

DON'T LET THIS
BE THE MOST
PHYSICAL ACTIVITY
OUR KIDS GET
AFTER SCHOOL.



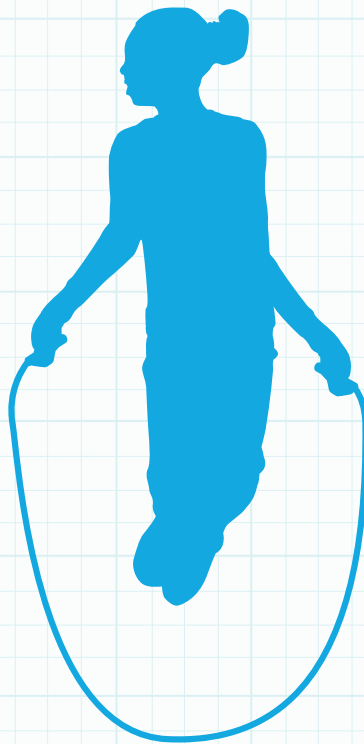
active
healthy
kids
CANADA

2011

Active Healthy Kids Canada Report Card on
Physical Activity for Children and Youth



Do You Know What Your Kids Are Doing?



The Active Healthy Kids Canada 2011 Report Card

on Physical Activity for Children and Youth

Active Healthy Kids Canada's strategic partners played a critical role in the research, development and communication of The Active Healthy Kids Canada 2011 Report Card on Physical Activity for Children and Youth:



The 2011 Report Card has been made possible through the financial support of the Public Health Agency of Canada Innovation Fund* and the following partners:



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Active Healthy Kids Canada (2011). Don't Let This Be The Most Physical Activity Our Kids Get After School. The Active Healthy Kids Canada 2011 Report Card on Physical Activity for Children and Youth. Toronto: Active Healthy Kids Canada.

A summary of the 2011 Report Card and the long form version are available at www.activehealthykids.ca.

**The views expressed in the Report Card do not necessarily represent the views of the Public Health Agency of Canada.*

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The Active Healthy Kids Canada 2011 Report Card

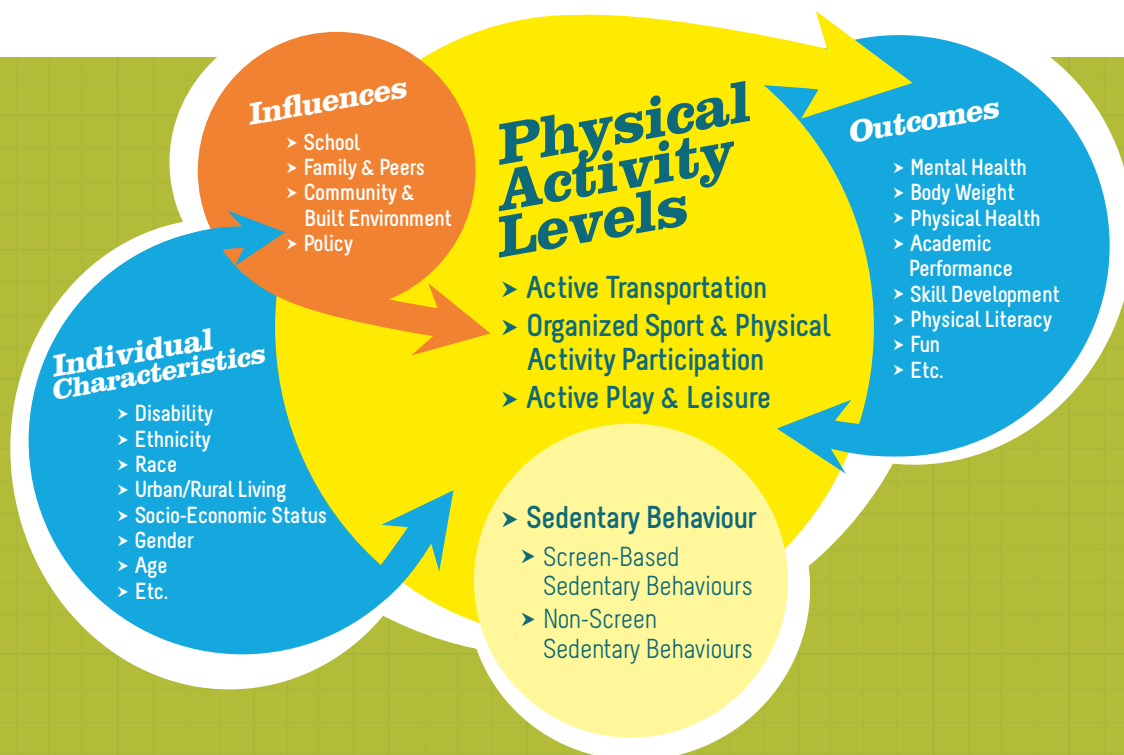
on Physical Activity for Children and Youth

Active Healthy Kids Canada is a national organization that was established in 1994. The focus of its efforts is to make physical activity a major priority in the everyday lives of Canadian families. To achieve this, Active Healthy Kids Canada brings forward scientific knowledge and advocacy strategies to stakeholders who can improve the physical activity opportunities for children and youth across Canada. The Report Card is Active Healthy Kids Canada's primary tool for influencing stakeholders and pushing for change. This year marks the 7th consecutive year of its publication. We hope the 2011 Report Card will continue to have an impact on physical activity promotion in Canada and abroad.

In past years, the Report Card has proven useful as an advocacy tool. Governments, non-government and philanthropic organizations, corporations and the research community have all used it, and there is overall agreement that the Report Card has helped increase awareness of the physical activity status of Canadian children and youth. The Report Card has been an influential tool in many countries around the world (e.g., United States, Mexico, South Africa, Kenya), where it has been used as a blueprint for collecting and sharing knowledge about the physical activity of their young people.

Common to any report card are the grades. The 2011 Report Card gives letter grades on 23 different indicators. (For more information on the grading scheme, see Methodology and Data Sources on page 78.) An indicator is anything measurable that either comprises physical activity (e.g., active play and leisure, organized sport) or influences it (e.g., physical education, availability of physical activity facilities, government policies). The indicators in the 2011 Report Card play an important role in drawing attention to specific areas where we need to improve our efforts. Together they reveal the overall status of physical activity among children and youth in Canada.

The figure below summarizes the components of physical activity and its influences that are graded in the 2011 Report Card. Individual characteristics and outcomes that affect physical activity are not graded, but they may impact other grades and are discussed throughout the 2011 Report Card. The arrows in the figure reveal the relationships among all these variables, illustrating the complexity of physical activity. Many factors impact the physical activity of children and youth and must all be considered in the promotion of physical activity.



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DATE OF PUBLICATION

April 26, 2011

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Introduction

SCHOOL'S OUT ...

Do You Know What Your Kids Are Doing?

Each day has different experiences and windows of time for children and youth to be physically active. Though all of these opportunities are discussed each year in the Active Healthy Kids Canada Report Card on Physical Activity for Children and Youth, the 2011 Report Card draws special attention to the after-school period, which stretches from the time immediately after school up and until supper (3 to 6 p.m.).¹

THE AFTER-SCHOOL PERIOD IS A CRITICAL PERIOD

In previous years, physical activity promotion has focused on the school day.² Changes have been made to curricula, physical education classes, policies and the school environment in an attempt to improve students' physical activity. This approach makes sense due to the large number of young people attending school.³ However, it is worth considering whether improvements to physical activity in structured settings at school influence physical activity patterns outside of school. According to a recent literature review of school-based physical activity programs, students who became more physically active at school were not necessarily more active outside of school.⁴ The importance, then, of promoting physical activity throughout the day cannot be ignored.

One part of the day that is receiving more attention in the literature for physical activity promotion is the after-school period, a period increasingly being viewed as a window of opportunity.⁵ Part of the explanation for the prior lack of emphasis may be that it is difficult to monitor what children and youth are doing after school due to the unstructured nature of their activities from 3 to 6 p.m. and the lack of adequate physical activity measurement tools. However, this has changed with improvements to physical activity measurement tools, and researchers are now calling the time after school a critical period.^{1,6} In fact, children and youth may get a large portion of their daily physical activity – as much as 30% – after school.¹ Research also suggests that the physical activity of children and youth after school has an influence on their overall daily physical activity. Children and youth who are physically active after school tend to be more active throughout the day.⁷⁻⁸ This points to the after-school period as a possible window of opportunity during which physical activity promotion may lead to considerable improvements in the daily physical activity of children and youth.

Table 1: Summary of Statistics on the After-School Period.

Critical Period	Opportunity for Exposure to Nature, the Outdoors and Active Play	After-School Programs	Independent Mobility
<p>From 3 to 6 p.m. (180 minutes), 6- to 19-year-olds in Canada are getting only 14 minutes (8%) of MVPA (e.g., aerobics, jogging, running). By contrast, they are spending an average of 107 minutes (92%) in either light activity (e.g., light play, walking less than 3.2 kilometres per hour) or sedentary pursuits (e.g., motorized transportation, sitting, standing idle).</p>		<p>According to a subsample of parent-reported data from the 2010 PAM, 72% of 5- to 17-year-olds do not have access to a supervised after-school program. Among those who do, significantly more 5- to 12-year-olds (33%) have access compared to 13- to 17-year-olds (21%).</p>	
<p>Canadian teens are getting an average of 6 hours of screen time per day (e.g., TV, computer, video games) outside of school.</p> <p>Adolescents are less likely to experiment with risky behaviours if they are in a supervised setting.</p>	<p>According to parent-reported data from the 2010 PAM, 62% of 5- to 17-year-olds in Canada are involved in unorganized physical activity or sport during the after-school period.</p>	<p>Physical activity is at least a component of 75% of after-school programs. For approximately 4 in 10 programs, physical activity is a primary purpose.</p> <p>Physical inactivity is a risk factor targeted by nearly half of after-school programs (49%). The school setting is the most popular location for after-school programs (72%).</p> <p>A review study reveals that after-school programs can improve physical activity, physical fitness and body composition.</p>	<p>In the United Kingdom, 80% of 7- to 8-year-olds traveled to school on their own in 1971, compared to only 9% in 1990.</p> <p>The proportion of 7- to 11-year-olds walking to school in Britain dropped by 25% between 1971 and 1990. This decrease has also been seen in other parts of the world.</p>

MVPA = moderate-to-vigorous physical activity
PAM = CFLRI Physical Activity Monitor survey

The increased focus on the after-school period raises the question of what young people are doing between 3 and 6 p.m. Several data sources suggest that Canadian children and youth are spending a lot of time sitting in the after-school period. According to parent-reported data from the 2010 Physical Activity Monitor (PAM), a survey by the Canadian Fitness and Lifestyle Research Institute (CFLRI), 73% of children and youth watch TV, read, or play video and computer games in the after-school period.⁹ As mentioned in prior Report Cards, Canadian teens are getting an average of 6 hours of screen time per day (e.g., TV, computer, video games) outside of school.¹⁰⁻¹¹ More accurate physical activity measurement tools are presenting an even clearer picture of what is happening in the after-school period. Results from the 2007-09 Canadian Health Measures Survey (CHMS) reveal that during the after-school period (180 minutes from 3 to 6 p.m.), 6- to 19-year-olds in Canada are getting only 14 minutes (8%) of moderate-to-vigorous physical activity (MVPA). By contrast, they are spending an average of 107 minutes (92%) in either light activity (e.g., light play, walking less than 3.2 kilometres per hour) or sedentary pursuits (e.g., motorized transportation, sitting, standing idle).¹² Figure 1 presents a breakdown of the percentage of time Canadian young people are spending in physical activity, light activity and sedentary pursuits after school. This is clearly a cause for concern.

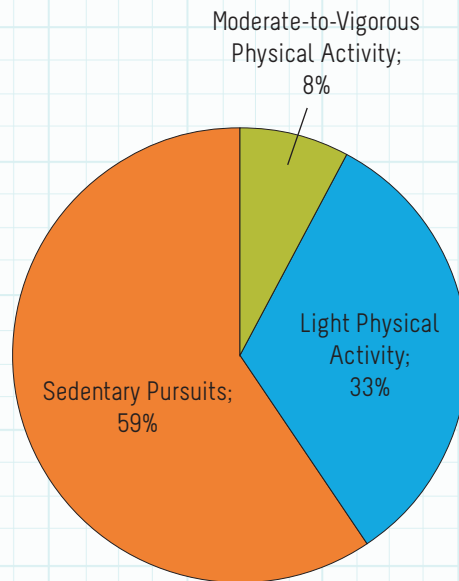


Figure 1: The Percentage of Time 6- to 19-Year-Olds in Canada Spend in Physical Activity and Sedentary Pursuits from 3 to 6 P.M. (Source: 2007-09 CHMS, Statistics Canada).

Another cause for concern is unsupervised time in the after-school period, an increasingly common reality that has emerged with many parents now working outside the home.¹³ Though the after-school period may be a window of opportunity for physical activity improvement, research suggests that it may also be a time when adolescents experiment with risky behaviours if left unsupervised. One research study reveals that experimentation with risky behaviours, such as sexual activity and alcohol/drug use, increases as unsupervised time increases.¹⁴ Another research study reports that adolescents are less likely to experiment with risky behaviours if they are in a supervised setting.¹⁵ The after-school period may, therefore, be a critical period for children and youth due to the potential for considerable improvements in physical activity as well as the limits that supervised physical activity from 3 to 6 p.m. places on experimentation with risky behaviours.

THE AFTER-SCHOOL PERIOD IS AN OPPORTUNITY FOR EXPOSURE TO NATURE, THE OUTDOORS AND ACTIVE PLAY

In communities across the country, there is a general sense that young people do not play outdoors enough anymore. Yet the after-school period is an obvious time when children and youth can – and should – play outdoors, since it is an unstructured time of the day and daylight is still available in most parts of the country for most of the year. Preliminary research suggests that connecting with nature and the outdoors improves the well-being of children and youth. A recent literature review concluded that exposure to nature and the outdoors while walking or running may reduce levels of anger, anxiety, energy, fatigue and sadness.¹⁶ (The Nature and the Outdoors indicator, which is new to the Report Card for 2011, provides more information; see page 52.)

Time in nature and the outdoors is also linked to daily physical activity. The 2009-10 Canadian Physical Activity Levels Among Youth survey (CANPLAY) by CFLRI reveals that 5- to 19-year-olds who play outdoors between the time school ends and dinner take roughly 2,000 more steps per day than those who do not play outdoors in the after-school period.⁴² To put this in perspective, even if each additional step taken were at a slow speed and covered only 1 metre of ground,¹⁸ those extra 2,000 steps would roughly equate to an additional 2 kilometres of movement per day.

Though unconfirmed by research, 13,500 steps are considered roughly equivalent to 60 minutes of MVPA. If this estimate is reasonable, an extra 2,000 steps per day would have a substantial impact on the number of Canadian children and youth who meet the new Physical Activity Guidelines for Children and Youth (see page 13 for more information). Results from the 2007-09 CHMS reveal that 6- to 19-year-old boys in Canada take an average of 12,100 steps per day and girls take an average of 10,300 steps per day.¹² This is similar to the 2009-10 CANPLAY results of 12,455 steps per day for boys and 11,114 steps per day for girls. An extra 2,000 steps per day from physical activity outdoors during the after-school period would theoretically mean that boys, on average, would surpass the target of 13,500 steps per day, while an additional 2,000 steps would also bring girls much closer to the target (Figure 2).

According to parent-reported data from the 2010 PAM, 80% of 5- to 12-year-olds play outdoors after school. This percentage drops to 43% in 13- to 17-year-olds.⁹ Though these numbers are informative, they do not address the frequency, intensity and duration of physical activity spent outdoors in the after-school period. More research is warranted.

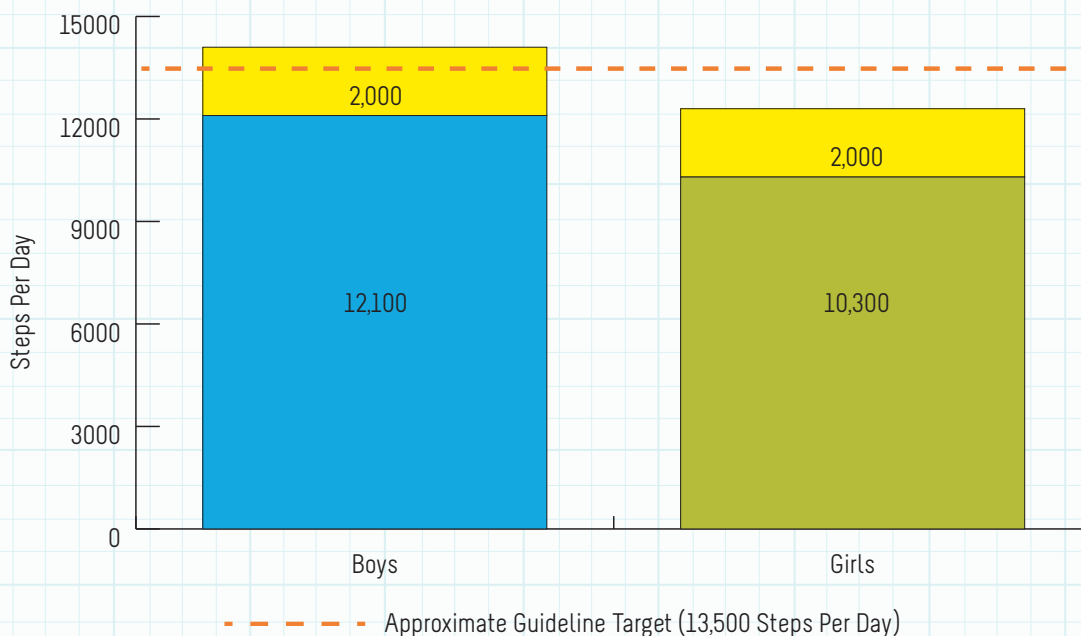


Figure 2: The Theoretical Contribution of 2,000 Extra Steps Per Day on the Average Number of Daily Steps Taken by Canadian Boys and Girls (Source: 2007-09 CHMS, Statistics Canada).

