input on activities they would like to try, are excellent ways to encourage participation. Schools can do this through daily physical education programming, structured physical activity programs at lunch periods, intramural and inter-school sport program and other extra-curriculum physical activities.¹⁶

Time Spent Reading and Doing Homework

Sedentary activities include things such as watching television, using the computer, reading and homework. To promote overall health, students should decrease the total amount of time they are inactive while maintaining homework and reading time. This can be done by decreasing “screen time” which is time spent in front of the television, video games or on the internet and also decreasing inactive time spent on the telephone.

This graph shows how much time students in the schools within the **Assiniboine Regional Health Authority** spend reading or doing homework per week.



How to Take Action:

While the Youth Health Survey was completed by students from Grades 6 to 12, some programs for younger children, such as the following program for Grade 3 and 4 students were highlighted by the Knowledge Exchange Network:

The Student Media Awareness to Reduce Television (SMART) program has been effective in decreasing physical inactivity. It includes three main components:

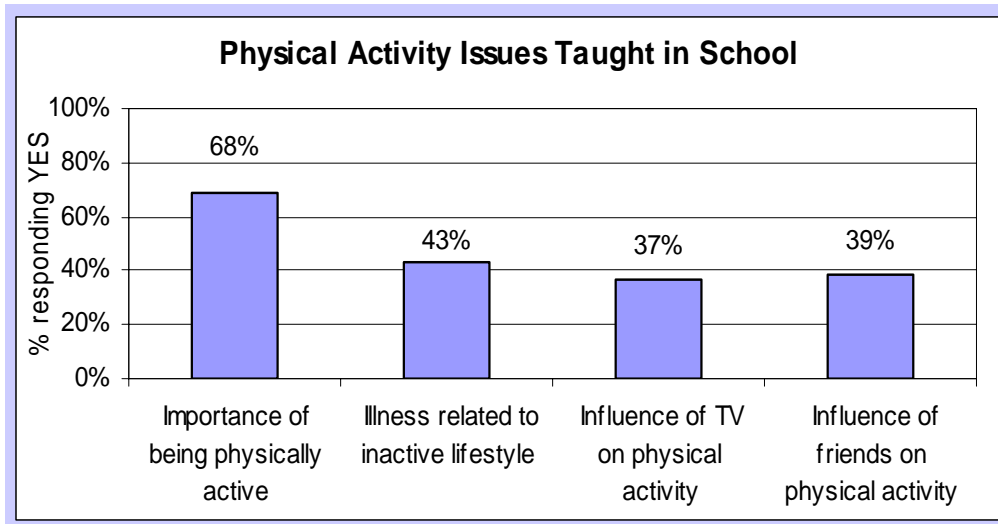
- (1) students learn to self-monitor,
- (2) a TV turn-off challenge, and
- (3) students develop a budget for television, videos and video game use.

The students participating in this program showed a 5.5 hour/week decrease in TV, a 2.5 hour/week decrease in video game use, and significant changes in body weight.

(From the Knowledge Exchange Network package *Effective School-based Interventions in Physical Activity*. Further information can be found at www.mb.cancer.ca. Follow the Knowledge Exchange Network Link.)

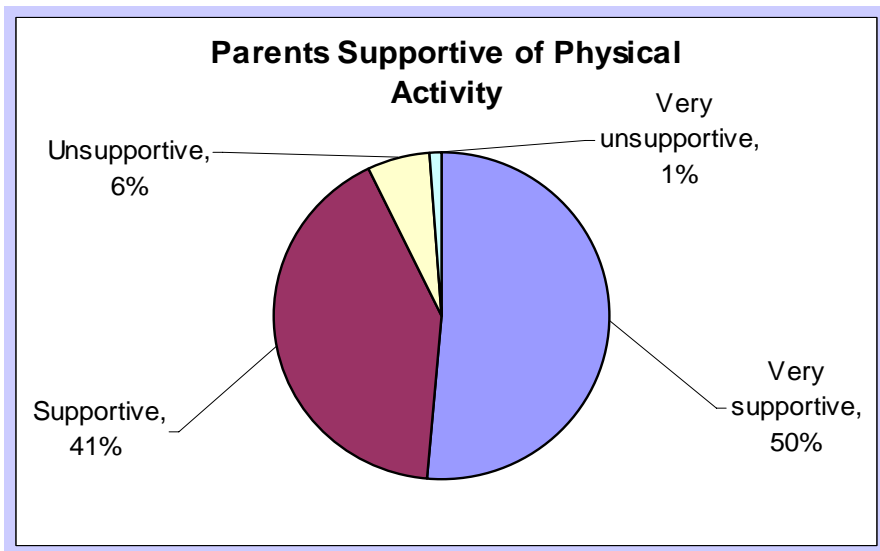
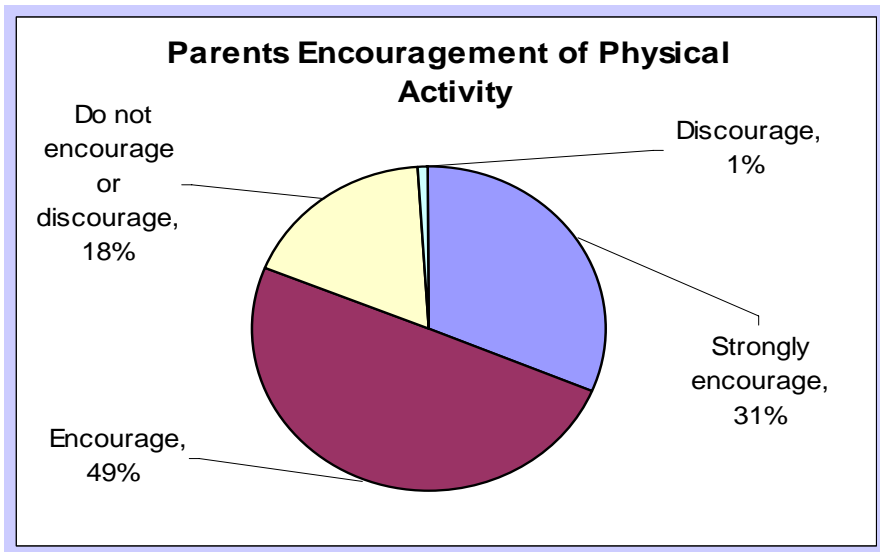
Students Perceptions of Physical Activity

We asked the students if the subjects at school taught them about topics related to physical activity. The graph below shows the percentage of students who thought that these issues were taught at their school.



Parental Support of Physical Activity

We asked students in the schools within the **Assiniboine Regional Health Authority** how their parents encouraged and supported them (such as driving to team games and buying sport equipment) in their physical activities. 80% of the students said that their parents encouraged/strongly encouraged them to be physically active and 91% of the students said that their parents were supportive/very supportive of their participation in physical activities.