AFTER-SCHOOL PROGRAMS

A recent literature review examined the research on after-school physical activity interventions from 1980 to 2008. Though the results are limited, it appears that after-school programs can improve the physical activity, physical fitness and body composition of children and youth.¹⁹

This message about the potential of the after-school period and programs appears to be reaching key players in the sector. Governments are making the after-school period an area of focus. In 2008, the federal, provincial and territorial (FPT) ministers responsible for sport, physical activity and recreation asked officials to explore the after-school period as a key opportunity for physical activity promotion in children and youth.²⁰

In 2009, the FPT Physical Activity and Recreation Committee distributed a questionnaire to the provinces and territories. This was done to determine the extent to which these governments prioritize, directly manage and/or fund after-school programs that either contain a healthy-living component or could possibly do so. Results reveal that some after-school programs are aimed at all children, while other programs concentrate on specific groups such as physically inactive children and youth, Aboriginal peoples, and those from low socio-economic backgrounds. Physical inactivity is a risk factor targeted by nearly half of after-school programs (49%). The majority of programs (88%) are for 5- to 12-year-olds, with a little less than half (49%) open to those age 13 to 18. According to this environmental scan, the school setting is the most popular location for after-school programs (72%).²¹

An interesting question asked in the FPT Physical Activity and Recreation Committee’s questionnaire was, “If there is not a physical activity component as part of your program, could there be one added? How could it be added?” Responses reveal that most programs need resources (40%), training (23%) and supplies (43%) in order to allow for a physical activity component to be added.

In 2010, the Public Health Agency of Canada held a workshop on the after-school period, in which participants proposed a number of solutions to the challenge of getting children and youth more physically active. These proposals included:

- An inclusive approach involving FPT governments and stakeholders in order to address policies and ensure that resources are available for physical activity promotion in the after-school period.
- Standardized training across Canada for those who promote physical activity in the after-school period.
- Funding and policies for physical activity that are a priority for FPT governments.
- An online inventory of what is available for use in communities during the after-school period.
- Delayed school bus runs so that children and youth, who would otherwise be home alone, can participate in unsupervised programs after school.
- Emphasis on simple programs (e.g., a parent monitoring a playground) rather than complex ones. Programs need to be “de-programmed.”²⁰

ARE AFTER-SCHOOL PROGRAMS AVAILABLE?

According to a subsample of parent-reported data from the 2010 PAM, 72% of 5- to 17-year-olds do not have access to a supervised after-school program. Among those who do, significantly more 5- to 12-year-olds (33%) have access compared to 13- to 17-year-olds (21%). Physical activity is at least a component of 75% of after-school programs. For approximately 4 in 10 programs, physical activity is a primary purpose (Figure 3).⁹ Figure 4 summarizes where after-school programs are most commonly offered, according to parents.

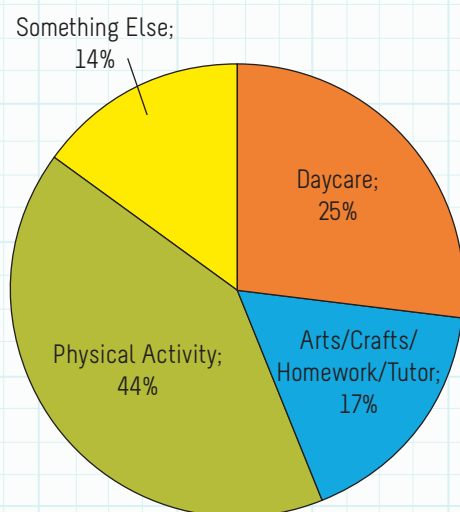


Figure 3: The Primary Purpose of After-School Programs According to Parents (Source: Subsample of 2010 PAM, CFLRI).

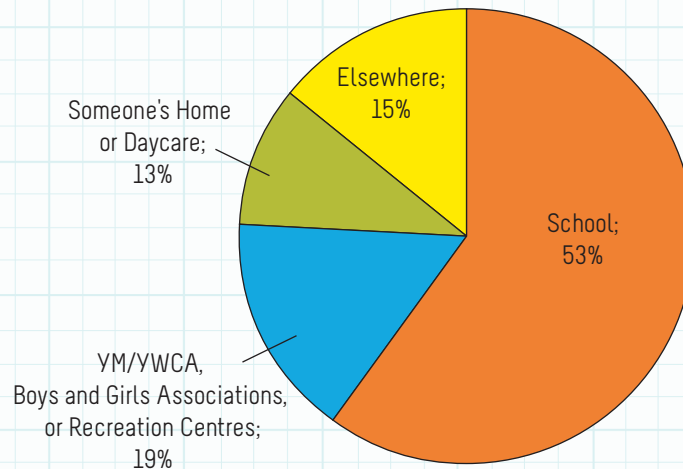


Figure 4: Where After-School Programs are Offered According to Parents (Source: Subsample of 2010 PAM, CFLRI).

EXAMPLES OF AFTER-SCHOOL PROGRAMS

Get B.U.S.Y.! (Building the Ultimate and Sensational You)

This program is financially supported by the Public Health Agency of Canada. Ten Boys and Girls Clubs received \$21,000 each to implement Get B.U.S.Y.!, which encourages a healthier, more physically active lifestyle through activities and education. To introduce the program, the 10 participating Boys and Girls Clubs organized activity days in their local communities to motivate young people to participate in non-traditional sports and physical activities. Get B.U.S.Y.! also allows Boys and Girls Clubs to provide leadership opportunities for youth so they can promote physical activity and healthy eating programs among younger children.

An evaluation of Get B.U.S.Y.! has reported positive outcomes (improved attitudes toward physical activity). The findings suggest that participants generally enjoy being physically active, it matters to them and they enjoy physical activity with others.²² For more information, visit www.bgccan.com/en/ClubsPrograms/Programs-National/Pages/Get-Busy.aspx.

Cool Moves

This program for 8- to 12-year-olds is available in many Boys and Girls Clubs across the country. Cool Moves has 3 components: Eat Smart, Play Cool and Pass It On. Play Cool is about increasing physical activity in the broadest sense. This includes unstructured play, competitive and non-competitive sports, co-operative games, dance and other fun activities.

An evaluation of Cool Moves reveals that children and youth more often list non-competitive activities (e.g., playing outside, riding a bike, running and swimming) than sports when asked what they like to do when physically active. This is true for both boys and girls. Approximately 80% of participants say they are "often active." More than half (58%) say Cool Moves helped them become more active and 41% say the program has inspired them to make healthy changes to their lifestyle, such as playing outside more. Despite these positive results, actual physical activity levels did not change as a result of Cool Moves. Yet anecdotal feedback from staff and young people point to positive results from the program.²³ For more information, visit www.bgccan.com/en/ClubsPrograms/Programs-National/Pages/Cool-Moves.aspx.

CATCH Kids Club

CATCH (Coordinated Approach To Child Health) is an evidence-based program designed to improve the physical activity and nutrition of children. The program was developed in the United States and is in wide use there. In 2008, the Public Health Agency of Canada, the Ontario/Nunavut Regional Office and the Ontario Ministry of Health Promotion funded CATCH. The YMCA of Ontario and the Boys and Girls Clubs of Ontario implemented the after-school component, CATCH Kids Club. The physical activity portion of this after-school program includes a box full of hundreds of index cards with clear instructions for active and inclusive games. CATCH Kids Club has been implemented in 330 locations across Ontario, and evaluation results reveal that 8,000 participants across the province have learned a wide variety of health-related information, have spent more time in MVPA, have benefited from a wider range of nutritious food choices for snacks and have become more effective in making healthy choices for themselves. Increases in physical activity during physical education classes are also observed in these kids and these improvements seem to be maintained long-term (see also page 72). For more information, visit cbpp-pcpe.phac-aspc.gc.ca/spotlight-en-vedette/index-eng.html.

Kidsfest's Running and Reading Club

Kidsfest was established in 2000 by Brian Warren, a retired Canadian Football League player. It is a not-for-profit organization that helps bridge the gap between the haves and have-nots among Canada's children. The Running and Reading Club is a unique after-school program offered to children living at or below the poverty line. This program was launched under the guidance of former Olympian and Canadian marathon record holder, Silvia Ruegger. It operates within inner-city schools 1 afternoon per week throughout the school year in locations across the country. Each session is 2 hours long. The first 45 minutes are taken up with a physical activity component that includes circuit training, running-based games and relays. The overall aim of the program is to improve children's physical, mental, emotional and social health, and develop within them a love for reading. For more information, visit www.kidsfestonline.com/kidsfest-pathways/running-and-reading-club.html.

INDEPENDENT MOBILITY

A common definition of independent mobility is the freedom kids have to move around their neighbourhood or city without adult supervision.²⁴ Playing, reaching a specific destination in the neighbourhood and travelling to meet up with friends, when done without adult supervision, are all examples of independent mobility. Research since the 1960s reveals that children have lost much of their independent mobility. Though the after-school period is a natural setting for children to be physically active and independently mobile, getting them active during this period may require strong efforts to reverse the trends in independent mobility. (The Nature and the Outdoors indicator, which is new to the Report Card for 2011, provides more information; see page 52.)

AFTER-SCHOOL RESEARCH GAPS

- More rigorous evaluation data and research on after-school programs, which use objective physical activity measurement tools, are needed.
- Canadian data on changes over time in independent mobility and parenting styles are needed.

AFTER-SCHOOL RECOMMENDATIONS FOR ACTION

- Promote this time of day as an opportunity for kids to do what they want. Empower them with a message that the after-school period is their time, while providing resources and models to encourage them to be healthy during this time.
- Create awareness campaigns to educate parents and caregivers about the potential of the after-school period for healthy, active living pursuits.
- Promote the importance of physical activity and its benefits to after-school program providers.
- Lobby governments at all levels to subsidize after-school programming for children and youth, and to require safe, developmentally appropriate activities that encourage movement and time outdoors.

Canada's New Physical Activity Guidelines

Since 1995, the Canadian Society for Exercise Physiology (CSEP) and the Public Health Agency of Canada have worked together on the development of Canadian Physical Activity Guidelines to promote healthy, active living in the Canadian population. The first guidelines appeared in 1998 (for 20- to 55-year-olds) followed by further releases in 1999 (for adults over 55 years of age) and 2002 (for 6- to 9-year-olds and 10- to 14-year-olds). This year, new Canadian Physical Activity Guidelines have been released by CSEP for all Canadians, including children and youth.²⁵

Why the need for new physical activity guidelines? The new guidelines reflect new evidence. There has been an explosion of new research on physical activity in recent years. With this has come new evidence enabling the formation of more specific recommendations. The old guidelines were showing their age, some having been released more than a decade ago. They were based on outdated research and were even incomplete, with some age groups (e.g., 15- to 19-year-olds) missing entirely from the guidelines.

The new physical activity guidelines are also the result of a more rigorous scientific process. The process to develop the new guidelines happened in 3 stages that included draft guidelines, stakeholder consultations and completed guidelines. More than 1,000 Canadian experts, professionals, stakeholders and partner organizations were involved in the process. During the process, 24 peer-reviewed papers, of which 5 were systematic reviews, were published. The work that came out of this process has informed the new World Health Organization Global Physical Activity Recommendations and the revision of the United Kingdom Physical Activity Guidelines. In sum, Canada's new guidelines are scientifically rigorous and leading the development process for physical activity guidelines around the world.

The new physical activity guidelines are for all apparently healthy children (5 to 11 years old) and youth (12 to 17 years old).

For health benefits, children (age 5 to 11) and youth (age 12 to 17) should get at least 60 minutes of MVPA daily. This should include vigorous-intensity activities at least 3 days per week and activities that strengthen muscle and bone at least 3 days per week. More daily physical activity provides greater health benefits.

There are several places where the new physical activity guidelines for children and youth differ from the old ones. The new guidelines are for 5- to 17-year-olds, whereas the old ones were for 6- to 14-year-olds. Also, the new guidelines call for at least 60 minutes of MVPA **every day**. This is based on the most current evidence, which shows the greatest health benefits with at least this much MVPA. By contrast, the old guidelines were unable to recommend a specific amount of physical activity for health benefits. Instead, they called for an increase of 30 more minutes of physical activity per day, progressing up to 90 more minutes of physical activity per day over the course of 5 months. Also, the old guidelines made recommendations about how much time should be spent in sedentary pursuits; the new guidelines do not include this, since new and separate guidelines for sedentary behaviour have been released (see the Sedentary Behaviour section on page 28).

Though there are differences between the old and new guidelines, it is important to note that the take-home message has not changed: more physical activity is better, and the recommendation provided (at least 60 minutes of MVPA every day) is a minimum target.

More work is still to be done with the new guidelines. For example, there is a need for guidelines to be tailored to Aboriginal peoples, pregnant women, preschool children and Canadians with disabilities and chronic diseases. For complete information on the new Canadian Physical Activity Guidelines, visit www.csep.ca/english/view.asp?x=804.

Why is Physical Activity Important?

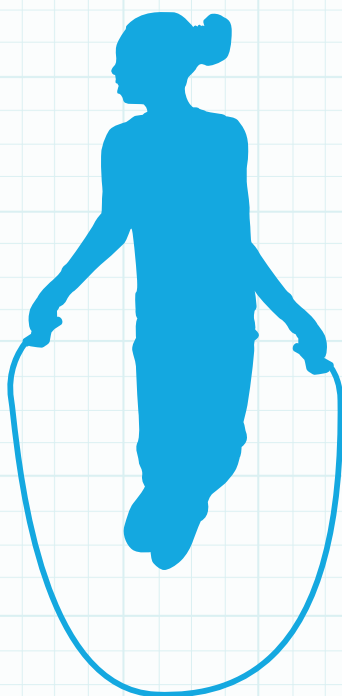
In recent years, obesity and physical inactivity have been a major focus of child health concerns in Canada. Evidence suggests that the percentage of obese children and youth is on the rise, leading to a physical inactivity crisis in Canada. Physical inactivity is also very high. These trends are a cause for concern due to the health consequences of childhood obesity and physical inactivity, which include an increased presence of cardiovascular diseases and type 2 diabetes.²⁶

THE HEALTH BENEFITS OF PHYSICAL ACTIVITY

In the midst of this child health crisis, the importance of physical activity is readily seen in the health benefits it offers to children and youth. In a recent literature review, physical activity was found to have benefits to several aspects of health. For example, significant improvements to cholesterol and blood lipid levels were seen in children and youth with high cholesterol and/or obesity who performed several hours of aerobic exercise per week. Hypertension was also improved in children and youth who exercised for several hours per week. Aerobic exercise also improved some markers of the metabolic syndrome, a condition where a person has several risk factors (e.g., abdominal obesity, high cholesterol, high blood pressure, insulin resistance) for diseases such as diabetes and coronary heart disease. Improvements in overweight/obesity and symptoms of depression were also seen with aerobic exercise. Resistance training, weight-bearing activities and jumping improved bone density in children and youth.²⁷

ABORIGINAL CHILDREN AND YOUTH

A population of special concern is Aboriginal young people. Estimates put the number of off-reserve Aboriginal youth (12- to 17-year-olds) who are either overweight (41%) or obese (20%) at 2.5 times the national average.²⁸ For this and other reasons (e.g., genetics), Aboriginal youth are susceptible to type 2 diabetes. The need for preventive strategies is urgent given the established health consequences of obesity and type 2 diabetes. Research suggests that physical activity can play a role. A study of Aboriginal children and youth in a couple of rural villages in northern British Columbia showed that 30 minutes of MVPA was linked to lower insulin resistance levels.²⁹ Results from the Canadian Community Health Survey (CCHS) also reveal that Aboriginal youth who are physically active are less likely to be obese.²⁸ Together, these studies reinforce the important preventive role of physical activity in Aboriginal children and youth.



PHYSICAL ACTIVITY, MENTAL ACTIVITY AND ACADEMIC PERFORMANCE

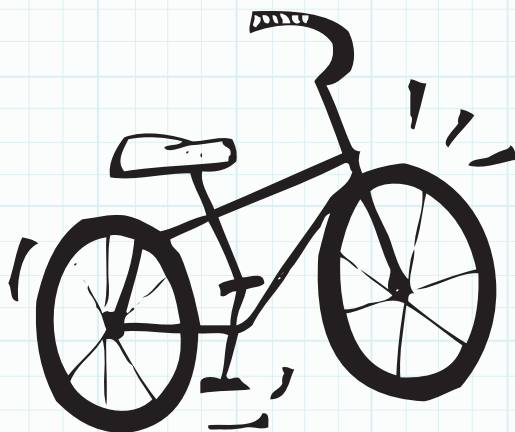
There is growing research on the link between physical activity and improved physical and mental health. Much less is known, however, about the relationship between physical activity and mental activities such as learning, memory, academic performance and intelligence in children and youth. This relationship is important to understand because of the lack of daily physical education (PE) in primary schools, and optional enrolment in many secondary schools.³⁰ Part of the explanation for declining enrolment in PE classes in high school may be that parents and teachers believe math, science and other academic classes lead to better academic achievement and entrance into university, thus justifying the neglect of PE. This suggests that enrolment in PE may come at an opportunity cost, i.e., lack of enrolment in PE results in lower academic achievement and less likelihood of entrance into university. However, the evidence for this assumption is questionable.³¹

A great deal of research in adults has looked at the relationship between physical activity and mental activities, such as learning and memory, and some evidence shows that physical activity improves these processes.³² Less is known, however, about whether this relationship exists in children and youth. A literature review concluded that physical activity does have benefits for mental activity in children and youth.³³ More recent studies reveal that physical fitness is positively linked to attention, memory and executive functions (e.g., abstract thinking, planning) in pre-adolescent children.³⁴

Although parents may be concerned about the opportunity cost of their children getting more daily physical activity, research suggests that physical activity does not take away from academic performance.^{31,34-35} In fact, recent research reveals that even small amounts of physical activity (e.g., walking on a treadmill at a moderate intensity for 20 minutes) leads to higher scores on standardized academic achievement tests.³⁴ A study of more than 7,000 15- to 16-year-olds found a link between higher levels of physical activity, and higher academic performance and plans for higher education. These relationships were much stronger, however, in youth from high socio-economic backgrounds.³⁶

Recent school-based studies show that increasing children's physical activity may be an effective approach to improving their academic performance. The inclusion of 30 minutes of physical activity 3 days per week for 4 months in a grade 3 curriculum improved scores on academic achievement tests.³⁷ Similarly, a school-based childhood obesity prevention program that included physical activity for elementary students from low-income families not only helped with weight control and blood pressure, but also improved academic performance.³⁸ This is particularly encouraging since children from low-income families are more likely to be physically inactive and obese, and to have lower levels of academic achievement.³⁹⁻⁴⁰

There appears, then, to be evidence that physical activity in children and youth is associated with improved mental activity and academic performance. More research is needed, but current results are promising. For additional information, refer to the 2009 Report Card, which looked closely at the link between physical activity and academic performance.¹⁰



Physical Activity

Indicators	Grades	Quick Stats	Recommendations for Action
PHYSICAL ACTIVITY LEVELS	F	<ul style="list-style-type: none"> ➤ Only 7% of Canadian children and youth are meeting the new Canadian Physical Activity Guidelines of at least 60 minutes of MVPA per day (2007-09 CHMS). ➤ Fewer than 2% of Canadian children and youth get 90 minutes of MVPA on at least 6 days of the week (2007-09 CHMS). 	<ul style="list-style-type: none"> ➤ Expend social marketing efforts to communicate the importance of regular, lifestyle-embedded physical activity throughout the day and week. ➤ Healthcare practitioners should be proactive in talking to children and parents about the importance of physical activity for healthy development.
ORGANIZED SPORT AND PHYSICAL ACTIVITY PARTICIPATION	C	<ul style="list-style-type: none"> ➤ 75% of parents say their children participated in sport in the past year (2010 PAM). ➤ Though the proportion of Canadian children and youth participating in organized sport appears to be high, gender and income disparities persist on this indicator, which keep it from entering the B range. 	<ul style="list-style-type: none"> ➤ Though children and youth who participate in sport take an extra 1,600 steps per day, physical activity promoters and parents should ask whether there are other ways for kids to get that extra physical activity. ➤ Work with sport associations and coaches is required to devise ways for kids to be more active when participating.
ACTIVE PLAY AND LEISURE	F	<ul style="list-style-type: none"> ➤ Only 14% of 6- to 10-year-old boys and 7% of 6- to 10-year-old girls in Canada are getting at least 60 minutes of MVPA on at least 6 days of the week. In combination with the fact that children and youth only get 14 minutes of MVPA during the after-school period (3 to 6 p.m.), which is one of the most unstructured parts of the day, this suggests that very few children are getting much active play (2007-09 CHMS). 	<ul style="list-style-type: none"> ➤ Parents should restrict television viewing, video and computer games during the after-school period (3 to 6 p.m.). ➤ Encourage children and youth to play outdoors. ➤ Social marketing campaigns need to target the promotion of active play at home, child care, school and in the community.
ACTIVE TRANSPORTATION	D	<ul style="list-style-type: none"> ➤ 24% of parents say their children use only active modes of transportation (e.g., walking, biking) in trips to and from school. By contrast, almost 62% of parents say their children and youth rely on only inactive modes of transportation to get to and from school: 24% by car, 34% by bus or train, and the rest by a combination of motorized transportation modes (2010 PAM). 	<ul style="list-style-type: none"> ➤ Efforts should be expanded to implement Active and Safe Routes to School programs in all communities. ➤ Parents and school representatives need to explore the possibility of modifying school bus drop-off locations to provide for a “walking school bus” to complete the trek to school for children who require busing. ➤ Initiatives need to be supported that facilitate active transportation to and from school (e.g., no drop-off zones around schools, safe and visible bike lock facilities on-site at schools).

Physical Activity Levels

YEAR	GRADE
2005	D
2006	D
2007	F
2008	F
2009	F
2010	F
2011	F

2011 GRADE

F

The grade for Physical Activity Levels is an **F** for the 5th year in a row. This reflects a combination of 2 data sources: (1) new accelerometer-measured physical activity data from the 2007-09 CHMS, and (2) the CFLRI CANPLAY step count data that we have been reporting on since the 2007 Report Card. The CHMS accelerometer data show that only 7% of Canadian children and youth are meeting the new Canadian Physical Activity Guidelines, a finding that confirms what we have seen in the CFLRI CANPLAY step count data, namely, that a range of 9 to 13% children and youth meet a target of 16,500 steps per day. The key message is that regardless of the methodology or optimal target used, the data consistently show that the vast majority of Canadian children and youth are not active enough.

KEY FINDINGS

New Guidelines

For 5 years, the Report Card has been tracking data from CANPLAY on the proportion of Canadian children and youth who meet the physical activity guidelines. This year marks a transition with the release of new Canadian Physical Activity Guidelines. New evidence since the publication of the old guidelines in 2002 reveals that 60 minutes of daily MVPA is associated with health benefits, and more daily physical activity provides greater health benefits. The new guidelines differ from what has been used for assigning grades in the Report Card over the past 6 years (step count equivalent to an average of 90 minutes of daily MVPA).

New Data Sources

For continuity, the Report Card will continue to report on the proportion of Canadian children and youth who meet the target of 90 minutes of MVPA per day. Since the new guidelines still state that “more is better,” the 90-minutes-per-day target is still relevant to measure and discuss. As in the 2010 Report Card, the proportion of children and youth meeting the guideline of 60 minutes of daily MVPA will also be reported. The 2007-09 CHMS data allow for an enhanced investigation into the 60-minute recommendation by including information on timing, frequency and intensity of activity that has not previously been possible.

Canadian Health Measures Survey (CHMS): First Accelerometer-Measured Physical Activity Data in Canada

On January 19, 2011, Statistics Canada released the first-ever physical activity data on a nationally representative sample of Canadians that was measured by accelerometers. Data were collected between 2007 and 2009 as part of the CHMS and included a sample of 1,608 6- to 19-year-olds. It found that only 7% of Canadian children and youth (9% of boys and 4% of girls) are getting at least 60 minutes of MVPA on at least 6 days of the week. Such low numbers raise the question of where the majority of Canadian children and youth are in relation to the new physical activity guidelines. A glimmer of hope emerges in the data, as the results suggest that many children and youth are partway there. For example, just under half (44%) get 60 minutes of daily MVPA on at least 3 days per week. Considerably higher numbers of children and youth get 30 minutes of daily MVPA: 29% of boys and 21% of girls. A majority of boys (83%) and girls (73%) get 30 minutes of MVPA on at least 3 days of the week.

More is Better: A Look at 90 Minutes of Daily Physical Activity

The new Canadian Physical Activity Guidelines state that more physical activity may be associated with greater health benefits. To explore this, an analysis was done of the number of children and youth getting 90 minutes of MVPA at least 6 days a week. Fewer than 2% achieve this target. But 60% get 90 minutes of MVPA on 1 day of the week, indicating that there is a small minority of Canadian children and youth who are highly active.

Vigorous Physical Activity

The new guidelines also recommend vigorous physical activity on at least 3 days of the week. To explore this, an analysis was done of the number of children and youth getting at least 5, 10 or 20 minutes of vigorous physical activity on at least 1, 2 or 3 days of the week. Half of Canadian children and youth do not get even 5 minutes of vigorous physical activity on 1 day of the week. A very small number (4%) get 20 minutes of vigorous physical activity 3 days per week.

Step Count Data: Evidence of Agreement Between Methodologies is Encouraging

Since 2005, CFLRI has been collecting pedometer data on a nationally representative sample of Canadian children and youth. This year's CANPLAY results show that the average daily steps taken are 12,455 for boys and 11,114 for girls. Limited progress has been made in increasing the overall level of physical activity. Mean steps have increased from about 11,400 in 2005-06 to 11,800 in 2009-10, and the proportion of children and youth getting 16,500 steps per day has increased from 9% to 13%. The 2009-10 CANPLAY data show that 31% are accumulating 13,500 steps per day (a step count target considered roughly equivalent to 60 minutes of MVPA). According to the 2009-10 CANPLAY, the average number of daily steps taken by the "typical" young person does not meet either the 16,500 or 13,500 daily step count targets, regardless of their region of residence. The average number of daily steps taken by children and youth in the Atlantic region (11,063) is less than the national average (11,806) by roughly 700 steps. CANPLAY data over 2 consecutive 2-year periods present a similar picture (Figure 5).

The Importance of Analysis at the Provincial/Territorial Level

A unique advantage of the CANPLAY survey is its ability to provide provincial- and territorial-level estimates of physical activity (Figures 5 and 6), something not possible in the CHMS. As discussed in previous report cards, this level of resolution is critically important for policy-makers working at the provincial and territorial (PT) level. The complementary strengths of the 2 major physical activity data sources in Canada (CHMS and CANPLAY) mean that both are needed in the future in order for us to have a robust national picture as well as the ability to know what is happening at the PT level.

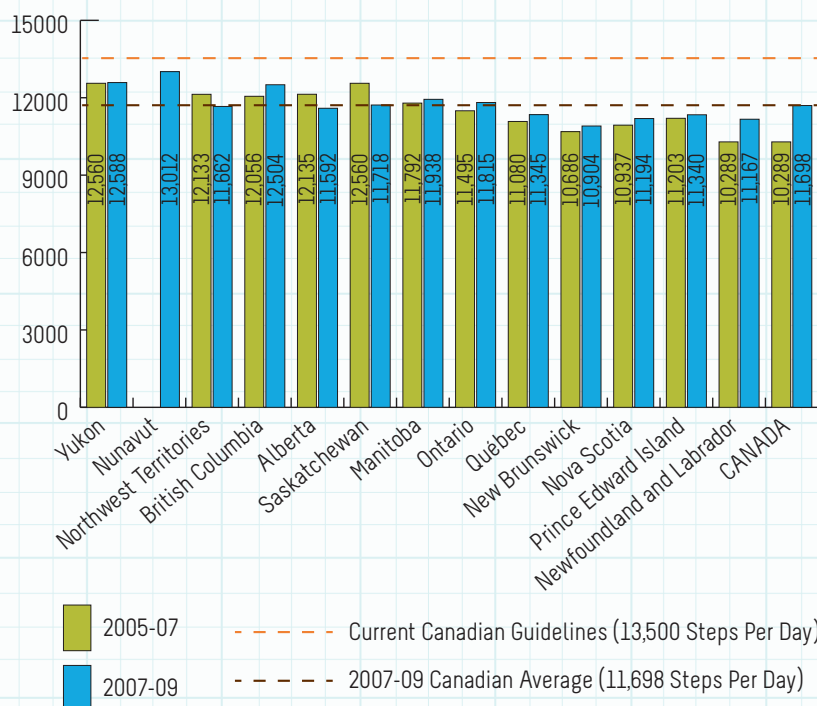


Figure 5: Average Steps Per Day Taken By 5- to 19-Year-Olds According to Province/Territory in 2005-07 and 2007-09 (Source: 2005-07 and 2007-09 CANPLAY, CFLRI).

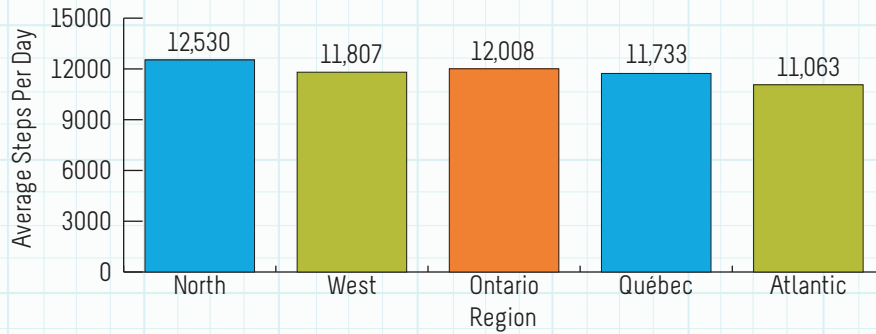


Figure 6: Regional Comparisons of Average Steps Taken Per Day Among 5- to 19-Year-Old Canadians (Source: 2009-10 CANPLAY, CFLRI).

HOW DOES CANADA STACK UP AGAINST OTHER COUNTRIES?

Few international comparisons of physical activity exist to answer this question. However, a group of researchers recently reviewed 43 studies from 13 countries around the world. These studies measure the number of steps children and youth take each day. The daily step count varies considerably from one country to the next, yet both Canada and the United States come out on bottom. Children and youth from European countries (Belgium, Czech Republic, France, Greece, Sweden, Switzerland and the United Kingdom) take almost 2,400 more steps per day than their peers in Canada and the United States. Girls in Western Pacific countries (Australia and New Zealand) take almost 3,400 more steps per day than girls in Canada and the United States.⁴¹

A comparison of accelerometer data between young populations in Canada and the United States has recently been done. Canadian children and youth appear to be slightly more sedentary than their American counterparts: 8.6 versus 6 to 8 hours per day. Canadian children age 6 to 10 are also less likely to get 60 minutes of daily MVPA than are 6- to 11-year-olds in the United States. By contrast, 11- to 19-year-olds in Canada are more likely than American adolescents to get 60 minutes of daily MVPA. The percentage of adolescent boys in Canada getting at least 60 minutes of MVPA on at least 5 days of the week is higher than in the United States, but similar among adolescent girls in the 2 countries.¹²

Ongoing measurement of physical activity in various countries with similar methodologies for measuring physical activity will contribute important information to global health surveillance efforts.

DISPARITIES IN PHYSICAL ACTIVITY

On average, boys get 14 more minutes of MVPA per day than girls, according to the 2007-09 CHMS. As has been reported in previous Report Cards, boys continue to be more physically active than girls in every age group. The decline in physical activity with increasing age continues to persist in boys and girls as well (Figure 7).

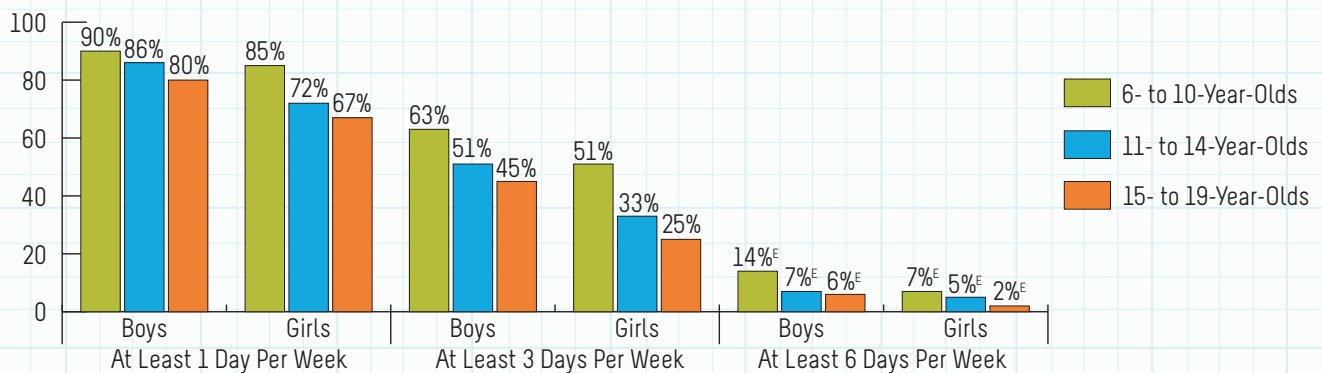


Figure 7: Proportion of Canadian Children and Youth Getting 60 Minutes of MVPA (Source: 2007-09 CHMS, Statistics Canada).

^E Use with caution

Table 2 below summarizes the time Canadian children and youth spend in each intensity level, by age, gender and body mass index (BMI). Average daily step counts are also included. For boys, physical activity tends to decrease as BMI increases.

Table 2: Average Daily Minutes of Physical Activity and Step Counts at Various Intensities and By Age, Gender and Body Mass Index Category (Source: 2007-09 CHMS, Statistics Canada).

GENDER, AGE GROUP AND BMI CATEGORY	INTENSITY OF ACTIVITY					STEP COUNTS
	SEDENTARY	LIGHT	MODERATE	VIGOROUS	MODERATE TO VIGOROUS	
BOYS (ALL AGES)	507	260	59*	2	61*	12,121*
6- TO 10-YEAR-OLDS ^R	445	298	67*	2	69*	13,217
11- TO 14-YEAR-OLDS	524 [†]	252 [†]	58*	2	59*	11,857*
15- TO 19-YEAR-OLDS	554* [†]	230 [†]	52* [†]	1	53* [†]	11,267* [†]
BMI CATEGORY						
NOT OVERWEIGHT/OBESE	500*	262	64*	2	65*	12,584*
OVERWEIGHT	524	260	50 [†]	1 [†]	51 [†]	11,188 [†]
OBESE	536	248	43 [†]	<1 [†]	44 [†]	10,256
GIRLS (ALL AGES)	524	252	46	1	47	10,327
6- TO 10-YEAR-OLDS ^R	446	306	56	2	58	11,745
11- TO 14-YEAR-OLDS	527 [†]	250 [†]	46 [†]	2 ^E	47 [†]	10,351 [†]
15- TO 19-YEAR-OLDS	582 [†]	212 [†]	38 [†]	<3	39 [†]	9,204 [†]
BMI CATEGORY						
NOT OVERWEIGHT/OBESE	524	249	46	2	48	10,224
OVERWEIGHT	515	262	43	1 ^E	44	10,450
OBESE	544	263	47	<3	48	11,159

^R Reference category

* Significantly different from estimate for girls

[†] Significantly different from estimate for the reference category

^E Use with caution

The 2009-10 CANPLAY results confirm these disparities. Average daily steps are greater in boys (12,455) than girls (11,114). Younger children (5- to 10-year-olds) continue to take more daily steps (12,918) than either 11-to 14-year-olds (11,521) or 15-to 19-year-olds (10,160).⁴² Furthermore, disparities have been observed with regard to both income (2005-2010) and education (2005-2009).