Recreation Activities in their Communities

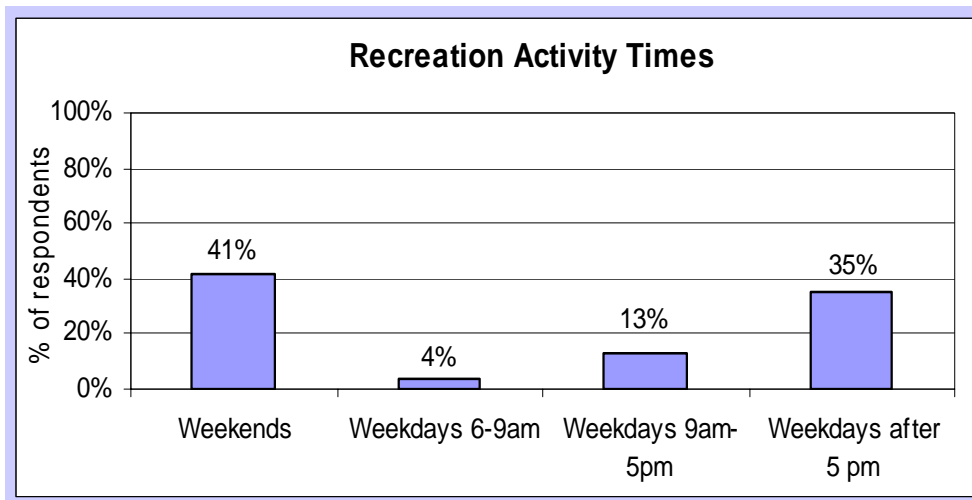
Students were asked to list up to 3 recreation activities that they would like to do that are currently not available in their community. Some of the most common responses from the girls were:

- swimming
- soccer
- tennis
- football

Some of the most common responses from the boys were:

- football
- lacrosse
- hockey
- swimming

Students were also asked when they would like to participate in these activities. A majority of students indicated that they would like to participate in physical activities on weekends followed by on weekdays after 5 pm.



B

Healthy Eating

Assiniboine Regional Report

Why We Study Healthy Eating

*Good health and nutrition are needed to achieve one's full educational potential because nutrition affects intellectual development and learning ability. Schools offer more effective, efficient and equal opportunities than any other setting to promote health and healthy eating. They reach young people at a critical age of development in which lifestyles are developed, tested and adapted.*¹⁷

- Lower grade levels provide excellent opportunities to influence healthy eating because eating habits are formed early in life.¹⁸
- The number of servings of fruits and vegetables provides a way to measure “healthy eating”. Only 39 % of Canadians and 36% of Assiniboine residents over the age of 12 eat at least 5 servings of fruits and vegetables every day¹⁹.

Benefits of healthy eating include;

- better performance at school, work and play
- better behaviour
- more able to cope emotionally
- less anxiety, depression and hyperactivity
- more ready to learn
- lower incidence of disease
- healthy weights

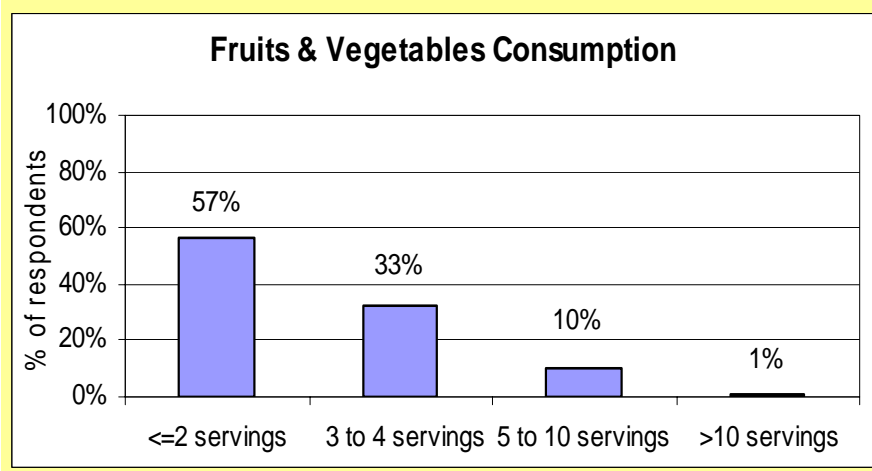
Healthy eating contributes to the prevention of:

- *Obesity*
- *Hypertension, heart disease and stroke*
- *Diabetes*
- *Respiratory diseases*
- *Orthopedic conditions such as arthritis, joint and back problems*
- *Certain mental health issues*

Eating Habits of Students

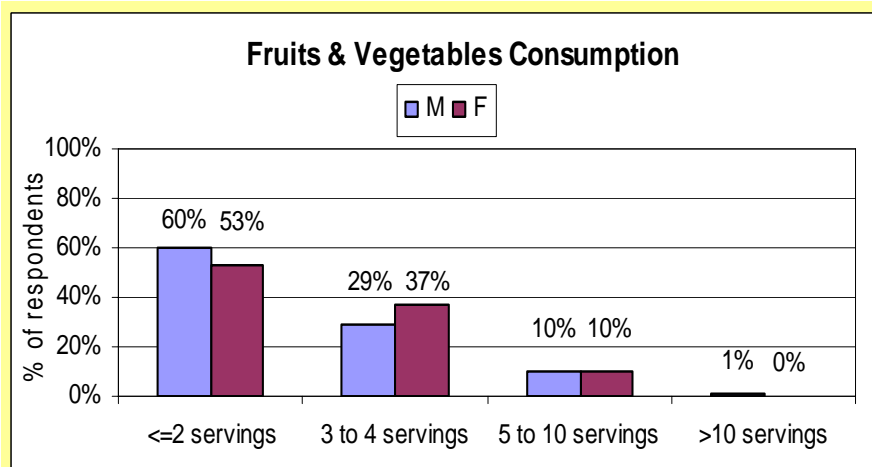
Canada's Food Guide to Healthy Eating recommends that children 9 to 18 years of age consume between 6 and 8 servings of fruit and vegetables on a daily basis. Students were asked to indicate the number of servings of fruits and vegetables they consumed on a regular basis.

Only 11% of students in the schools within the **Assiniboine Regional Health Authority** consumed fruits and vegetables 5 or more times per day.



Significant trends contributing to unhealthy eating:

- *Supersizing*
- *Junk food*
- *Fast food*
- *Eating out*



How to Take Action:

There is *strong evidence* showing that school-based interventions are effective in increasing fruit and vegetable intake, and decreasing the amount of fat intake in children and youth. Effective strategies include:

- Using clear messages about specific behaviour changes
 - Incorporating multiple strategies to reinforce messages
- Incorporating family involvement
- Running programs for an extended period of time (> 16 weeks)
- Treating fruits and vegetables separately in the intervention (separate programs / curricula)
- Encouraging children to accept or like the taste of fruits and vegetables (e.g. offering veggie packs in the canteen)
- Minimizing emphasis on benefits for future health
- Beginning interventions prior to the sixth grade before behaviour patterns become resistant to change

Effective school-based nutrition interventions use approaches that include one or more of the following:

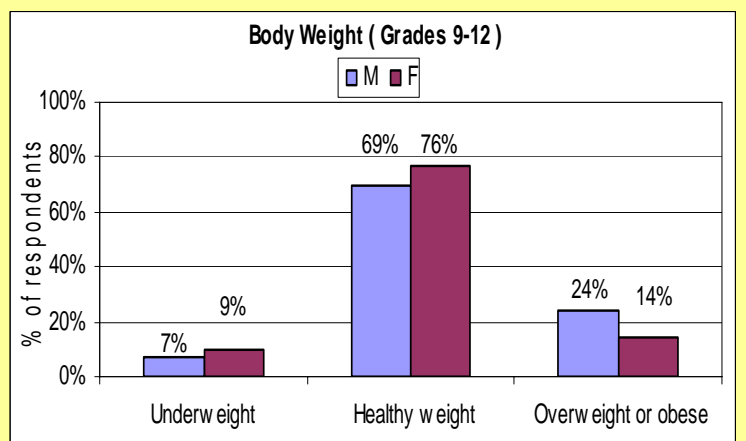
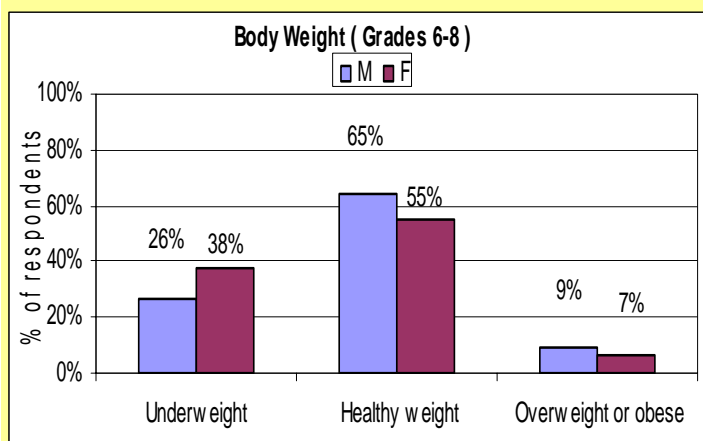
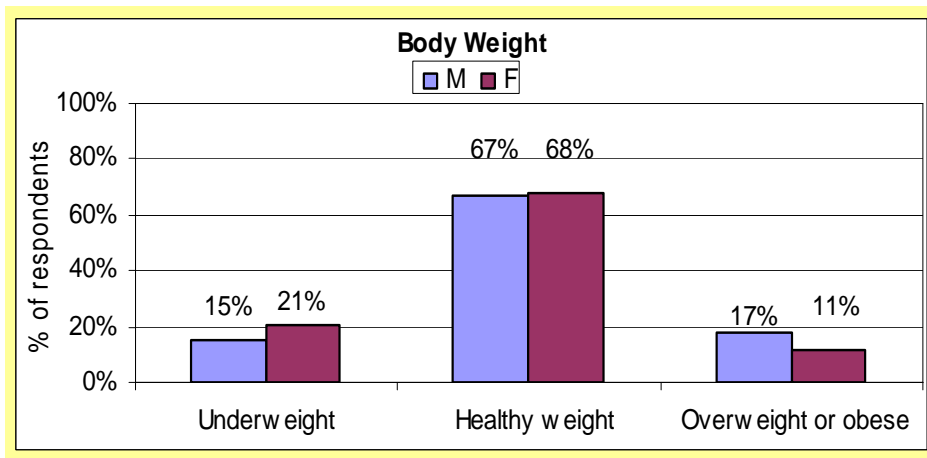
- Classroom (lessons and activities)
- School meal modification
- Parental involvement
- Point-of-purchase education
- Media marketing

(From the Knowledge Exchange Network package *Effective School-based Interventions in Nutrition*. Further information can be found at www.mb.cancer.ca. Follow the Knowledge Exchange Network Link)

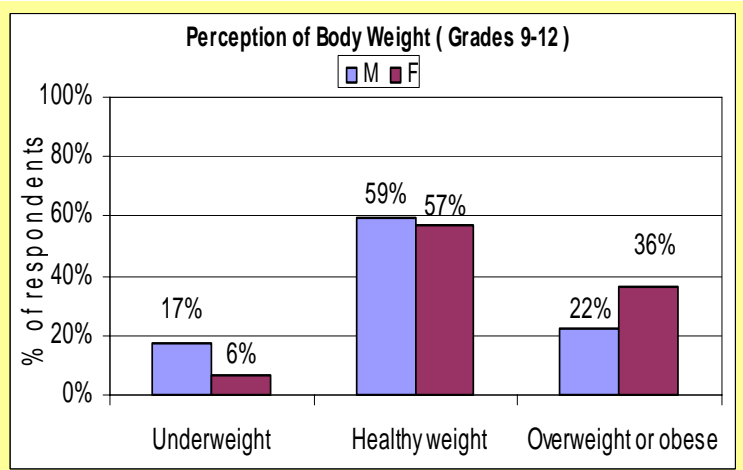
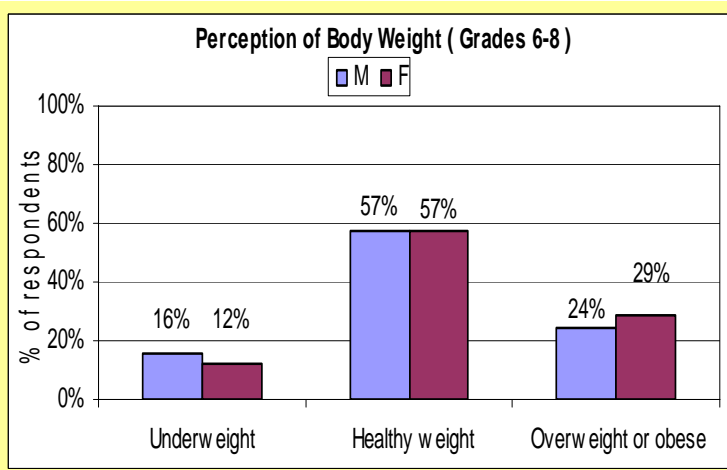
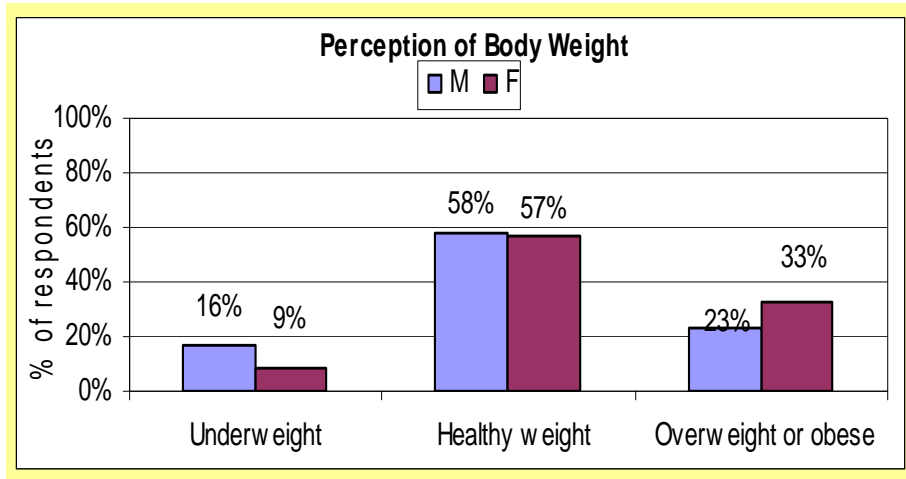
Healthy Body Weight

48% of Canadians and 56% of the **Assiniboine Regional Health Authority** population were overweight or obese in 2003²⁰. The **Assiniboine Regional Health Authority** rate increased to 61% in 2005²¹. Being overweight during childhood can lead to increased illness and risk of chronic diseases such as heart disease, cancer and type-2 diabetes²². Overweight and obese youth are often stigmatized by peers and adults^{23,24}. These youth may experience psychological stress, have a poor body image as well as poor self-esteem²⁵.

Healthy body weight can be measured by body mass index (BMI). BMI is a measure of a person's weight in comparison to their height. Of the students with a valid BMI, 67% of the boys and 68% of the girls in the schools within the **Assiniboine Regional Health Authority** fall within the recommended healthy weight category for their age.

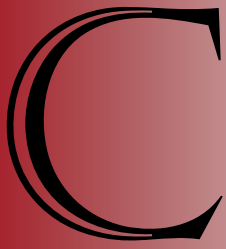


Having a healthy body weight is necessary for health & well-being. However, an accurate and realistic perception of one's weight can provide motivation to gain or lose weight as necessary. Of the students with a valid BMI, 58% of male students and 57% of female students in the schools within the **Assiniboine Regional Health Authority** perceive their body weight as healthy. These rates are lower than their actual body weights.