These disparities continue to highlight the importance of implementing and monitoring programs, strategies and policies that address these age-related, gender-related, weight-related and socio-economic differences in physical activity. However, the relationship with parental education is not significant in 2009-10.

CEREBRAL PALSY

Cerebral palsy (CP) is an umbrella term for a number of disorders that first appear in infancy or early childhood and affect body movement and muscle coordination. Exercise is commonly prescribed to children and youth with CP. While it is known that children and youth with CP get less physical activity than their peers, Canadian researchers have recently published the first paper on exercise participation rates in 11- to 18-year-olds with CP according to their gross motor function. Physical activity was self-reported and adolescents were considered to be meeting physical activity recommendations if they were getting at least 420 minutes of moderate physical activity per week. Anywhere between 1 and 419 minutes of moderate physical activity per week was considered "some activity." Participation rates were very low in general. Only 9% of adolescents got at least 420 minutes of moderate physical activity per week. Physical activity participation tends to drop off as mobility decreases.⁴³ These results call further attention to the need for the development of physical activity guidelines for children and youth with disabilities.

RESEARCH GAPS

- More exploration of the 2007-09 CHMS dataset is warranted, particularly around socio-economic disparities and other determinants of healthy living behaviours.
- Accelerometer-measured physical activity data that are representative of children and youth at the provincial and territorial levels, as well as community size, would provide provinces and territories with information that is more relevant to their local jurisdiction, thus enabling the design of more effective and targeted interventions, policies and programs.
- There is a need for sector harmonization in methods of data collection and analysis for physical activity data. There is also a need for surveillance data for daily physical activity profiles and fitness levels of Aboriginal youth living on reserves.



Organized Sport and Physical Activity Participation

YEAR	GRADE
2005	C+
2006	C-
2007	C
2008	C
2009	C
2010	C
2011	C

2011 GRADE

C The grade for Organized Sport and Physical Activity Participation is a **C** for the 5th year in a row. This reflects the fact that participation rates as reported in the 2010 PAM have changed very little from previous years. The persistence of disparities in this indicator, income in particular, also continues to prevent improvements in the grade.

KEY FINDINGS

According to nationally representative data from the 2010 PAM, 75% of parents say their children participated in sport in the past year, which is similar to last year's findings from the CANPLAY. Sport participation rates have remained relatively stable since 2005, unlike the decline observed in adult sport participation. Given this year's focus on the after-school period (3 to 6 p.m.), it is notable that 30% of children and youth participate in organized sport or physical activity after school and before supper.⁹

Though the percentage of Canadian children and youth participating in organized sport appears to be high, disparities persist on this indicator, which keep it from entering the B range. According to the 2010 PAM, more boys (81%) than girls (70%) participated in sport in the last year. More children and youth from families earning incomes of at least \$100,000 per year participated in sport compared to those from families earning less than \$50,000 per year (83% versus 66%). The same trend is true for children and youth with parents of differing educational backgrounds. More young people whose parents have attended university participated in sport than those whose parents have a high school education or less (79% university versus 70% high school versus 61% less than high school).

In 2 recently published analyses of nationally representative data on 12- to 15-year-olds in Canada from the National Longitudinal Survey of Children and Youth (NLSCY), these disparities were confirmed.⁴⁴⁻⁴⁵

Boys are more likely than girls to participate in organized physical activity, and those in the higher categories of socio-economic status are more likely to participate in organized physical activity than those in the lowest category. Another recently published analysis of NLSCY data further confirms these findings.

According to the latest data from CANPLAY, children and youth who participate in organized sport and physical activity take approximately 1,600 more daily steps than those who do not participate (12,194 vs. 10,570).⁴² While this is a significant amount of physical activity, an important question to ask is whether organized sport and physical activity is the only way to get children and youth active. ***Unstructured physical activity and active play may be an equally good, if not better, way for children and youth to increase their physical activity.*** This message may be empowering for families who struggle, because of financial and/or time pressures, to get their kids into organized programs. In other words, there are many ways to be active – the key is for families to be encouraged and empowered to find an approach that works for their unique situation. The extra 1,600 steps per day that a child who participates in an organized program gets could be easily obtained through active play, family activities, active transportation and a range of other economical and real-world solutions!

ORGANIZED PHYSICAL ACTIVITY ACROSS CHILDHOOD AND ADOLESCENCE

Data from the NLSCY provide insight into the likelihood of organized physical activity participation across childhood and adolescence. As the inverted U-shaped figure shown in Figure 8 reveals, participation tends to peak in middle childhood and drop off in adolescence. This plot is based on nationally representative data from 8,817 4- to 17-year-olds in Canada.⁴⁵ This trend mirrors overall physical activity trends.

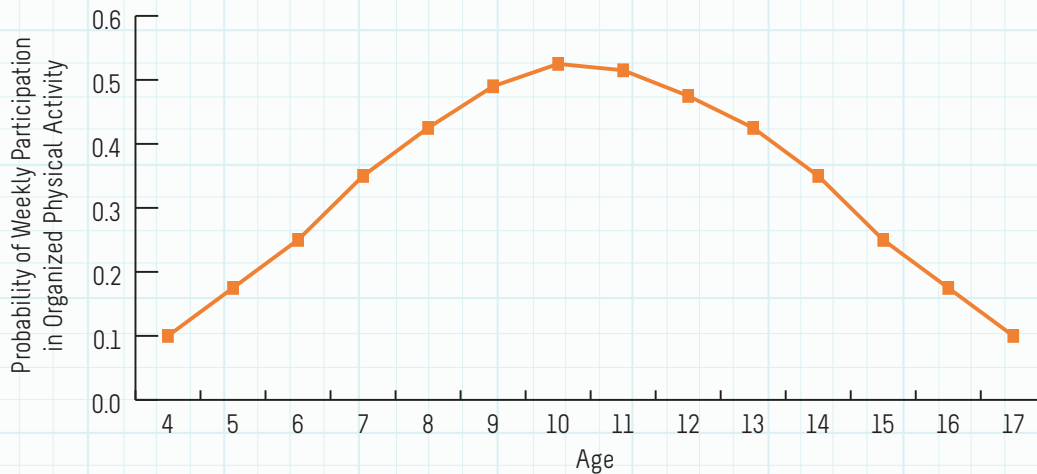


Figure 8: Organized Physical Activity Pattern Throughout Childhood and Adolescence
(Source: Adapted from Findlay et al., 2009⁴⁵).

The importance of organized physical activity in childhood and adolescence can be seen in its potential effect on lifelong physical activity habits. A recent study from Europe tracked individuals from the age of 13 to 23 years. Participation in organized sport during childhood and adolescence was positively linked to leisure-time physical activity at 23 years of age (Figure 9).⁴⁶



Figure 9: The Relationship Between Physical Activity in Childhood and Adulthood
(Source: Kjønnsen et al., 2009⁴⁶).

RESEARCH GAPS

- There is a need for accurate, consistent reporting of organized sport and physical activity participation rates by age and gender across Canada.
- Little is known about how much physical activity is actually achieved in sport programs. Research is needed on how much vigorous physical activity children and youth are getting during organized sport sessions, games and competitions.
- As stated in the 2010 Report Card, the Canadian Fitness Tax Credit appears to be benefiting middle- and upper-income families more than the lower-income families for whom it is intended. More research is needed on whether this tax initiative will increase disparities.

SPORTS DAY IN CANADA

Sports Day in Canada was held for the first time on September 18, 2010. It was a celebration of sport from grassroots to high-performance levels in communities across the country. This day was presented by CBC Sports, ParticipACTION and True Sport, and was guided by a committee of national sporting organizations and their networks of coaches, athletes and enthusiasts across the country. Sports Day gave all Canadians the opportunity to celebrate the power of sport, build community, fortify our national spirit and encourage healthy, active living. For more information, visit www.participaction.com/en-us/FindProgramsAndEvents/SportsDayInCanada.aspx.

Active Play and Leisure

YEAR	GRADE
2005	—
2006	—
2007	—
2008	INC
2009	INC
2010	F
2011	F

2011 GRADE

F

The grade for Active Play and Leisure is an **F** for the 2nd consecutive year. Active play refers to any play that involves bursts of physical activity, whether jumping or running around. Given that the contribution of active play to overall physical activity levels is likely higher in younger children, this indicator is discussed largely in reference to children who are 12 years old and younger. The grade reflects the fact that very few children are meeting the new Canadian Physical Activity Guidelines, based on newly released data from the 2007-09 CHMS. This suggests that few children are getting adequate amounts of active play.

KEY FINDINGS

According to the 2007-09 CHMS, only 14% of 6- to 10-year-old boys in Canada are getting at least 60 minutes of MVPA on at least 6 days of the week, and only 7% of 6- to 10-year-old girls are meeting this target. In combination with the fact that children and youth get only 14 minutes of MVPA during the after-school period (3 to 6 p.m.), which is one of the most unstructured parts of the day, this suggests that very few children are getting much active play. It should be recognized, however, that there are limitations to basing the grade strictly on daily MVPA. It is possible that children get active play during light-intensity activity. As physical activity measurement continues to improve in accuracy, a clearer picture of active play may emerge.

New data from the 2010 PAM present a more optimistic picture: 71% of parents say their 5- to 12-year-olds play in unorganized sport and physical activity after school; 80% say their children play outdoors after school. This indicator suggests that the opportunity exists to promote active play during this time period. However, these numbers are quite limited due to the lack of understanding about the frequency, intensity and duration of this parental-reported activity.⁹

Other data provide a less optimistic picture about the frequency of active play in the after-school period. In a small sample of 8- to 10-year-olds living near Montréal with at least 1 obese parent, only 13% reported actively playing on 5 days of the week (Figure 10).⁴⁷ Though the data are not representative of the general population, it provides a possible lower limit to the prevalence of active play, and underscores that solutions need to be found in the context of the family unit. More data like this are needed across other parts of Canada.

In a recent study of 10- to 11-year-olds in the United Kingdom, those who actively played on at least 5 days of the week had higher levels and greater intensities of physical activity on weekdays after school and for total physical activity.⁴⁸ This supports the important contribution active play makes to daily physical activity. Physical activity promotion strategies need to address this component of physical activity.

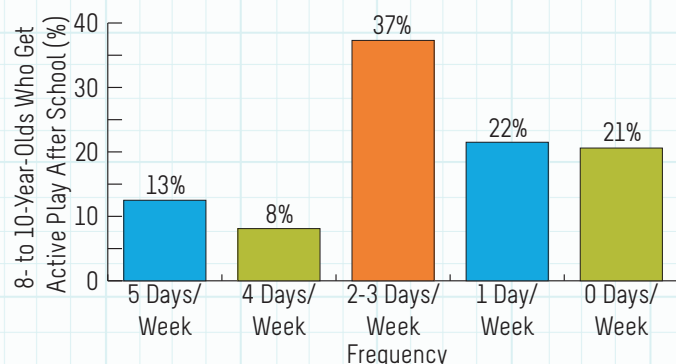


Figure 10: Frequency of Active Play in 8- to 10-Year-Olds Living in Montréal and with at Least 1 Obese Parent (Source: Québec Adiposity and Lifestyle Investigation in Youth Cohort).

RESEARCH GAPS

- Data continue to be needed that provide a picture of how much active play Canadian children and youth are getting, and how frequently.
- There is a need for better ways to measure active play. This may require the use of accelerometers and logbooks so researchers can determine what portion of light-intensity physical activity represents active play.
- More research exploring the relationship between active play, and health and behaviour outcomes is required – both in the presence and absence of organized sport and activity participation.

Active Transportation

2011 GRADE

D The grade for Active Transportation is a **D** for the 4th year in a row. The grade remains unchanged from previous years due to the relatively low levels of active transportation rates in Canadian children and youth.

YEAR	GRADE
2005	—
2006	D
2007	—
2008	D
2009	D
2010	D
2011	D

KEY FINDINGS

Based on nationally representative data from the 2010 PAM, 24% of parents say their children use only active modes of transportation in trips to and from school. Most of these children and youth walk to school (20%), while 4% bike (either exclusively or in combination with walking). By contrast, almost 62% of parents say their children rely on only inactive modes of transportation to get to and from school: 24% by car, 34% by bus or train, and the rest by mixed motorized transportation modes. An additional 14% used a combination of active and inactive modes of transportation to and from school.⁴⁹

Other data published in 2005 show that approximately 30% of Canadian children used active modes of transportation.⁵⁰ Numbers were higher in western provinces and lower in eastern provinces. In a recent study of 1,495 elementary school students in 67 schools in the Montréal and Trois-Rivières regions, 30% commuted by walking and 5% by bike.⁵¹ These numbers are generally much lower in adolescents.⁵²⁻⁵³

FACTORS ASSOCIATED WITH ACTIVE TRANSPORTATION

A broad variety of factors are linked to active transportation, including individual characteristics (e.g., motivation), the social environment (e.g., parent and peer attitudes toward active transportation), public policies (e.g., municipal bylaws, urban planning practices) and the built environment (e.g., availability of sidewalks and bicycle paths). Researchers believe a complex interaction exists between these factors. Therefore, ecological models that put a major emphasis on these interactions are used to understand active transportation (Figure 11).⁵⁴⁻⁵⁵

A recent study found that the distance between home and school was the most frequently reported barrier to active transportation.⁵⁰ Another group of researchers carried out semi-structured interviews with 37 parents in the Greater Toronto Area. They found that the mode of transportation chosen by parents was essentially based on 2 questions: (1) Does my child need to be escorted to school?, and (2) What is the most convenient mode of transportation based on factors such as time availability, distance to school and weather?⁵⁶

HEALTH BENEFITS OF ACTIVE TRANSPORTATION

A recent review of the scientific literature concluded that active transportation to and from school is generally associated with higher levels of daily physical activity, as measured by pedometers and accelerometers.⁵⁷ Canadian researchers estimated that if all motorized trips of less than 1 kilometer were replaced with walking, 5- to 14-year-olds would take an additional 2,238 daily steps.⁵⁸

Increasing evidence suggests that children who bicycle for transportation may improve their cardiovascular fitness.⁵⁹⁻⁶¹ In a recent study, more than 6,000 English students completed the 20-metre shuttle run test, a cardiovascular endurance test. Compared to their peers who were driven to school, walkers were 1.3 times more likely, and cyclists 8.0 times more likely, to be classified as physically fit.⁶³

In contrast to previous research,⁵⁹ 2 recent Canadian studies have shown that active commuters have better body composition. Researchers in Québec reported that children who actively travelled to school through kindergarten to grade 2 had a lower BMI than those who did not.⁶² However, children who were participants in active transportation on a single occasion were not leaner, suggesting that a certain volume of active transportation may be necessary to achieve health benefits. A lower BMI was also seen in participants who actively transported to school in a study in eastern Ontario.⁶³

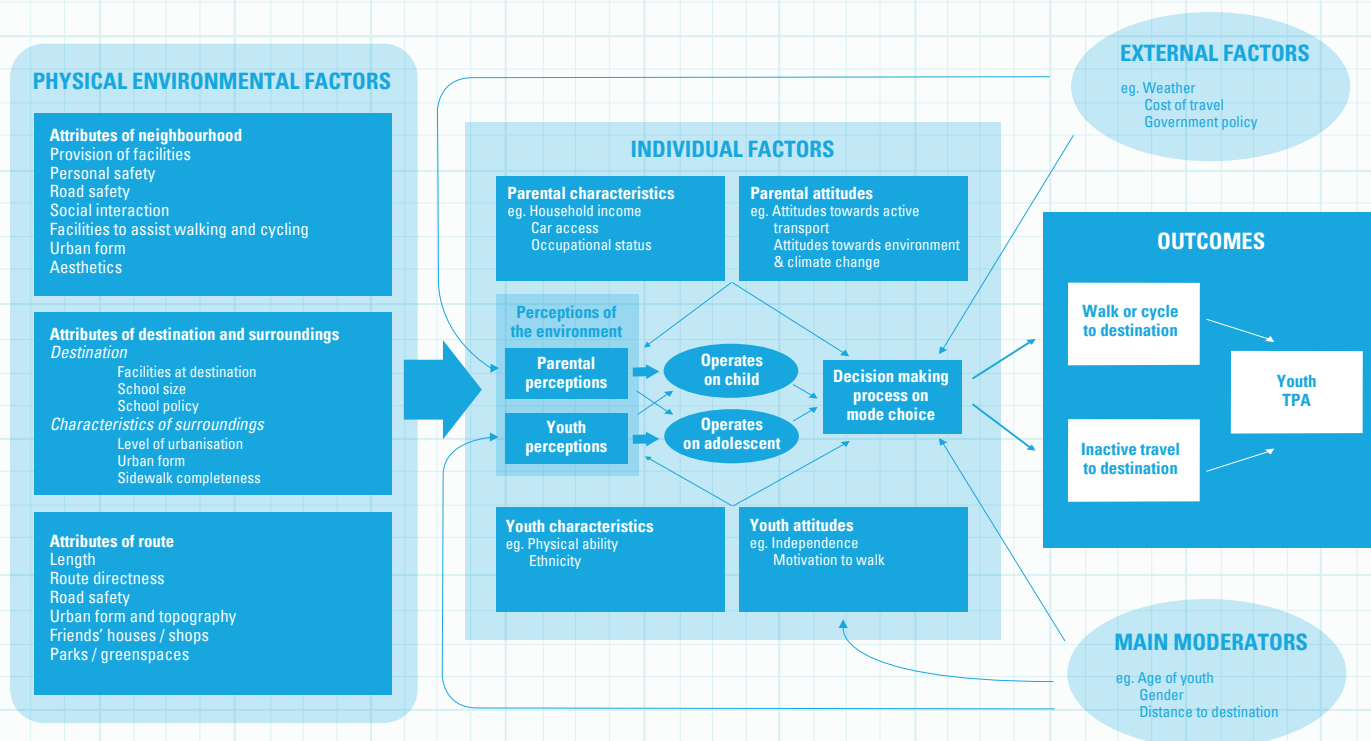


Figure 11: A Summary of the Factors That Are Linked to Active Transportation in Children, TPA = Transportation-Related Physical Activity (Source: Panter et al., 2008⁶⁴).

ACTIVE TRANSPORTATION AND ACADEMIC PERFORMANCE

An increasing number of studies have found a positive relationship between physical activity and academic success.⁶⁴ As one improves, so does the other. Since active transportation is a component of physical activity, it makes sense that children and youth who walk or bicycle to school may perform better in school. A Spanish study recently examined the academic performance of 1,700 adolescents based on their mode of transportation to school. Girls who actively commuted to school had significantly better overall academic scores, verbal scores and numeric abilities after the effects of age, school type, weight status and extracurricular physical activity were factored out. However, no difference was seen in boys, despite having a greater amount of extracurricular physical activity than girls.⁶⁵

INDEPENDENT MOBILITY AND ACTIVE TRANSPORTATION

The 2008-09 Family Intervention Survey reported some interesting results on active transportation. A total of 1,442 families from 4 provinces (Nova Scotia, Ontario, Alberta and British Columbia) participated in this study between March and June 2008, prior to the development of a school travel plan. Following the development of the plan, 1,520 different families participated in a follow-up survey. All results reported here are from the follow-up sample. The car was the most common mode of transportation to (42%) and from (35%) school. More children and youth appeared to walk home from school (43%) than to school (37%). Reasons given by parents for motorized transportation included inclement weather (21%), convenience and time pressures (18%), driving somewhere else anyway (17%), distance to school is too far (16%), traffic danger (11%) and personal safety issues (11%).⁶⁶

An interesting link between independent mobility and active transportation was also revealed in this survey. As the degree to which children were “allowed out” by their parents went up, so did the use of active modes of transportation to and from school. A total of 63% of children who were always allowed out used active modes of transportation to school; that number increased to 67% on the trip home from school. By contrast, only 29% of children who were never allowed out used active modes of transportation to school (34% on the trip home from school).

THE IMPORTANCE OF DISTANCE FOR ACTIVE TRANSPORTATION TO SCHOOL

The distance between the student's home and school has a big impact on active transportation to school. Distances of less than 1.5 kilometres are generally recognized as reasonable walking distances to and from school. In fact, active transportation to and from school is approximately 6 times higher in families that live less than 1.5 kilometres from school compared to families who live farther away.

ACTIVE TRANSPORTATION INITIATIVES

There are a number of promising initiatives that are promoting active transportation in Canada. The Canadian Child and Youth Friendly Land Use and Transport Planning Guidelines, developed by the Centre for Sustainable Transportation, represent an interesting initiative to promote active transportation. These guidelines have been developed for all 10 provinces and can be viewed online: www.kidsonthemove.ca. There are 19 guidelines at the federal level, which specify, among other things, that the needs of children and youth should be taken into account during urban planning. Also, adequate infrastructure should be in place to encourage walking and cycling, and traffic safety should be improved.

The Active and Safe Routes to School program (www.saferoutestoschool.ca), which is in line with the aforementioned guidelines, is being implemented in a growing number of schools. Eight schools in the Halton Region of Ontario implemented this program for a year. During some months, 100% of students living within 1.6 kilometres of school actively commuted to and from school!⁶⁷ In Québec, 210 schools now participate in the On the Move to School program, which has been developed by Velo Québec and is based on the Active and Safe Routes to School projects (www.velo.qc.ca/monecole/index_e.php). The P.L. Robertson elementary school in Milton, Ontario, is a noteworthy success story: parents are forbidden from driving their kids to school, and 90 to 100% of students actively commute to and from school (www.stnonline.com/home/top-stories/1969-a-one-of-a-kind-walking-biking-school-opens-in-canada). Finally, walking school buses have also been implemented in several regions across Canada to address parental concerns about traffic safety and stranger danger (www.saferoutestoschool.ca).

RESEARCH GAPS

- There is a clear lack of research on the effectiveness of active transportation programs such as walking school buses and Active and Safe Routes to School in increasing physical activity.
- There has been a lot of research on the factors associated with active transportation, but almost all studies are descriptive. Intervention studies are needed to determine how these factors may be favourably changed.
- Accelerometers and pedometers are limited in their ability to measure physical activity during bicycling because of the restricted movement of the body when worn on the waist. The combination of accelerometers and GPS has been proposed as a valid alternative to address this limitation.⁶⁸ This may help give a more accurate picture of active transportation in children and youth.
- There is a need for research data on the cost savings of active transportation (e.g., walking school bus versus busing). This data may have an impact on school administrators.

Sedentary Behaviour

Indicators	Grades	Quick Stats	Recommendations for Action
SCREEN-BASED SEDENTARY BEHAVIOURS	F	<ul style="list-style-type: none"> Canadian children are getting 6 hours of screen time on weekdays and more than 7 hours on weekend days (2005-06 HBSC). 	<ul style="list-style-type: none"> Parents should implement household rules on screen time and provide alternative opportunities for active play, sport and physical activity participation. Parents should model screen time rules. Parents should reintroduce some manual chores for a dual purpose – even washing and drying dishes requires a little more energy than loading the dishwasher. Schools should educate students and model behaviours to create awareness around the importance of reducing sedentary behaviours, especially extended sitting. For active gaming recommendations, see the 2010 Report Card (p. 25).
NON-SCREEN SEDENTARY BEHAVIOURS	INC	<ul style="list-style-type: none"> Non-screen sedentary behaviour is relatively under-researched.⁷⁷ 	

This year, sedentary behaviour is being considered independently of the Physical Activity indicators. Two indicators comprise sedentary behaviour: Screen-Based Sedentary Behaviours and Non-Screen Sedentary Behaviours.

Over the past several decades, the physical activity and fitness of Canadians have decreased whereas overweight/obesity and their associated co-morbidities have increased.^{12,69} To date, public health agencies have focused on physical activity, and have paid little attention to the mounting evidence to support sedentary behaviours as a distinct health issue. Growing evidence shows that increased levels of sedentary behaviours, independent of physical activity, are associated with increased risk of chronic disease and a variety of physiological and psychological problems.⁷⁰⁻⁷²

A recent review of the research shows that increased time spent in sedentary behaviours (primarily television viewing) is associated with unfavourable body composition, decreased physical fitness, increased risk for metabolic syndrome and cardiovascular disease, decreased self-esteem, behavioural problems and decreased academic achievement. This relationship increases in a dose-response manner, meaning that as sedentary time increases, so do health risks.⁷⁴ This is a cause for concern since Canadian children and youth spend an average of 8.6 hours per day, or 62% of their waking hours, in sedentary pursuits (2007-09 CHMS).

NEW SEDENTARY BEHAVIOUR GUIDELINES

CSEP's new Canadian Sedentary Behaviour Guidelines for School-Aged Children and Youth, released on February 15, 2011, are the first systematic, evidence-informed recommendations of their kind in the world.⁷³ They offer recommendations on how long Canadian children and youth should spend in sedentary pursuits in order to minimize health risks. CSEP developed these evidenced-based guidelines in partnership with the Healthy Active Living and Obesity Research Group (HALO) at the Children's Hospital of Eastern Ontario, ParticipACTION, and with support from the Public Health Agency of Canada. The guidelines are based on a systematic review of the best scientific evidence examining the relationship between sedentary behaviours (e.g., sitting, watching television, playing video games) and health indicators such as body composition, fitness, metabolic syndrome and cardiovascular disease, self-esteem, pro-social behaviour and academic achievement in school-aged children and youth. The guidelines were developed through a scientifically rigorous and transparent process similar to that used in the development of the new Canadian Physical Activity Guidelines (see page 13).

New Canadian Physical Activity Guidelines were developed to encourage children and youth to get at least 60 minutes of daily MVPA. However, even if children and youth meet these guidelines, there are still 23 hours remaining in the day for school, sleep, work and discretionary or “free” time. The Canadian Sedentary Behaviour Guidelines for School-Aged Children and Youth target this free time in particular, and encourage incidental movement (physical activity, such as chores and walking, that is not planned or intended as exercise) and active play, and discourage prolonged periods of sitting at a computer or resting on the sofa watching TV.

These guidelines are relevant to all apparently healthy children (5 to 11 years) and youth (12 to 17 years), irrespective of gender, race, ethnicity or family socio-economic status. Children and youth are encouraged to limit sedentary behaviours, and to participate in physical activities that support their natural development and are enjoyable and safe. Children and youth should limit recreational screen time (e.g., television, computer, video games), motorized transportation, indoor time and extended sitting in the context of family, school and community (e.g., volunteer, employment) activities. Following these guidelines can improve body composition, cardio-respiratory and musculoskeletal fitness, academic achievement, self-esteem and social behaviours. The benefits of reduced sedentary time exceed potential risks. For those with screen time levels in excess of 2 hours per day, it is appropriate to start to progressively reduce screen time as a stepping stone to meeting the guidelines.

For health benefits, children (age 5 to 11) and youth (age 12 to 17) should minimize the time they spend being sedentary each day. This may be achieved by:

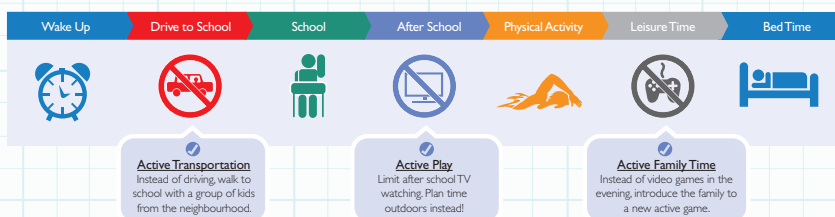
- **Limiting recreational screen time to no more than 2 hours per day; lower levels are associated with additional health benefits.**
- **Limiting sedentary (motorized) transport, extended sitting and time spent indoors throughout the day.**

For more information, visit www.csep.ca/english/view.asp?x=804.

WHAT DOES REDUCING SEDENTARY BEHAVIOUR LOOK LIKE ON A DAILY BASIS?

It is important to take a “whole day” approach to healthy, active living in order to maximize health. An ideal day would see the replacement of a large proportion of sedentary pursuits (e.g., watching TV, playing video games) with light activity such as play, chores and various types of incidental movement. Adequate MVPA to meet the physical activity guidelines would also be involved. This will mean limiting sedentary time while at school, work and home (see Figure 12).

Cutting down on sitting down. Help children swap sedentary time with active time!



Cutting down on sitting down. Help teens swap sedentary time with active time!

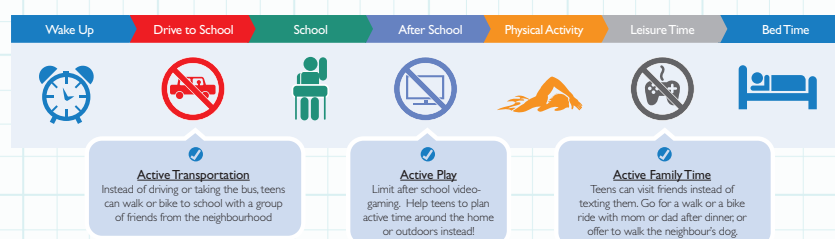


Figure 12: Recommended Ways of Reducing Sedentary Behavior in Children (Top) and Youth (Bottom) (Source: CSEP).

IMPORTANT DEFINITIONS⁷²

SEDENTARY: a distinct class of behaviours (e.g., sitting, watching television, playing video games) characterized by little physical movement and low energy expenditure.

SEDENTARISM: extended time in sedentary behaviours characterized by minimal movement, low energy expenditure and rest.

PHYSICALLY ACTIVE: meeting established guidelines for physical activity (see page 13).

PHYSICAL INACTIVITY: the absence of physical activity, usually reflected as the proportion of time not engaged in physical activity of a pre-determined intensity.

ACTIVE VIDEO GAMING: video games that are designed to promote movement and interaction from the participant(s). Some examples include the Nintendo Wii™, Microsoft Kinect™, Sony's Playstation Move™ and arcade-type video games.

RECREATIONAL SCREEN TIME: time spent doing things like watching television, playing video games or using the computer for non-school-based entertainment. This can include time in the classroom where screens are used for non-education purposes.

Screen-Based Sedentary Behaviours

YEAR	GRADE
2005	C-
2006	D-
2007	D-
2008	D
2009	F
2010	F
2011	F

2011 GRADE

F

The grade for Screen-Based Sedentary Behaviours (formerly Screen Time) is an **F** for the 3rd year in a row. This reflects the new, nationally representative data that show very few children and youth are meeting the new Canadian Sedentary Behaviour Guidelines released by CSEP.⁷²

KEY FINDINGS

Results from the 2007-09 CHMS reveal that 6- to 19-year-olds in Canada spend an average of 8.6 hours per day, or 62% of their waking hours, in sedentary pursuits; it is uncertain if they are engaged in screen time for this entire 8.6 hours. However, since other data show that children and youth get as much as 6 hours per day of screen time, most of these 8.6 hours are likely spent in front of various screens (e.g., TV, computer, smart phones). Future research should combine accelerometry and time-use data to determine the makeup of sedentary time.

Sedentary time does not vary considerably depending on age, gender or body fat. This may indicate that future research needs to examine new ways of looking at sedentary time to determine what it is about sedentary behaviour that leads to poor health. Evidence suggests that the number and duration of sedentary breaks throughout the day may have more influence on health than simply the total amount of time spent in sedentary pursuits.⁷⁴

As mentioned in the Introduction, the after-school period, which is an important window of opportunity for children and youth to get physically active, is largely spent in sedentary pursuits. Children and youth spend 107 minutes (59%) of the after-school period in sedentary behaviour, according to the 2007-09 CHMS. The 2010 PAM indicates that sedentary behaviour is widespread, with 73% of parents saying their 5- to 17-year-olds watch TV, play computer/video games or read in the after-school period.⁹

A newly published analysis of the 2005-06 Health Behaviour in School-Aged Children Survey (HBSC) focuses on different kinds of screen time. This meets an important need because the majority of research focuses on the impact of television while ignoring Internet viewing and video game playing, which are increasingly important components of screen time for adolescents. Only 25% of grades 6 to 8 students are spending 16 hours or less per week in screen-based sedentary behaviour (television, computer, video games). Only 25% of grades 9 and 10 students are spending 14 hours or less per week in screen-based sedentary behaviour. These results show high computer use in grades 9 and 10 students. Computer time that was greater or equal to 18 hours a week in grade 6 to 10 students, and greater or equal to 23 hours per week in grades 9 and 10 students, was associated with a higher likelihood for risky behaviours such as smoking, drunkenness, drug use, non-use of seatbelts and non-use of condoms. These results suggest that particular attention should be paid to excessive computer use when limiting screen time in children and youth. More research is needed that examines the relationship between other screen time behaviours and health.⁷⁵

RESEARCH GAPS

- There is a need for higher quality research studies in children and youth (e.g., larger and more diverse sample sizes, direct measures of sedentary behaviour, reporting of adverse events). These larger studies should be able to address the impact of various demographic variables on sedentary behaviour.
- With the increasing popularity of hand-held portable devices, “sedentary multi-tasking” is becoming more common. Children and youth often watch television, talk on the phone and use the computer all at the same time. This is a relatively new phenomenon, and future research should assess what health effects are associated with this high level of screen time. Work must also be done to better understand the long-term effects of active video gaming on health.⁷⁶

Non-Screen Sedentary Behaviours

YEAR	GRADE
2005	—
2006	—
2007	—
2008	—
2009	—
2010	—
2011	INC

2011 GRADE

INC

The Non-Screen Sedentary Behaviours indicator is new to the Report Card and represents all sedentary behaviours not related to screens (Figure 13). This new indicator recognizes the diverse contexts within which sedentary behaviours occur and the need to understand the variation in exposure, impact and potential intervention opportunities for non-screen time sedentary behaviours. The grade is **Incomplete**, reflecting the lack of data around the non-screen time pursuits of children and youth. The majority of available information includes measures of screen-based discretionary time behaviours. Not only is this easier to measure quantitatively, but decreasing screen time is an easier concept to promote to the general public. However, even with limited information, it is agreed that the benefits of decreasing sedentary behaviour outweigh any potential harms. While developing the Canadian Sedentary Behaviour Guidelines, the Research Work Group discussed at length the risks of decreasing sedentary behaviour. As with all changes to habitual behaviour, there may be some risks associated with decreasing sedentary behaviour. Decreasing sedentary behaviour inevitably leads to an increase in more active pursuits, and as physical activity is increased, the likelihood for injury also increases (e.g., more likely to have an accident while moving around when compared to sitting down). This being said, the perceived risk for decreasing all sedentary behaviours is extremely low.