This section has focused on overweight and obesity, but we acknowledge the dangers of being underweight, which are not discussed. Regardless of weight, however, “body image dissatisfaction is a strong precursor to emotional problems, unhealthy nutrition habits and in extreme cases, to eating disorders.”²⁶

A complex web of factors contributes to a healthy body weight. This report has outlined possible actions for communities within the **Assiniboine Regional Health Authority** for physical activity, inactivity and healthy eating.



Smoking, Alcohol & Drug Use

Assiniboine Regional Report

Why We Study Youth Smoking

Smoking is a Public Health Problem

- 22% of Canadians and 16% of the Assiniboine population over the age of 12 are smokers²⁷.
- 22% of all deaths in Canada are attributed to smoking.²⁸ Smoking causes 4 times as many deaths as car accidents, suicide, homicide and AIDS combined.²⁹
- Half of all long-term smokers will die or be disabled by a smoking-related illness.³⁰

Smoking is an Adolescent Problem in Canada

- Because 85% of current smokers start smoking by the age of 19,³¹ adolescence is a crucial time in the prevention of smoking
- The average age at which students smoke their first whole cigarette is 11.³²
- What starts as a bid for *independence* quickly becomes *dependence* on tobacco. Only 5% of student smokers think that they will be smoking in 5 years – 5 years later, 80% of them are heavy smokers.³³

Smoking is a Community Problem in Canada

- Smoking is more predictive of dropping out of school than marijuana use or alcohol use.³⁴
- Students who take up smoking show a decrease in academic achievement and motivation.³⁵
- Starting smoking at an early age is predictive of a number of other risk behaviors; these include carrying a gun or other weapon at school, fighting, and drug use.³⁶

Schools Can Make a Difference:

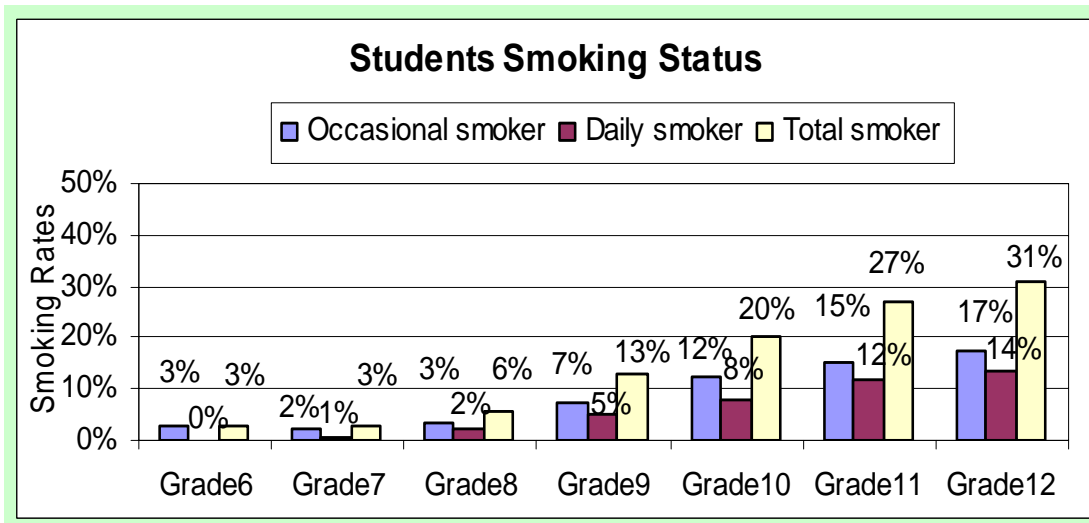
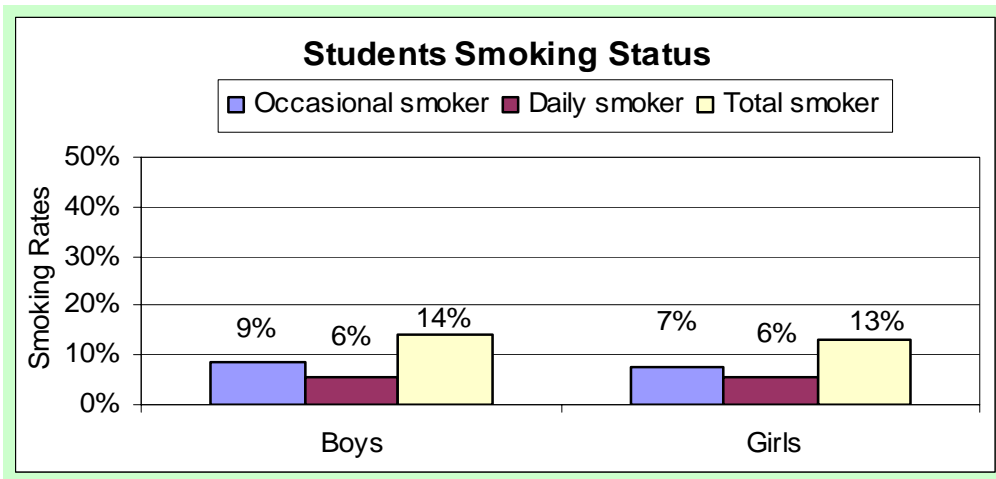
School efforts linked with local public health and community agency efforts can reduce problems related to youth smoking. Research has shown that successful efforts include education (coordinated curriculum), a supportive environment (clear, enforced rules about smoking), services and students who know people care.

(From the Knowledge Exchange Network package *Effective School-based Interventions in Tobacco Prevention*. Further information can be found at www.mb.cancer.ca. Follow the Knowledge Exchange Network Link).

The Assiniboine Health Promotion Team reports success with the NOT (Not On Tobacco) youth tobacco cessation program. See www.mb.lung.ca/not.html for more information.

Who Smokes in Schools within the Assiniboine Regional Health Authority

Overall, 14% of the boys and 13% of the girls we surveyed in the schools within the **Assiniboine Regional Health Authority** reported that they are currently smoking. We see the smoking rates increase substantially from grade 6 to 12, with 31% of grade 12 students smoking. When we look at the smoking rates by gender, we see that the rates are almost equal for males and females.



The Canadian Tobacco Use Monitoring Survey³⁷ indicates that 20% of youth aged 15-19 in Manitoba and 19% of youth aged 15 to 19 in Canada were current smokers in 2005. When compared to this rate, the **Assiniboine Regional Health Authority** youth smoking rate of 22% for grades 9 to 12 is higher.

Attitude to Smoke Free Public Spaces

In the schools within the **Assiniboine Regional Health Authority**, 87% of the students surveyed responded 'probably yes' or 'definitely yes' to the question, "*Do you think all public places (e.g. malls, arcades, restaurants, etc.) should be smoke free?*" Sharing this information with the students and getting kids involved in advocating for smoke-free public places may reduce the likelihood that they will start to smoke and may help them to feel that it is okay to speak out in favor of non-smoking.

School Smoking Policy

Students were asked a question about their school's smoking policy. 60% of the respondents indicated that their school has a clear set of rules about smoking for students to follow and 28% indicated that they didn't know. 10% of students reported that their school does not have a clear set of rules about smoking.

Moving toward action

The enforcement and perceptions of enforcement are crucial to the success of school smoking bans. A recent study found that school smoking bans that were strictly enforced were related to an 11% decrease in the uptake of smoking.³⁸ To obtain this type of a reduction, it is important that students perceive that most or all students obey the rules. It is important for students to understand that the rules are not arbitrary, but intended to protect the health of students.