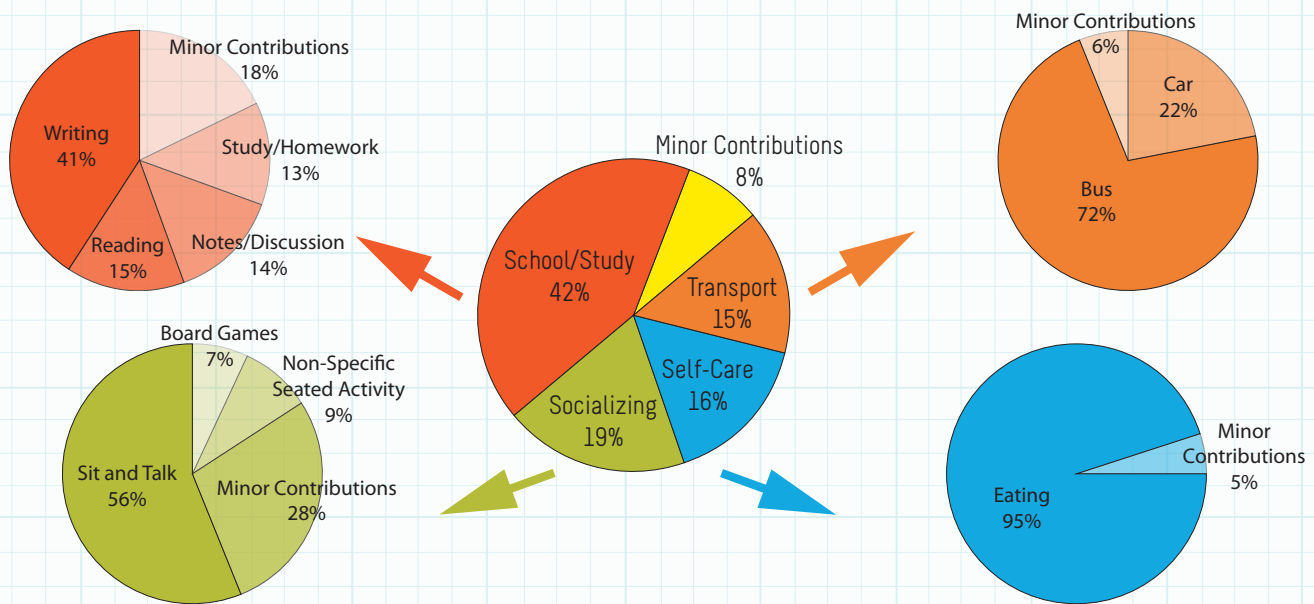


Figure 13: The Components of Non-Screen Sedentary Behaviours (Source: Adapted from Olds et al., 2010⁷⁷).

RESEARCH GAPS

- There is a need for data on the non-screen sedentary behaviours of Canadian children and youth.

School

Indicators	Grades	Quick Stats	Recommendations for Action
PHYSICAL EDUCATION	C-	<ul style="list-style-type: none"> 44% of Canadian children receive PE at school 1-2 days per week, 25% on 3-4 days of the week, and 22% receive daily PE (2005 PAM). Available data hint at the possibility that only a small portion of PE class is dedicated to actual physical activity. In 1 study, only 2% of girls and 3% of boys were spending at least half of PE class in MVPA.⁷⁸ 	<ul style="list-style-type: none"> PE in schools at all ages and PE specialist hiring for all ages should be mandated. There is a need for a novel curriculum that increases the fraction of PE time devoted to physical activity. There is a need to develop a curriculum for high school students that emphasizes lifelong physical activity skills in place of a sport-related curriculum.
SPORT AND PHYSICAL ACTIVITY OPPORTUNITIES AT SCHOOL	B	<ul style="list-style-type: none"> 77% of parents say schools offer other physical activity or sport programs outside of regular PE classes (2010 PAM). 45% of parents say these programs meet the needs of their kids quite or very well while 17% say they meet their kids' needs moderately well (2010 PAM). 	<ul style="list-style-type: none"> Schools should have physical activity as part of their school improvement plan. Out-of-class physical activity opportunities for the whole school need to be addressed. Non-traditional physical activity needs to be addressed and groups targeted who are known to have lower levels and who tend to get their physical activity only at school (e.g., adolescent girls). Students should be involved in the development and organization of physical activity opportunities that address student preferences.
SCHOOL INFRASTRUCTURE AND EQUIPMENT	B	<ul style="list-style-type: none"> No new data are available, but based on data from prior Report Cards, the majority of children and youth report that the facilities available at school are adequate.⁷⁹ 	<ul style="list-style-type: none"> Ensure the gym is available for use before school, during lunch and immediately after school, for both sport and general participation in physical activity. Develop policies requiring appropriate facilities and equipment in sufficient amounts to meet student needs. If not already in place, develop cooperative agreements between schools and municipalities, and schools and communities.
SCHOOL POLICY	C	<ul style="list-style-type: none"> Data on the support for physical activity policies in the school environment, and their implementation, remain sparse. 	<ul style="list-style-type: none"> Daily PE policies for K-12 are needed to foster skill and motor development for lifelong participation in physical activity. In addition, policies are required to ensure actual participation in daily physical activity, such as British Columbia's Daily Physical Activity policy to provide 30 minutes of physical activity daily up to grade 9, and 150 minutes a week for grades 10 to 12. PE teachers and physical activity leaders, as well as all other teachers and school staff, need to be given adequate, regular and appropriate training to establish quality and safe PE and physical activity programs.³

Physical Education

YEAR	GRADE
2005	F
2006	—
2007	—
2008	—
2009	C-
2010	C-
2011	C-

2011 GRADE

C-

The grade for Physical Education (PE) remains a **C-** this year for the 3rd year in a row due to lack of new data. There continues to be a limited picture of what is happening on the ground. There is a lack of evaluation data on how well PE is being implemented. Are children and youth actually getting the amount of PE per week that schools say they are getting?

KEY FINDINGS

Based on the 2005 PAM, 44% of Canadian children receive PE at school 1-2 days per week, 25% on 3-4 days of the week, and 22% who receive daily PE. The remaining 9% reportedly receive no PE at school (Figure 14). Among those who do, the average reported class duration is 50 minutes.¹³⁹ These numbers need to be used cautiously since the proportion of time dedicated to PE and health education in these classes is not clear.

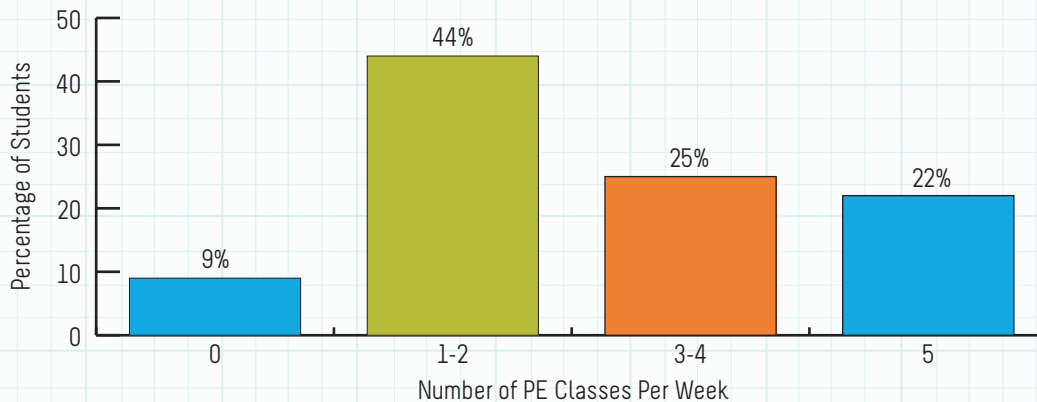


Figure 14: Parent-Reported Weekly PE Class in Canadian Children and Youth (5- to 17-Year-Olds) (Source: 2005 PAM, CFLRI).

PE specialists are not mandated in all provinces across Canada at the elementary school level. This leads us to question what kind of training generalist teachers receive in PE, and whether it is enough. Researchers from the University of Manitoba conducted a qualitative study where they asked generalist teachers and principals to describe the challenges of delivering quality PE curricula. They concluded that the “delivery of quality physical education is constrained in generalist schools.” Principals noted that “teachers were limited in their ability to provide lessons that were developmentally appropriate and varied in terms of an effective scope and sequence of curricular content. As a consequence, there was evidence that some students became discouraged by their experiences in the gym.” Teachers were also quick to acknowledge their “inadequate specialist training and the resulting lack of knowledge” with regard to teaching PE. The presence of PE specialists tends to increase as the size of the school increases.

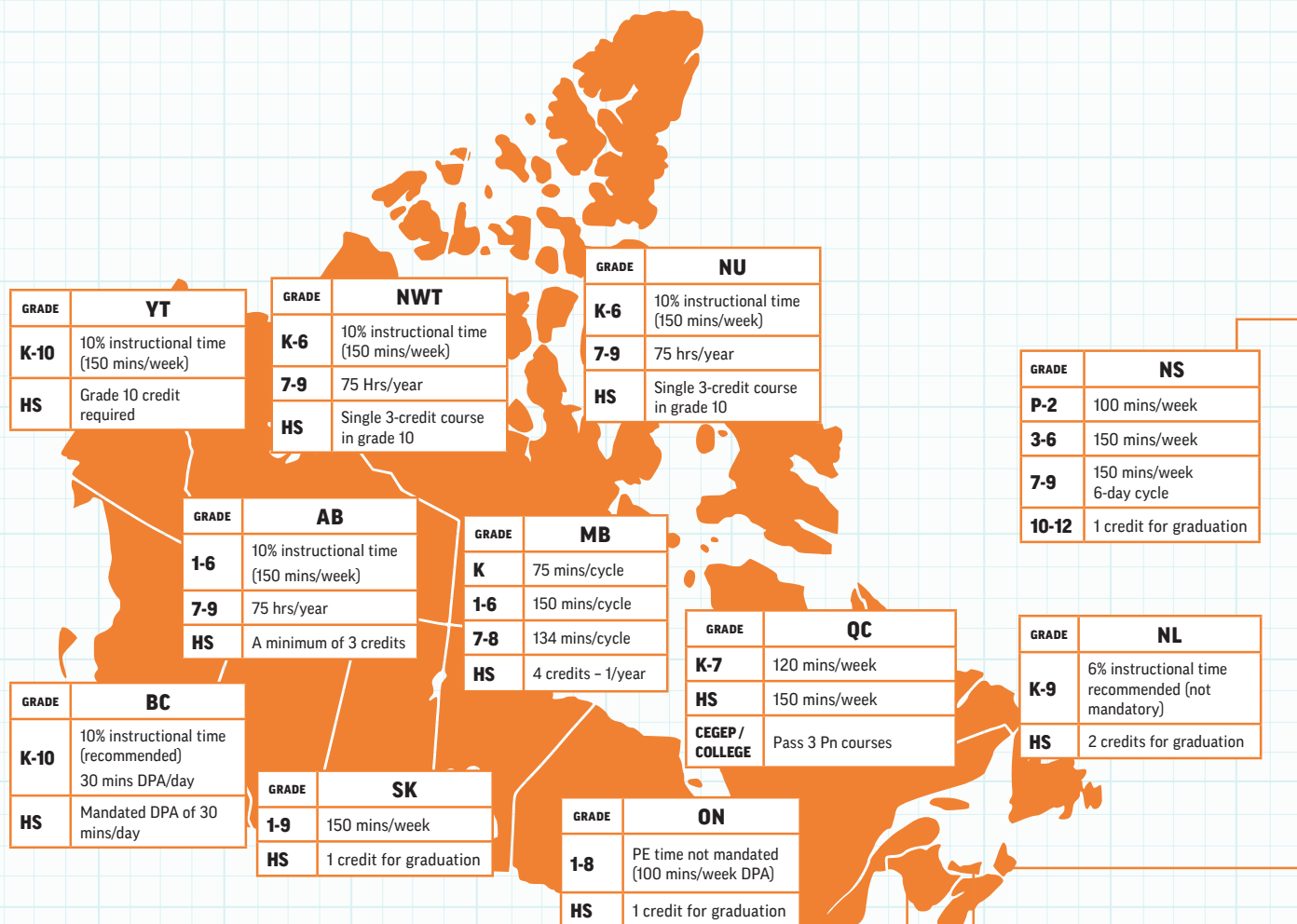


Figure 15: Mandated PE time across Canada.

Note: Times are presented as each province reports them.

HS = High School

DPA = Daily Physical Activity

GRADE	NB
Anglophone	
K-5	100 mins/week
6-8	150 mins/week
9-10	45-135 hrs total between both grades

GRADE	NB
Francophone	
K-6	6% instructional time
7-8	7% instructional time
9-10	93.5 hours total between both grades

GRADE	PEI
K-6	5% instructional time (90 mins/6-day cycle)
7-9	4-6% instructional time (72-108 mins/6-day cycle)
HS	Not compulsory

THINK KIDS ARE ACTIVE DURING PE CLASS? THINK AGAIN

Are children being physically active during their PE classes? No nationally representative data exist to answer this question. However, available data in Canada suggest that most children spend only a small fraction of their PE class actually being active. In a study that used accelerometers to measure physical activity in 8- to 11-year-olds from 9 elementary schools in British Columbia, girls spent 13% and boys spent 11% of their PE class in MVPA. In fact, only 2% of girls and 3% of boys spent at least 50% of PE class in MVPA (Figure 16).⁷⁸ Results from a small study in Ontario report similar findings. Grade 6 students at a private school spent only 3.7 minutes of a 35-minute PE class in MVPA. Students in grades 7, 8 and 10 from the same school spent less than 10 minutes in MVPA during a 71-minute PE class.⁸⁰ Clearly, opportunities to get children and youth active during PE class are being missed. Strategies are needed to determine how to increase the time spent being physically active within PE classes.

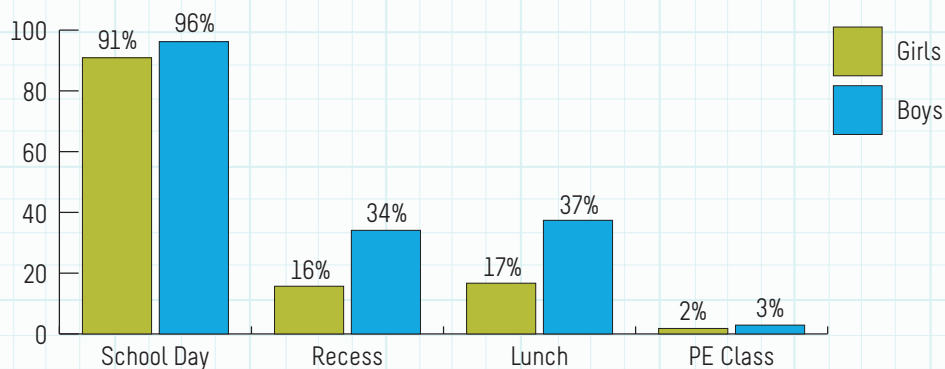


Figure 16: Proportion of 8- to 11-Year-Old Boys and Girls in 9 Elementary Schools Who Are Getting at Least 30 Minutes of MVPA During the School Day, Spending at Least 40% of Recess Time in MVPA, Spending at Least 40% of Lunch Time in MVPA and Spending at Least 50% of PE Class in MVPA (Source: Nettleford et al., 2010⁷⁸).

ENROLMENT IN PE IN HIGH SCHOOL

Adolescent participation in PE is important because greater participation is linked to higher levels of leisure-time physical activity.⁴⁶ Unfortunately, a recent study found that the average enrolment in PE classes in some Ontario schools was 62%, with some schools reporting rates under 30%.⁸¹ Most differences in PE enrolment can be explained by differences in student preferences. However, there are differences between schools that contribute to low PE enrolment that may be of interest to educators and policy-makers. Future PE programs may stand to benefit from offering daily PE to students. Results from 1 study also suggest that larger PE class sizes do not negatively affect enrolment, particularly among female students, as it does for other subjects.⁸¹ Therefore, regulations that allow for larger enrolments in PE class may warrant consideration. Additional research is needed to examine the impact of larger PE class sizes on the teacher's ability to accomplish course objectives, including improving fitness and motor skills in children. The study also bears replication across other jurisdictions.

The curriculum for grades 11 and 12 in Manitoba sets a target for students to get at least 30 minutes of MVPA per day. No other curriculum sets these targets, which are helpful for teachers. The curriculum allows students to get their MVPA outside of school, depending on the model implemented. They have lists of activities that are known to produce MVPA, which again gives clear direction to those who are implementing the curriculum. There is also flexibility so that with proper assessment (e.g., assessing heart rates while engaged in an activity), students can make the case for doing things that are not on the curriculum lists. This also helps create skills and interests that have potential to be carried on beyond the high school years. It is important to note that while this is useful for increasing physical activity, it is only 1 component of a quality H&PE program.

RESEARCH GAPS

- There is a major gap in evaluation data on how often and how well PE is being implemented in schools.
- Systems that facilitate collection of data relevant to classroom teachers, administrators and other levels of the education and health systems can contribute to learning about what is effective, for whom and under what circumstances.
- Regulations that allow for larger enrolments in PE class may warrant consideration. Additional research is needed that looks at how larger PE classes affect the accomplishment of course objectives, such as improving fitness and motor skills.⁸¹
- Additional research is needed to determine why students are not taking PE and what their suggestions are to increase opportunities.

OPHEA HEALTH AND PHYSICAL EDUCATION ELEMENTARY CURRICULUM RESOURCES

In September 2010, Ontario elementary schools began implementing the revised Interim Health and Physical Education (H&PE) Curriculum. With a vision to increase physical and health literacy of children and youth, the H&PE curriculum will have an impact on the 2.1 million children and youth who attend Ontario's 5,000 publicly funded schools, and on their families. Over the past 2 years, Ophea (an Ontario-based non-profit organization that supports healthy schools and communities) has been leading a provincial effort that mobilized more than 150 organizations and individuals to ensure that consistent and quality implementation support is available across the province. The result was the release of the Ophea H&PE Elementary Curriculum Resources in Fall 2010. These resources include more than 1,000 lesson plans and supporting materials for grades 1 to 8, in both English and French. To date, partnerships have been established with 59 school boards and several public health units across the province to deliver these essential resources. A baseline evaluation study is currently underway to collect information about the current practice and context with respect to H&PE implementation in Ontario. A follow-up study will take place in 2012-13. Indeed, a significant milestone has been achieved, but continued efforts are still required to make the vision of the H&PE Curriculum a lasting reality in elementary and secondary schools and communities. For more information, visit www.ophea.net.

Sport and Physical Activity Opportunities at School

YEAR	GRADE
2005	INC
2006	INC
2007	C
2008	C-
2009	B-
2010	C
2011	B

2011 GRADE

B The grade for Sport and Physical Activity Opportunities at School is **B** this year because well over half of schools are providing students with sport and physical activity opportunities outside of PE classes according to parents.

KEY FINDINGS

Based on the 2010 PAM, 77% of parents say schools offer other physical activity or sport programs outside of regular PE classes. 45% of parents say these programs meet the needs of their kids quite or very well while 17% say they meet their kids' needs moderately well.⁹

Although not representative of Canadian children in general, the Québec Adiposity and Lifestyle Investigation in Youth (Quality) cohort study reports that 43% of 8- to 10-year-olds belong to a school sports team, whether intramural or varsity. Consistent with other research, more boys (50%) than girls (35%) participate in school sports.⁴⁷

PHYSICAL ACTIVITY INTERVENTIONS AT SCHOOL

A recent systematic review evaluated research studies that involved physical activity interventions among European adolescents. The majority of studies targeted adolescents in the school setting. Physical activity promotion strategies at school did improve physical activity among students in the short term. Whether these improvements lead to greater physical activity outside of school is less certain. Still, these studies highlight the importance of providing opportunities for physical activity at school, particularly with adolescents, who experience a decline in their physical activity during this phase of life.⁴

DECLINE IN SPORT PARTICIPATION AT SCHOOL OVER TIME

Consistent with previous research, the Tell Them From Me (TTFM) survey continues to reveal a big drop in school sport participation as students enter high school. A marked decline in participation occurs between grades 8 and 9 (59% versus 50%), and this decline continues throughout high school (Figure 17).⁸²

TTFM results also reveal several potential benefits associated with participation in school sports. Both boys and girls involved in school sports or clubs are less likely to report problems with anxiety and depression. They are also more likely to report positive friendships and have a positive sense of belonging. These benefits of school sport participation continue to highlight the importance of providing sport opportunities at school⁸² despite earlier evidence that it does not necessarily prevent the overall decline in activity seen in adolescence.⁸³

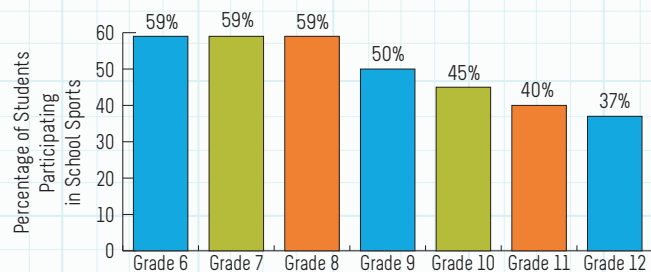


Figure 17: Proportion of Grades 6 to 12 Students Who Participate in School Sports (Source: TTFM).⁸²

PHYSICAL ACTIVITY OPPORTUNITIES IN CHILDCARE SETTINGS

Regular physical activity is important in the preschool years (6 months to 5 years) not only for growth and development but also for the establishment of healthy habits that may carry into childhood and adolescence. The childcare setting represents an important opportunity for physical activity promotion given the number of preschool children enrolled. In 2002-03, more than half of Canadian preschoolers (54%) received child care, with 30% of this care coming from outside the home. Preschoolers are more likely to spend more time than older children in childcare settings, further highlighting the importance of targeting this age group. As such, childcare settings should continue to provide opportunities to preschoolers for both structured and unstructured play. They should also provide fixed and portable equipment, and cut the time preschoolers spend in sedentary activity. More research is needed documenting the amount and type of physical activity among preschoolers.⁸⁴

RESEARCH GAPS

- A more complete picture is needed of the time spent by children and youth in non-PE physical activity at school.
- Existing school data are from 2006; new data are needed to assess changes in sport and other physical activity opportunities in schools.
- Data are needed to determine how many schools provide physical activity opportunities for students who do not participate in varsity sports.

School Infrastructure and Equipment

YEAR	GRADE
2005	—
2006	—
2007	—
2008	INC
2009	B
2010	B
2011	B

2011 GRADE

B The grade for School Infrastructure and Equipment is a **B** for the 3rd year in a row, mostly due to the lack of new data.

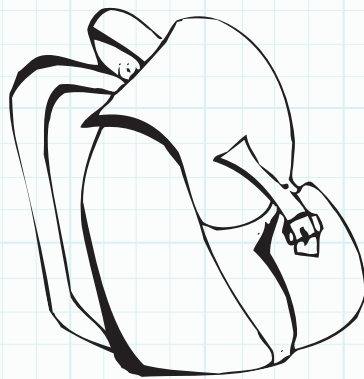
KEY FINDINGS

Characteristics of the environment can influence children's physical activity levels and their exposure to physical activity. This applies not only to the community and built environment, but the school environment. Schools with facilities and equipment that support physical activity have students who are more physically active, as reported in prior Report Cards.⁸⁵

A recent study of 9 elementary schools in the United States reveals that schoolyard use is much higher at schools with renovated schoolyards compared to schools without renovations.⁸⁶ According to a study in British elementary schools, students attending schools with outdoor equipment were significantly more active and less sedentary at recess compared to students in schools without this equipment.⁸⁷ Although these studies did not directly measure the physical activity of schoolchildren, these observations point to the potential of non-curricular approaches to increasing physical activity in children and youth during the school day.

RESEARCH GAPS

- Existing school data are from 2006; new data are needed to assess changes in school infrastructure and equipment.



SCHOOL EQUIPMENT AND INJURIES

Playground-related injuries, especially fractures, are common in children and can result in emergency room treatment and hospital admissions. This may lead parents and/or guardians to be reluctant to encourage free play in such a built environment. Typically, fall height and playground surface area are the major determinants of fall-related injury risk. Researchers found that granite sand playground surfaces reduce the risk of arm fracture from falls by almost 5 times when compared to engineered wood fibre surfaces. Sand may be more “forgiving” than wood chips, which may partly explain the protective effect of sand.⁸⁸

Other researchers examined the relationship between socio-economic status and playground injury before and after playgrounds were updated to meet Canadian Standards Association (CSA) guidelines. Prior to upgrading playgrounds, child injury risk was roughly 50% greater at schools of lower socio-economic status compared to schools of higher socio-economic status. Following upgrades to meet CSA recommendations, there was no longer a significant relationship between socio-economic status and injury rate. Improvements in playground equipment may result in an environment where students from poorer neighbourhoods are not at increased risk of injury.⁸⁹

School Policy

YEAR	GRADE
2005	—
2006	—
2007	—
2008	—
2009	C
2010	C
2011	C

2011 GRADE

C

The grade for School Policy is a **C** for the third year in a row, which reflects the existence of promising policies for physical activity in schools. However, the lack of data on the effectiveness and implementation of these policies prevents this indicator from receiving a higher grade.

KEY FINDINGS

Canadian researchers recently inventoried physical activity policies in the school setting. The results are summarized in Table 3. Policies considered effective were those tested in 1 or more well-designed research studies (prospective and controlled) and found to affect physical activity. Promising policies were those in which the rationale behind the policy was supported in 1 or more well-designed studies (prospective or cross-sectional).³

Table 3: Effective and Promising Policies for Physical Activity in Schools (Source: Lagarde and LeBlanc, 2010³).

POLICY AREA	POLICY OPTION	EVIDENCE
DAILY, QUALITY, SAFE PHYSICAL EDUCATION	Raise the quantity of physical education in schools, aiming for daily PE throughout the school year.	Effective
	Provide a variety and choice of physical activities that meet specific needs for all children and youth (recognizing age, development, disability and gender).	Effective or promising
	Ensure that students are physically active for a large percentage of PE class time.	Effective
	Determine the minimum level of qualifications that PE teachers and physical activity leaders should have.	Effective
DAILY, QUALITY, SAFE PHYSICAL ACTIVITY	Integrate physical activity into other curricula and provide appropriate training of educators, as well as support for implementation.	Effective or promising
	Integrate the physical, psychological and social health benefits of physical activity, as well as actual learning methods, into various school curricula beyond the PE class.	Effective or promising
EXTRACURRICULAR PHYSICAL ACTIVITY	Provide a variety of physical activity opportunities, such as sports, non-competitive recreation, active recess (preferably outdoors) and active play through intramural and interscholastic activities that meet the needs, interests and abilities of all students. These should not be considered a substitute for PE.	Effective or promising
TRAINING	Provide PE teachers and physical activity leaders, as well as all other teachers and school staff, with adequate, regular and appropriate training to establish quality and safe PE and physical activity programs.	Effective
ACTIVE TRANSPORTATION TO AND FROM SCHOOL	Ensure that there is safe walking and cycling to school.	Promising
FACILITIES	Provide funding to ensure that adequate facilities and equipment, including bike racks, are available for physical activity.	Effective or promising
COMMUNITY OUTREACH	Establish partnerships with municipalities and children/youth organizations to optimize use of school and community facilities such that community members can access schools after hours and students have community-based physical activity opportunities (recreation centres, playgrounds and parks) during school hours.	Effective or promising

Though such an inventory of physical activity policies is encouraging, the more important task is to successfully implement these policies at the school level. Schools indicate that their primary role is to support student learning. Though there is a growing recognition about the interrelationship between student health and student learning, schools are challenged to find the time and resources to address a myriad of policy and program priorities. This creates tension when administrators are forced to choose one over the other,⁹⁰ and points to the need to highlight the relationship of physical activity and health to student academic achievement. For effective and promising practices, we need to better understand how to effectively adapt and implement the policies. We need to make a learning-oriented evaluation a routine part of implementation of policies, i.e., evaluation that helps to identify what is working under what conditions and how that came to be.⁹¹

IMPLEMENTATION, IMPACT AND POSITIVE OUTCOMES

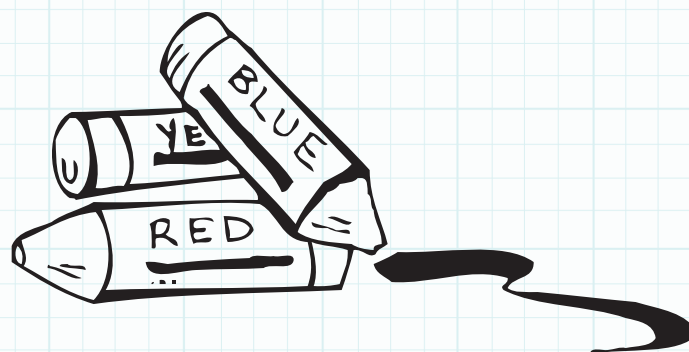
While Canada has one of the best education systems in the world, the high percentage of Canadian children and youth who are overweight or obese suggests that we are not educating young people about healthy, active living. A change in unhealthy behaviours, however, requires a more comprehensive approach than simply providing students with health facts. Health promotion in schools has changed significantly over the past 25 years. There is currently a shift away from individual, behaviour-focused approaches, and toward strategies that provide supportive physical and social environments. Canada's governments refer to this broader approach as Comprehensive School Health (CSH). It is sometimes called Health Promoting Schools (often in Europe and Australia) or Coordinated School Health (in the United States). Although CSH can exist in many different forms, common to all CSH approaches is an emphasis on involving parents, communities and/or stakeholders, as well as supportive policies, programs and environments. The 4 pillars of CSH are: teaching and learning, physical and social environments, healthy school policy, and partnerships and services. Research shows that students who attend CSH schools are more physically active and less likely to be overweight.⁹² Still, more research needs to be done to establish the effectiveness of CSH. Researchers have identified research gaps that need to be addressed:

1. To what extent has CSH been implemented in schools in Canada? Is progress being made for each of the 4 pillars of CSH?
2. Under what conditions does CSH have an impact, and on what populations? Have changes in knowledge, attitudes and behaviours resulted from the implementation of CSH?
3. What processes led to effective implementation?

Research into the implementation, impact and outcomes of CSH will help establish its effectiveness.⁹² A tool that may help in this is the Joint Consortium for School Health (JSCH) Healthy School Planner. Its main purpose is to help schools assess how well they are implementing CSH. There is a module specific to physical activity that assesses the 4 pillars. Individual school results can be aggregated to provide a picture of implementation for a jurisdiction, or a particular research study can get the data to answer specific research questions, or link the data to student-level information. The Healthy School Planner is currently undergoing revision. For more information, visit eng.jsch-cces.ca.

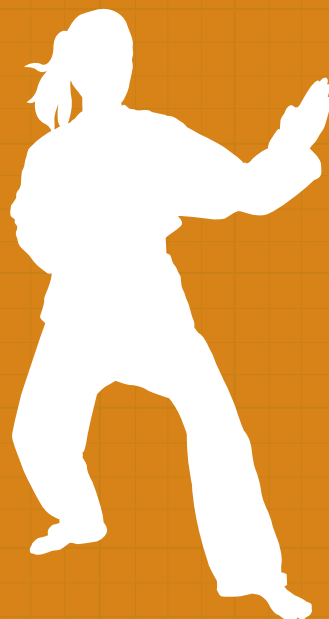
COMPREHENSIVE SCHOOL HEALTH IN A RURAL POPULATION OF ABORIGINAL PEOPLES

More than half of Aboriginal peoples live in rural areas. It is important to promote school-based physical activity in schools in these areas, given the disproportionate percentage of Aboriginal children and youth who are overweight or obese (2 to 3 times greater than among other Canadians). Action Schools! BC, a whole-school approach to improving students' physical activity and eating behaviours, was implemented in 3 remote Aboriginal communities in northern British Columbia. Schools and teachers were provided with tools and training to help create action plans for increasing physical activity and healthy eating across 6 "action zones:" school environment, PE, classroom, family and community, extracurricular, and school spirit. Preliminary results indicate that this program was well received and feasible. Staff at the school stated that with ongoing support and some cultural adaptations, they could continue to implement Action Schools! BC.⁹³



Family and Peers

Indicators	Grades	Quick Stats	Recommendations for Action
FAMILY PHYSICAL ACTIVITY	D+	<ul style="list-style-type: none"> ➤ 80% of parents say they have purchased equipment, paid a membership or fee, or paid for coaching for their kids in the last year (2010 PAM). ➤ 64% of parents often or very often take their kids to places where they can be active, such as a park, playground or sport facility (2010 PAM). ➤ 37% of parents often or very often played active games with their children in the past year (PAM 2010). ➤ Only 15% of Canadian adults meet the new Canadian Physical Activity Guidelines for Adults (2007-09 CHMS). 	<ul style="list-style-type: none"> ➤ Since the obesity epidemic is affecting both children/youth and parents, interventions should be investigated that encourage whole families to be physically active and reduce sedentary time. ➤ Parents should role model healthy physical activity and sedentary behaviours.
PEER INFLUENCE	INC	<ul style="list-style-type: none"> ➤ In a nationally representative sample of 10- to 15-year-olds, children and youth who reported that most or all of their friends smoked or drank alcohol were much more likely to have multiple risk factors (including a high BMI, physical inactivity, sedentary behaviour, smoking, and alcohol use) that are linked to chronic diseases in later life (NLSCY). 	<ul style="list-style-type: none"> ➤ Given the important influence peers have on health-related behaviours, parents should talk more with their children, and encourage them to have friends who will have a positive effect on their behaviours. ➤ Talk about peers as both positive and negative influences on behaviour, and empower children and youth to recognize the difference. ➤ Build on “social influences” models, validated through tobacco prevention promotions, to address similar types of influences for physical activity.



Family Physical Activity

YEAR	GRADE
2005	C-D
2006	D-D
2007	D
2008	B-D
2009	C+
2010	D
2011	D+

2011 GRADE

D+

The grade for Family Physical Activity is a **D+** this year, which is a slight improvement from last year. The grade reflects new data from the 2010 PAM revealing that an encouraging percentage of parents are providing logistical support for their kids' physical activity (e.g., driving their kids to the soccer field). What prevents a higher grade for this indicator is that other important parental influences, such as their own physical activity behaviour (modelling), are less encouraging. Data from the 2007-09 CHMS reveal that very few Canadian adults are meeting the new Canadian Physical Activity Guidelines for Adults, suggesting that very few parents are modelling adequate levels of physical activity. We are witnessing a "do what I say, not what I do" phenomenon.

KEY FINDINGS

According to nationally representative data from the 2010 PAM, 80% of parents say they have purchased equipment, paid a membership or fee, or paid for coaching for their kids in the past year; 64% often or very often take their kids places where they can be active, such as a park, playground or sport facility; 37% say they have offered to volunteer in the past year at their kids' physical activity or sporting events; and 22% say they have supervised at recess or helped out at a school event involving physical activity or sport in the past year. All of these parental activities fall under the category of logistical support. As encouraging as these numbers are, logistical support is only 1 component of family influences on child and youth physical activity. As pointed out below, relatively few parents actually "get active" with their kids.