Why Students Smoke

Students take up smoking for a variety of reasons. Peers and family members are especially influential in the decision to start or continue smoking. These influences are sometimes direct (e.g., peer pressure) but more often indirect (e.g., modeling). We asked students in the schools within the **Assiniboine Regional Health Authority** a series of questions relating to peers and family.

92% of daily smokers and 82% of occasional smokers report that 1 or more of their 5 closest friends smoke cigarettes. 12% of non-smokers report that 1 or more of their 5 closest friends smoke.

How many of your 5 closest friends smoke cigarettes?	Percentage of Students Responding		
	Daily Smokers	Occasional Smokers	Non-smokers
0	4%	16%	17%
1	5%	21%	5%
2	9%	21%	3%
3	17%	17%	2%
4	15%	10%	1%
5	46%	13%	1%

Students were also asked how many people, besides themselves, smoked inside their home every day or almost every day.

Family Member Smoking Inside the Home	Percentage of Students Responding		
	Daily Smokers	Occasional Smokers	Non-smokers
0	31%	51%	70%
1	21%	25%	17%
2	23%	15%	8%
3	9%	6%	2%
4	8%	1%	0%
5 or more	7%	3%	1%

Not only are students whose parents smoke more likely to become smokers themselves, it is also a health concern if a family member(s) smokes in the home. 68% of the daily smokers and 50% of occasional smokers in the schools within the **Assiniboine Regional Health Authority** reported that at least one person inside the home smoked on a daily basis. In contrast, only 28% of non-smokers reported that someone smokes daily inside their home.

How to take action:

There is *strong evidence* showing that school/ community-based interventions are effective in preventing tobacco use in youth. Effective strategies:

- Include peers in the development and implementation of programs
- Build on elements of existing effective campaigns
- Create interventions that focus on social reinforcement and/or developmental and social norms
- Focus on multiple risk behaviors, not just tobacco use
- Sustain and coordinate interventions to the end of adolescence
- Focus on higher grade levels making sure community activities reach youth
- Create campaigns of sufficient intensity, frequency and duration
- Include multiple activities that address the different factors associated with smoking behavior

Effective school / community-based youth tobacco prevention interventions use approaches that include one or more of the following:

- Classroom education
- Telephone and mail boosters
- Mass media marketing
- Parent and school principal groups, example, refining school policy

(From the Knowledge Exchange Network package *Effective School-based Interventions in Tobacco Prevention*. Further information can be found at www.cancer.ca. Follow the Knowledge Exchange Network Link)

How Students Obtain Cigarettes

Most of the students in the schools within the **Assiniboine Regional Health Authority** are under the age of 18. Despite the fact that federal law prohibits the sale of cigarettes to anyone under the age of 18, many students are able to buy cigarettes and in most cases they are not asked their age. In the past month 37% of smokers stated that they were not asked their age when buying cigarettes, another 7% were asked less than half the time. Only 4% were always or almost always asked their age when buying cigarettes.

Student who smoke obtain their cigarettes in the following ways:

<i>How do you usually get your cigarettes?</i>	% responding
I buy them	32%
Someone buys them for me	21%
I get them from my friends	28%
I get them from home	4%
other	8%

<i>If you buy your own cigarettes, where do you buy them?</i>	% responding
Convenience store	22%
Gas station	27%
Grocery store/supermarket	10%
Bar	12%
Restaurant/diner/cafeteria	4%
Friend or other person	21%

*Note: column may exceed 100% as students were asked to select ALL that apply.

Moving toward action

Establishing partnerships between school divisions, schools, local health departments and tobacco retailers is important in reducing the number of youth who access tobacco.

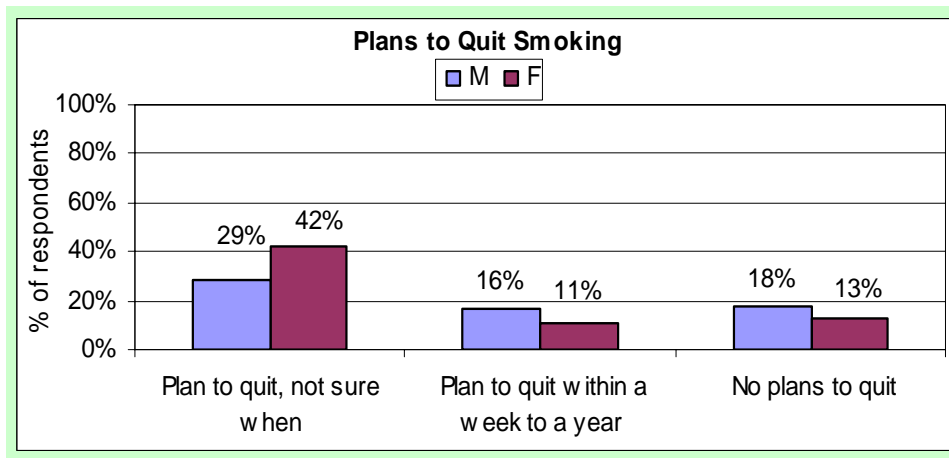
Other community strategies include:

- Enforcing legislation and working with schools on the issue of social supply (students sharing tobacco) on school property can reduce youth access to tobacco.
- Retailer education and increased compliance with laws that prohibit sales to minors can be another way to effectively reduce tobacco use.

Trying to Quit

Quitting smoking is not an easy process for adults or for youth. New evidence indicates that the first symptoms of addiction to nicotine may occur as early as a few days or weeks after the beginning of even occasional smoking by youth³⁹. Students can have a very difficult time quitting even when they have strong motivation to do so.

When student smokers were asked about their plans to quit smoking, many students (42% of females and 29% of males) plan to quit, but are not sure when. Another 11% of females and 16% of males plan to quit within a week to a year. Of those who smoke 13% of females and 18% of males have no plans to quit.



Most young smokers attempt to quit within two years of their first cigarette, and most smokers make multiple quit attempts.⁴⁰

According to the Youth Smoking Survey, 1994 (YSS), a high percentage of current smokers aged 10 to 19 years (81%) have at some time seriously thought about quitting; most have made a quit attempt (Y3). Of current smokers who have tried to quit, 19% have made five or more attempts to quit. In the six months prior to the survey, 40% of all current smokers aged 10 to 19 had made at least one quit attempt.

Moving toward action

Smoking often occurs in social situations among peers. Programs that help students to develop skills for resisting social influences are helpful. The most successful programs teach students refusal skills through direct instruction, modeling, reversal, and reinforcement.

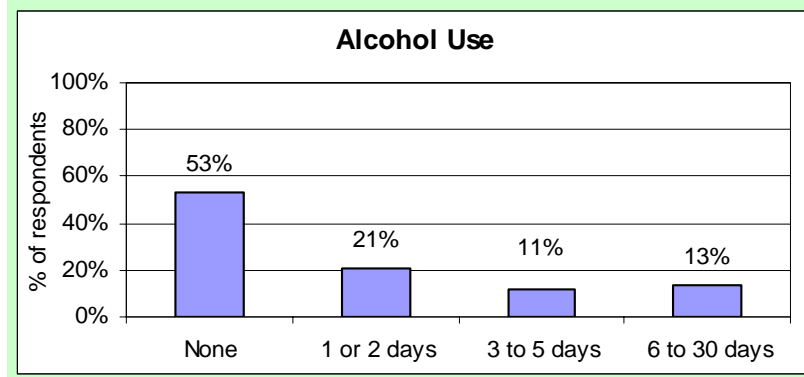
It is also important to increase awareness of the artificial atmosphere created in our society that leads students to see the cigarette as a rite of passage into adulthood and an emblem for rebellion.

The Manitoba Lung Association **Not On Tobacco** program provides strategies to deal with the social pressures to smoke. For more information, visit: www.mb.lung.ca/not.html.

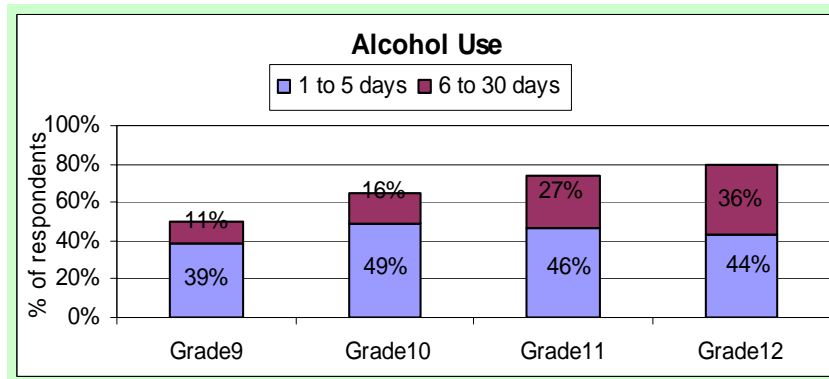
Alcohol & Drug Use

Alcohol abuse is associated with motor vehicle and aquatic injuries and deaths, vandalism, alcohol poisoning and violence. Harmful use patterns started young and carried into adulthood exacerbate these problems, and chronic alcohol abuse leads to a number of acute and chronic disease conditions.⁴¹

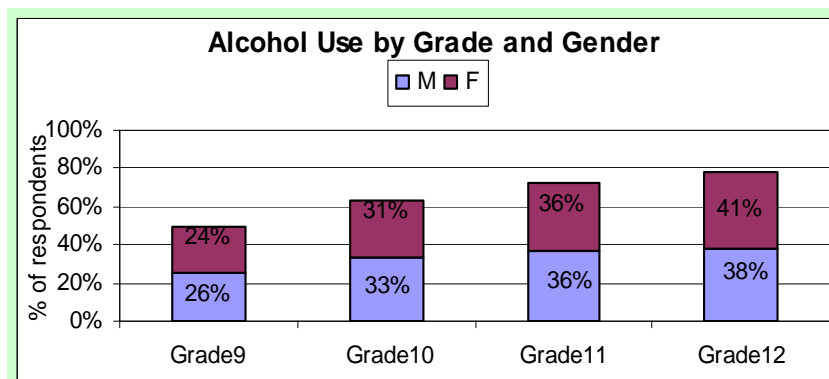
Students were asked “During the past 30 days, on how many days did you have at least one drink of alcohol?” 32% of students indicated that they had alcohol between 1 and 5 days and 13% had alcohol between 6 and 30 days.



50% of grade 9 students had at least one drink of alcohol in the last 30 days. This increased to 80% for grade 12 students.

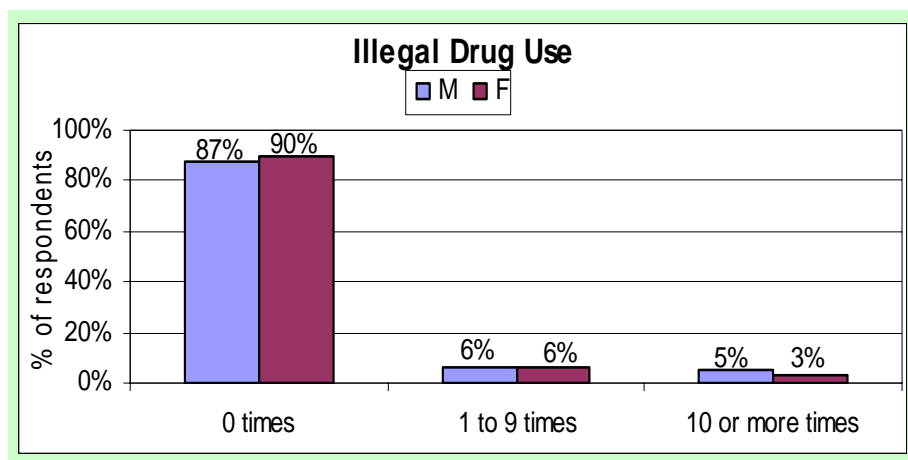


26% of boys and 24% girls in grade 9 had at least one drink of alcohol in the last 30 days, but this increased to 38% and 41% by grade 12.

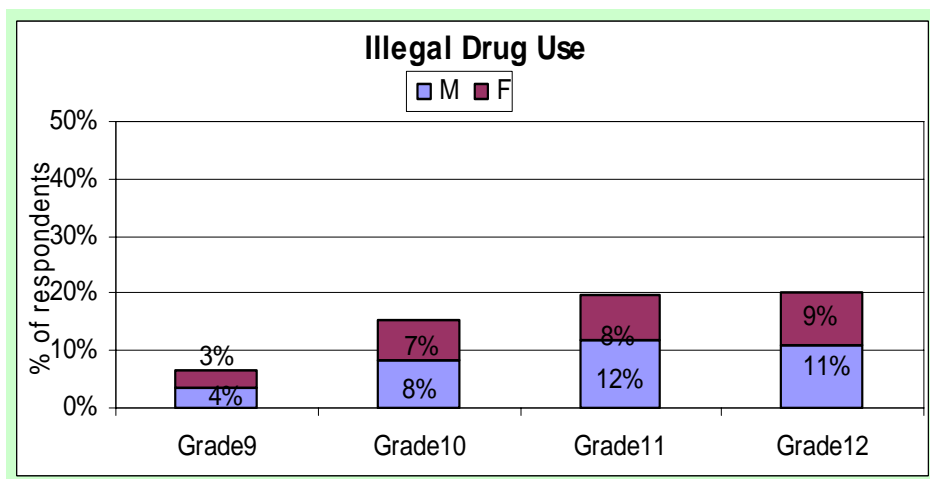


When asked “During the past 30 days, on how many days did you have 5 or more drinks of alcohol within a couple of hours?”, 27% indicated that they had 5 or more drinks of alcohol within a couple hours on at least once in the past 30 days.

10% of students in the schools within the Assiniboine Regional Health Authority indicated that they had used illegal drugs such as marijuana, cocaine, heroin, methamphetamines, ecstasy, steroid pills/shots or sniffed glue in the past 30 days.



When we look at these rates for grades 9 to 12, we see that 7% of grade 9 students used illegal drugs in the past 30 days, but this increases to 21% by grade 12.



How to take action:

A Health Canada publication entitled “Preventing Substance Use Problems Among Young People: A compendium of Best Practices”⁴² includes several principles of effective prevention programs, such as:

- Prevention should enhance protective factors and minimize risk factors
- Prevention should include family, schools and community
- Prevention programs should be developed on a continuum in order to meet age specific and developmental needs in a young persons life
- Programs need to be sustainable and integrated within the community network

A recent comprehensive analysis of evidence-based best practices in school health instruction and policy in substance abuse prevention in Australia⁴³ identified the following characteristics of successful programs:

- Parents and the wider community are involved
- Health is a whole school responsibility
- Instruction should be sequential and developmentally appropriate
- Instruction should have a basis in expressed student needs
- Instruction should begin before the onset of harmful practices
- Interaction vs. didactic learning is a best fit for health instruction
- Peer leaders hold promise for health instruction
- Classroom teachers play a central role
- The values and attitudes of the broader community must be considered
- Focus should be on harm minimization as an end goal
- Social skills are superior to factual information alone in achieving improvements

School Connectedness:

There is increasing evidence that the school environment plays an important role in supporting students' abilities to stay smoke-free. Students who feel an attachment to their school and who consider their teachers to be supportive are less likely to smoke or to engage in other unhealthy or risky behaviors. Activities to build a positive school community might be helpful in reducing smoking in the **Assiniboine Regional Health Authority**. Here is what students in the schools within the **Assiniboine Regional Health Authority** said about their school environment:

How strongly do you agree or disagree with the following statements?	Percentage of Students Responding	
	Agree/ Strongly Agree	Disagree/ Strongly Disagree
I feel close to people at this school	79%	18%
I feel I am part of this school	81%	16%
I am happy to be at this school	76%	21%
I feel safe in my school	84%	14%

“School connectedness is an important predictor of academic performance, positive career trajectory and a clear protective factor against a range of problem behaviours.”⁴⁴

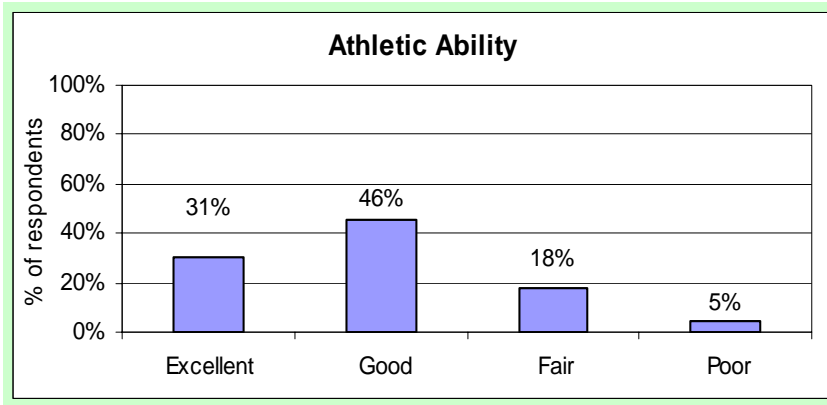
How to take action:

‘What are the creative ways to involve students in your school?’

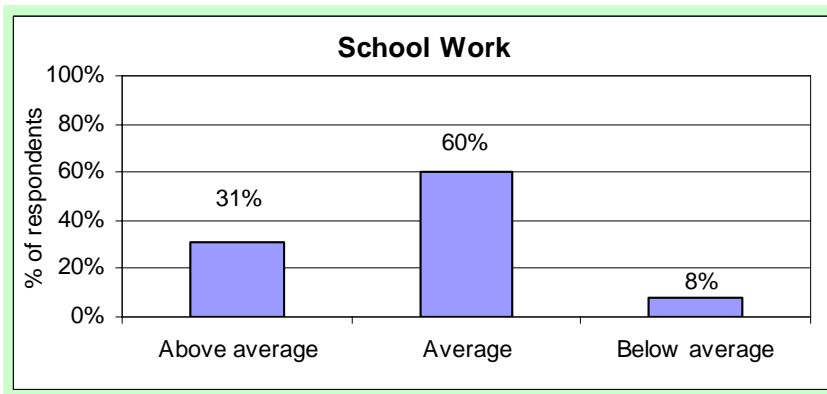
- Involve students in school/ community leadership opportunities, Healthy School initiatives, and peer helper programs.
- Partner with local groups that have an interest in health and chronic disease prevention to develop community-wide activities.

Overall Feelings of Well-being

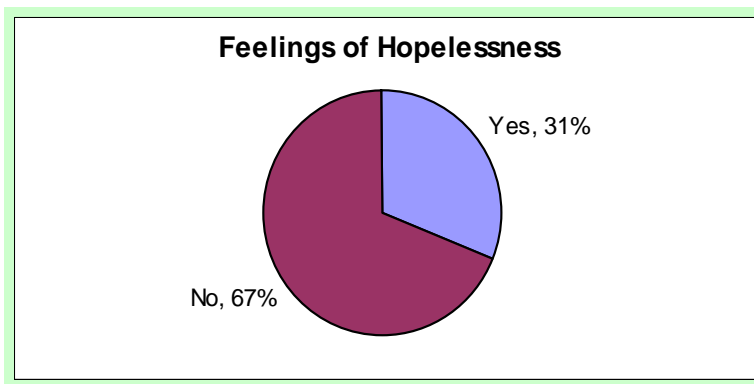
Students were asked a few questions about their accomplishments and overall sense of well-being.



77% of students rated their athletic ability as excellent or good.



91% of students rated their school work as average or above average.



31% of students stated that they had felt so sad or hopeless in the past 12 months that they stopped doing some usual activities for a while.

How to take action:

The importance of **listening to children and youth** for parents, teachers and other adults cannot be underestimated. When promoting health in the school or community, it is essential to give children and youth a voice. This can be done in a number of ways, such as interviews, surveys, “bear pit” sessions and student health awareness days.

Where do we Start?

There is growing evidence of the link between healthy child development and chronic disease prevention. "It is clear from the global experience that opportunities exist within the school setting from kindergarten to Grade 12 to significantly and positively influence many domains of youth health."⁴⁵ There are numerous resources available to assist schools and communities to promote healthy living. Many of these programs can be adapted to fit your situation.

The British Columbia Provincial Health Officer's 2003 Report: *An Ounce of Prevention*,⁴⁶ refers to a large body of evidence collected over the past two decades that identifies the following key factors to successful school health programs:

- Teacher training
- Teacher comfort with the topic
- Administrator support
- Respect for the subject from administrators and teachers
- Room in the day to teach it
- Challenging content
- Focus on both social and cognitive outcomes
- An endurance over years and throughout grades
- Student involvement and engagement
- Challenging, adequate classroom resources

Poor or diminished outcomes were found with:

- ✖ Addressing crises, especially through preaching or scare tactics
- ✖ Little broad school/family/community involvement (classroom only)
- ✖ Programs based on external speakers or assemblies with little involvement of school staff
- ✖ Little or no investment in teacher training or provision of support

If you are interested in learning more about chronic disease prevention in your school or community, contact the Assiniboine Regional Health Authority Health Promotion Team through the Corporate Office at 483-5000, the Regional Office at 759-4500, or call our toll-free line at 1-888-682-2253.

Innovation through evaluation

We hope that this report will be a useful resource for informing school and community health initiatives, as well as a potential tool for evaluation.

It is only thorough partnerships with schools and communities that we may begin to identify promising practices, innovative approaches, and leaders in the promotion of child and youth health within schools in the Assiniboine Region.

Links to Additional Resources

Youth

- Health Canada – Canada’s Food Guide (http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index_e.html)
- Health Canada – Canada’s Physical Activity Guides for Children and Youth (http://www.phac-aspc.gc.ca/pau-uap/paguide/child_youth/index.html)
- Visit the Youth Media Campaign – “VERB for Tweens” for ideas on fun activities at home, school or places within your community. (<http://www.verbnow.com/index2.php>)

Teachers

- Canada’s Teacher’s Guide to Physical Activity for Children (www.phac-aspc.gc.ca/guide/pdf/kids_teachguide_e.pdf)
- The Canadian Association for Health, Physical Education, Recreation and Dance (CHAPERD) – Quality Daily Physical Education (QPDE). This site provides guidelines, success stories and resources on implementing QDPE in your school (http://www.cahperd.ca/eng/physicaleducation/about_qdpe.cfm)
- Ontario Physical and Health Education Association (OPHEA) provides information and resources on improving physical health and well-being of children and youth (<http://www.ophea.net/Ophea/Ophea.net/index.cfm>)
- Centers for Disease Control and Prevention (CDC) – adolescent and School Health. Find information on health programs, health topics for adolescents, school health profiles and lessons form implementation (<http://www.cdc.gov/nccdphp/dash/index.htm>)
- Knowledge Exchange Network (KEN), (Canadian Cancer Society website (www.cancer.ca), Manitoba, Knowledge Exchange Network)
- Cancer Control Planet – Links to comprehensive cancer control resources fro public health professionals (<http://cancercontrolplanet.cancer.gov/>)

General

- Coalition for Active Living-Learn about the coalition efforts for physical activity advocacy in Canada, Canadian facts and figures (<http://www.activeliving.ca/English/index.cfm>)
- Centers for Disease Control and Prevention (CDC) – physical activity. This site provides information on the importance of physical activity and how to make it a part of your life. (<http://www.cdc.gov/nccdphp/dnpa/physical/index.htm>)
- *In motion* is an innovative health promotion strategy with its emphasis on increasing physical activity (www.manitobainmotion.ca)
- Dietitians of Canada – Promoting health through food and nutrition (www.dietitians.ca)
- Manitoba Healthy Living Resource Clearinghouse – Provides online access to healthy living resources and expertise (<http://www.lin.ca/mhlrc/index.cfm?fa=links.main>)
- Manitoba Lung Association is the premier source of respiratory health information and initiatives in Manitoba (www.mb.lung.ca)

References

1. Kendall, P.R. (2003) *An Ounce of Prevention: A Public Health Rationale for the School as a Setting for Health Promotion*. British Columbia Office of the Provincial Health Officer.
2. *Guidelines for School Health Programs to Promote Lifelong Healthy Eating*. MMWR 14 June 1996; 45 (RR-9):1-41.
3. *Health-Promoting Schools*(2005) Background paper for the Health-Promoting Schools Forum, Vancouver B.C. Available online at: www.bced.gov.bc.ca/health/background.pdf.
4. Ibid.
5. *Comprehensive School Health* (2006) Canadian Consensus Statement. Available online at: www.safehealthyschools.org.
6. Kendall, P. R. (2003)
7. *Health-Promoting Schools* (2003)
8. St. Leger, L. et al (2000) The Evidence of Health Promotion Effectiveness, Shaping Public Health in a New Europe: A Report for the European Commission by the International Union for Health Promotion and Education, Part Two Evidence Book, Chapter 10.
9. Kendall, P. R. (2003)
10. Statistics Canada (2005) Canadian Community Health Survey, Cycle 3.1
11. Currie, R. J. (2007). *A Generation at Risk: Low Physical Activity in Young Manitobans*. Health, Leisure and Human Performance Research Institute, University of Manitoba.
12. Ibid.
13. Ibid.
14. Active Healthy Kids Canada (2006). *Canada's Report Card on Physical Activity for Children and Youth – 2006*. Available online at: http://www.activehealthykids.ca/programs_reportcard.cfmhttp://www.activehealthykids.ca/programs_reportcard.cfm
15. Lee, I., Paffenbarger, R.S. Jr. (1992). Change in body weight and longevity. *JAMA*, 268, 2045-9.
16. Craig, Cora L. et al. 2001. Increasing physical activity: building a supportive recreation and sport system. Canadian Fitness and Lifestyle Research Institute.
17. World Health Organization (1998) *Healthy Nutrition: An Essential Element of a Health-Promoting School*. Available online at: www.int/school_youth_health/resources/information_series/en/inidex.html.
18. Ibid.
19. Statistics Canada (2003) Canadian Community Health Survey, Cycle 2.1.
20. Ibid.
21. Statistics Canada (2005).
22. Lee. I. And Paffenberger, R. S. Jr. (1992).
23. Battistich, V. and Holm, A. (1997) The relationship between students' sense of their school as a community and their involvement in problem behaviors. American Journal of Public Health, 87, 1997-2001.
24. Wade, T.J. & Brannigan, A. (1998) The genesis of adolescent risk taking: Pathways through family, school and peers. Canadian Journal of Sociology, 23, 1-19
25. Dornbusch, S., Erickson, K.S., Laird, J. and Wong, C. (2001). The relation of family and school attachments to adolescent deviance in diverse groups and communities. Journal of Adolescent Research, 16, 396-422.
26. Kendall, P. R. (2003)

27. Statistics Canada (2005).
28. Health Canada (1998) *Mortality attributable to tobacco use in Canada and its regions, 1998*. Available online at: <http://www.hc-sc.gc.ca/hesc-sesc/tobacco/research/factsheet.html>
29. Ministry of Health (1996) *Tobacco – Sounding the alarm* (Catalogue No. 60M/10/96). Queen's Printer of Ontario
30. Centers for Disease Control & Prevention (2004) *Targeting tobacco use: The nation's leading cause of death 2004*. Available online at: <http://www.cdc.gov/tobacco/overview/oshsummary2004.htm#1>
31. Health Canada. (2002). *2000-2002 Report of Tobacco Control – An Update*. Available online at: http://www.hc-sc.gc.ca/hesc-sesc/tobacco/policy/ter_update_2000_2002/ch4.htm#6
32. Health Canada (2004) *Summary of results of the 2002 Youth Smoking Survey*. Available online at: <http://www.hc-sc.gc.ca/hesc-sesc/tobacco/research/yss/index.html>
33. The Lung Association (2003). *Stop smoking: Youth and tobacco*. Available online at: <http://www.on.lung.ca/nosmoking/youth.html>
34. Ellickson, P., Bui, K., Bell, R. & McGuigan, K. (1998) Does early drug use increase the risk of dropping out of high school? *Journal of Drug Issues*, 28, 357-380.
35. Andrews, J. (1991, August) *Adolescent substance use and academic achievement and motivation*. Convention conducted at the Annual Convention of the American Psychological Association, San Francisco, California.
36. DuRant, R.H., Smith, J.A., Kreiter, S.R. & Krowchuk, D.P. (1999). The relationship between early age of onset of initial substances use and engaging in multiple health risk behaviors among young adolescents. *Archive of Pediatric and Adolescent Medicine*, 153, 286-291.
37. Health Canada (2005) *Canadian Tobacco Use Monitoring Survey (CTUMS)* Available online: http://www.hc-sc.gc.ca/hl-vs/tobac-tabac/research-recherche/stat/ctums-esutc/2005/ann-table2_e.html
38. Wakefield, M., Chaloupka, F., Kaufman, N., Orleans, T., Barker, D., & Ruel, E. (2000) Effect of restrictions on smoking at home, at school, and in public places on teenage smoking: Cross sectional study. *British Medical Journal*, 321, 333-337
39. Hardeman W, et al. Interventions to prevent weight gain: A systematic review of psychological models and behavior change method. *International Journal of Obesity*, 2000, 24:131-143
40. Health Canada (2006) Youth and Tobacco. Available online at: www.hc-sc.gc.ca/hl-vs/pubs/tobac-tabac/youth-jeunes/quit_e.html
41. Kendall, P.R. (2003)
42. Health Canada (2007) *Preventing Substance Use Problems Among Young People: A Compendium of Best Practices*. Available online at: www.hc-sc.gc.ca/hl-vs/pubs/adp-apd/prevent/programmes-programmes_15_e.html.
43. Midford, R., Munro, G., McBride, N., Snow, P., and Ladzinski, U. (2002) Principles that underpin effective school-based drug education, *Journal of Drug Education*, 32 (4), 363-386.
44. Association of State and Territorial Health Officials and Society of State Directors of Health, Physical Education and Recreation (2002) *Making the Connection: Health and Student Achievement*, SSDHPER.
45. Kendall, P. R.
46. Ibid.