Another important family factor that influences physical activity is the physical activity behaviour, or modelling, of parents. The new Canadian Physical Activity Guidelines for Adults (18- to 64-year-olds) recommend that adults get at least 150 weekly minutes of MVPA. This physical activity should be in bouts of 10 minutes or more. The inclusion on at least 2 days per week of activities that strengthen muscle and bone is also beneficial. The more physical activity that adults get, the more health benefits they get. The 2007-09 CHMS reveals that only 15% of Canadian adults meet the new guidelines. If the number of adults getting at least 30 minutes of MVPA on at least 5 days of the week is tallied (i.e., to reflect engagement in regular physical activity), only 5% meet this criterion. Roughly half of Canadian adults (53%) get at least 30 minutes of MVPA on at least 1 day of the week. While this statistic is encouraging, it is important to highlight that it also means the other half are not even attaining this modest level of physical activity.⁹⁵

Consistent with the findings of the 2007-09 CHMS, a smaller number of parents appear to be modelling physical activity for their kids when compared to the number of parents providing logistical support; this according to the 2010 PAM. Although not a specific marker for modelling of physical activity, only 37% of parents say they play active games with their children often or very often (Figures 18 and 19). Given the disconnect between how physically active parents actually are versus what they report, it is important to ask how many days they spend at least 30 minutes actively playing with their kids.

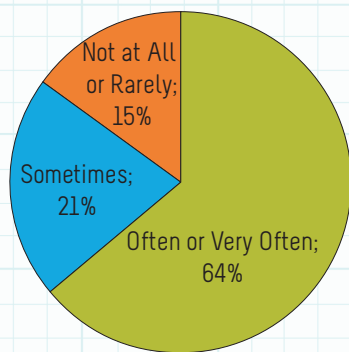


Figure 18: How Often Parents Take Their Children Places Where They Can Be Physically Active (Source: 2010 PAM, CFLRI).

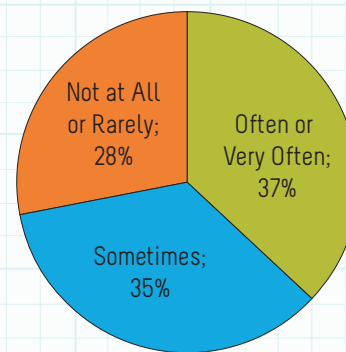


Figure 19: How Often Parents Play Active Games With Their Children (Source: 2010 PAM, CFLRI).

ACTIVE AND PASSIVE FAMILY INFLUENCES ON PHYSICAL ACTIVITY⁹⁶

Though many factors influence physical activity in children and youth, few are as direct, long-term, broad – and, therefore, as important – as family influences. These influences tend to be either active or passive. Examples of active family influences include verbal encouragement from parents to be physically active, or logistical support such as driving kids to places where they can be physically active. Passive family influences on physical activity include parents' attitudes and beliefs about physical activity, their socio-economic status and their own patterns (or modelling) of physical activity. Family influences on the physical activity of children and youth, whether active or passive, depend on the physical activity in question. For example, verbal encouragement from parents may have a different impact in the context of organized sport compared to active transportation.

Focus group research tends to support the important influence that family has on physical activity. More objective study designs, however, do not always confirm this conclusion. Active family factors tend to be more consistently linked to physical activity in the research literature than are passive factors. Although these relationships are sometimes inconsistent when overall physical activity is in view, relationships are much more consistent when more specific physical activity is targeted (e.g., organized sport). Future research on family influences on physical activity should continue to distinguish between factors (active and passive) and types of physical activity. Since the obesity epidemic is affecting both children/youth and parents, interventions should be investigated that encourage both children/youth and parents to be physically active. This may also lead to an examination of how children and youth influence their parents to be physically active, since this relationship is not unidirectional. In addition to future research, parents need to be made aware of the potential influence they have to either help or hinder physical activity in their children. If parents establish limits on the amount of time children and youth can watch TV, for example, this may lead to a reduction in the sedentary time of children and youth. Providing logistical support may also be very important in getting children and youth physically active outside the home.

THE ROLE OF FAMILY IN ABORIGINAL YOUTH SPORTS PARTICIPATION

At a reserve in northern Ontario, researchers held community meetings and talking circles to discover how to improve youth participation in sports programs on the reserve. A number of participants were involved, including students in grades 7 to 12. The family as a whole – including siblings, grandparents, aunts, uncles and cousins – was considered important in sharing the responsibility to keep youth in community sport programs through collateral support. Parents were also expected to support their children in a number of ways (e.g., managing schedules and priorities, providing transportation, financial support, encouragement).⁹⁷

RESEARCH GAPS

- Future research on family influences on physical activity should continue to distinguish between different influences (active and passive) and types of physical activity.
- Providing parents and children with objective information about levels of their activities along with opportunities to reflect on what can be done to increase family activity levels may contribute to change.
- Linking family influence research and evaluation to other influences discussed in this Report Card (e.g., active transportation, community infrastructure) may help families see their niche role.



Peer Influence

2011 GRADE

YEAR	GRADE
2005	—
2006	—
2007	—
2008	—
2009	INC
2010	INC
2011	INC

INC

The grade for Peer Influence remains an **Incomplete** this year because of a lack of gradable data. The presence of this indicator in the Report Card highlights the important influence that peers have on each other's physical activity. Most of the research on the social influences on child and youth physical activity focuses on the role of parents, but more attention needs to be paid to the influence peers have on child and youth physical activity. Children and youth are not just passive agents in the socialization process; they are in fact powerful social agents who can and do influence the physical activity of others.

One of the most common aspects of peer influence studied is peer support. Overall, perceptions of peer support for physical activity (e.g., encouragement, discussion, being active together) are linked to physical activity. Sometimes peer support and peer modelling are rolled into one and called peer influence. Although not studied very well, the nature of peer relationships (e.g., closeness of peers, feelings of acceptance by peer group) can improve our understanding of how to maximize the positive potential of this type of influence.

KEY FINDINGS

Data from the NLSCY reveal the influential role – for better or worse – that peers have on each other's activities. In a nationally representative sample of 10- to 15-year-olds, children and youth who reported that most or all of their friends smoked or drank alcohol were much more likely to have multiple risk factors (including a high BMI, physical inactivity, sedentary behaviour, smoking, and alcohol use) that are linked to chronic diseases in later life.⁹⁸

In a study of grades 5 to 8 students from 30 elementary schools in Ontario, having a high number of friends who were physically active (3 or more of one's 5 closest friends) was linked with moderate screen time (1 to 3 hours per day).⁹⁹ Also, students with 3 or more physically active friends were more likely to be moderately active than students with less than 3 friends who were active.¹⁰⁰



EXAMPLES OF PROGRAMS WITH A PEER-BASED APPROACH

HEALTHY BUDDIES™

This program empowers elementary school students to live healthier lives by giving them knowledge about the 3 components of health (physical activity, nutrition and mental health), and encouraging positive attitudes within these components. The program was developed by doctors and educators, and requires 2 to 3 hours of class time per week. During the first 2 weeks of the program, students are directly taught how to work together as buddies. It is believed these skills are transferable to the students' lives outside of school. As older students take on an active role in teaching younger buddies, they learn the program material well enough to teach it and, consequently, grow in their own understanding of physical activity, nutrition and mental health. Older students are empowered to be positive role models helping to create a positive school climate. For more information, visit www.healthybuddies.ca.

BETTER WITH A BUDDY

A recent research study in Britain looked at the relationship between physical activity in 10- to 11-year-olds and their best friends. As determined by accelerometer-measured data, there was a positive link for both boys and girls between MVPA and their best friends. Boys who were physically active with their best friends at home or in the local neighbourhood got more MVPA than when physically active with their best friends at school. Girls who were frequently active with their best friends got more MVPA than girls who were less frequently active with their best friends. These findings suggest that physical activity promotion that targets peers should focus on getting children physically active with their best friends often and outside of school hours.¹⁰²

PEER INFLUENCE AND DISABILITY

An important concern shared by adapted physical activity professionals is the inclusion of children and youth with disabilities into physical activity settings. Few research studies have examined the perspective of children and youth with disabilities to discover what makes them feel included in physical activities. Researchers in Western Canada interviewed several 8- to 12-year-olds with various disabilities (e.g., cerebral palsy, muscular dystrophy, severe asthma) to learn more about their experiences of inclusion in physical activity. One of the important themes that emerged from the interviews was that having friends was important for feeling included in physical activity. Those with friends felt they were more likely to be invited to play and to be offered encouragement. By contrast, those without friends said they did not feel included in physical activity, and were teased. The role of adults, such as parents and coaches, was important for them to feel included in physical activity, but peer influence was the most significant factor in whether children and youth with disabilities felt included in games and sports.¹⁰¹

This study highlights some challenges for those who work to improve physical activity among children and youth with disabilities. Practitioners have primarily concentrated on the PE setting for the inclusion of disabled children and youth in physical activity. A major challenge is to know how to best promote the inclusion of those with disabilities in unstructured physical activity settings. The perspectives of the children in this study draw attention to the importance of peer influence in feeling included in physical activity settings. Perhaps the answer to getting children with disabilities to be physically active in unstructured settings lies with children themselves.

RESEARCH GAPS

The nature of peer relationships (e.g., closeness of peers, feelings of acceptance by peer group) can improve our understanding of how to maximize the positive potential of this type of influence. The following kinds of questions need to be asked: “Compared to your 3 closest friends, are you more active, about the same or less active? Are your 3 closest friends supportive of your physical activity? Are your 3 closest friends physically inactive? Do you plan physical activity among your peers?” These questions may go a long way in helping us to better understand how peers influence each other’s physical activity.

Similar to research with parents, an understanding of the types of influences (active, passive) may better guide interventions that take advantage of peer relationships.

A CULTURE OF PHYSICAL ACTIVITY ON THE STREET

“In the 1980s, until my 2 sons were 10 and 12 years old, we lived on a suburban Kitchener street where every house had at least 2 children. A boy across the street, a few years older than my sons, regularly knocked on doors after school and on weekends, urging kids to come out for road hockey. He’d knock until he had enough kids for a game. There was usually a good response: players between the ages of 6 and about 13 grabbed their sticks and divided into the Uphill and Downhill teams (our street was on a slope). My sons remember that the games became less fun only when the door-knocker entered high school and started treating the younger kids as just that: good enough to shag balls, but otherwise not quite up to standard.

“Today my sons are 32 and 34. One plays road hockey with friends on a dead-end street on Sunday afternoons. He says little kids always come out of a nearby apartment building to watch, and sometimes get a game of their own going. My other son started playing road hockey with office mates in Ottawa, but lost interest as many more teams formed and competitive players started campaigning for uniforms, stats gathering and managers. He’s since moved to Toronto and has joined a corporate dodgeball league that plays in school gyms. He’s appalled that Toronto bans road hockey.”

—Carol Jankowski,
Waterloo



Community and the Built Environment

Indicators	Grades	Quick Stats	Recommendations for Action
PROXIMITY AND AVAILABILITY	A-	<ul style="list-style-type: none"> 93% of Canadian parents say public facilities and programs for physical activity and sport are available locally (2010 PAM). 	<ul style="list-style-type: none"> Strategies that try to change how adolescents view their community and built environment may help improve their physical activity.¹⁰³
USAGE OF FACILITIES, PROGRAMS, PARKS AND PLAYGROUNDS	C	<ul style="list-style-type: none"> 61% of Canadian parents say their kids use public facilities and programs for physical activity sometimes, often or very often, which is not significantly different from 2005 (2010 PAM). 69% of children and youth use parks and outdoor spaces at least sometimes (2010 PAM). 	<ul style="list-style-type: none"> Studies consistently demonstrate an association between green space and physical activity among children. There needs to be greater advocacy for green space within communities. Current park space in communities, including micro-parks, need to be maintained.
COMMUNITY PROGRAMMING	B+	<ul style="list-style-type: none"> 93% of Canadian parents say public facilities and programs for physical activity and sport are available locally (2010 PAM). 91% of municipalities report that they offer physical activity programs or scheduling specifically for children. This is up slightly from 2000 and 2004 (2009 SPACC). 	<ul style="list-style-type: none"> Efforts should be made to improve the dissemination of information about physical activity programs so that more parents and their children will be aware of what is available in their own community.
PERCEPTIONS OF SAFETY AND MAINTENANCE	B	<ul style="list-style-type: none"> 66% of Canadians 15 years and older report that there are many safe places in their communities to walk, such as sidewalks and walking trails (2009 PAM). 	<ul style="list-style-type: none"> Develop/expand a well-connected series of sidewalks, paths, trails and linear parks to permit safe commuting from place to place and for unstructured activities. Ensure school playgrounds are safe (and in some cases, supervised) during the after-school period.
MUNICIPAL POLICIES AND REGULATIONS	D-	<ul style="list-style-type: none"> Only 16% of Canadian municipalities have a formal transportation master plan. This differs drastically by municipality size: 7% of communities with at least 1,000 residents and less than 10,000 report having a master transportation plan. By contrast, 60% of communities with more than 100,000 residents have such a plan (2009 SPACC). Only a small number of municipalities (fewer than 20%) require safe walking and biking routes under any of the following conditions: (1) development of new areas, (2) reconstruction of roads, and (3) retrofitting of existing communities (2009 SPACC). 	<ul style="list-style-type: none"> Municipalities should make policies from a physical activity point of view. For example, when making environmental policies, think about the impact this will have on physical activity and consider this in the policy change.
NATURE AND THE OUTDOORS	INC	<ul style="list-style-type: none"> 64% of parents say their kids play outdoors in the after-school period (2010 PAM). 	<ul style="list-style-type: none"> Health promotion strategies of any kind should consider the addition of an outdoor element. Learn from and model the "Leave No Child Inside" initiatives going on around the world and in Canada.

The community and built environment remain important predictors of child and youth physical activity, particularly as they pertain to active transportation and play. More recently, the community and built environment are drawing interest as an influential factor in children's sedentary pursuits. The 2010 Report Card discussed the importance of involving multiple sectors and levels (e.g., personal, family, social, environmental, ecologic) when establishing environmental strategies for increasing child and youth physical activity. In the past year, there has been a rise in the number of communities and governments taking this multi-sectoral/level approach in their strategies to promote child and youth physical activity and reduce sedentary pursuits by targeting the built environment. The community and built environment remain a priority for addressing these trends in society, especially as children and youth physical activity continues to remain below recommended levels of daily physical activity and as time in sedentary pursuits increases.

Several national and international conferences and initiatives were held in 2010 to discuss the vital role of the built environment in child health and development, and a number focused on physical activity. The Child and Nature Alliance (www.childnature.ca), for example, elected their first national board of directors and initiated a collaborative network across the country to support children's physical activity in the outdoors. The goal of the Alliance is to get children and families outdoors in their immediate environments. Another example is Healthy Children Healthy Spaces, a multi-sector conference hosted by KidActive (www.kidactive.ca) in partnership with Carp Ridge Learning Centre, the International Play Association Canada and the Child and Nature Alliance. The elimination of current barriers and increased access to healthy spaces for Canadian children and youth were addressed at the conference. A collaborative initiative of the same name as the conference was also formed (www.healthychildrenhealthyspaces.ca). The focus of this initiative is policy development that contributes to increasing accessible, safe outdoor environments that support outdoor physical activity/active play for more children and youth at home, school and in their community. Another initiative launched in 2010 to promote children's physical activity in the outdoors is Take Me Outside (www.takemeoutside.ca) – a run across Canada in 2011 that will deliver programs to encourage children to play outside and connect with nature.

In April 2010, the Heart and Stroke Foundation of Canada released the Shaping Healthy Active Communities Toolkit (www.heartandstroke.com). This toolkit is a free resource for individuals and groups who want to increase the support their community provides for physical activity through community designs that promote healthy, active living.

In September 2010, the FPT health and healthy living/wellness ministers released Curbing Childhood Obesity: A Federal-Provincial-Territorial Framework for Action to Promote Health Weights. This document offers strategies that support the design of communities in collaboration with all levels of government and sectors, which encourage active living (www.phac-aspc.gc.ca/hp-ps/hl-mvs/framework-cadre/index-eng.php).

Several municipalities have begun or continued to establish supportive community and built environments for physical activity. For example, Surrey, B.C., launched its Child and Youth Friendly City Strategy in November 2010. This strategy focuses on actions the city can take to provide a natural and built environment that supports the healthy development of children and youth (www.surrey.ca/plans-strategies/3191.aspx). The number of communities establishing similar strategies for active design will likely continue to increase over the year.

This past year saw the publication of several Canadian-based research studies. Results were published from the first survey of the Raising Healthy Eating and Active Living Kids in Alberta (REAL Kids Alberta), an initiative by the Government of Alberta that promotes healthy body weights in Alberta children and youth. This survey involved grade 5 students and identified several neighbourhood characteristics (e.g., satisfaction with access to recreation programs, presence of sidewalks and parks) that were linked to physical activity.¹⁰⁴ Other researchers looked at data from the same survey and found parents' satisfaction with neighbourhood access to sports, recreation and other services was associated with children being more physically active and having lower screen time. They also found the number of sidewalks and parks in the neighbourhood to be related to being physically active, engaging in lower screen time and choosing active transportation to school.¹⁰⁵

Data from the 2005-06 Health Behavior in School-Aged Children survey were also published recently. This survey examined the relationship between perceptions of safety plus availability of recreation facilities within 5 kilometres of schools and students' physical activity levels outside of school. The study showed that higher perceptions of safety, but not higher numbers of recreational facilities, were associated with a greater number of students being physically active for at least 4 hours per week outside of school. The 5-kilometre buffer around schools was used as a marker of the residential neighbourhood for students in the school. However, this buffer zone may not fully represent the surroundings of student homes where physical activity occurs. This marker of the residential neighbourhood also does not take into account the structural barriers of the neighbourhood, such as lack of sidewalks to facilities, large roadways, speed limits, street connectivity, green space and the actual access to and maintenance of facilities.¹⁰⁶

While Canadian data on the relationship between the built environment and the physical activity of children and youth continue to grow, more research is needed to identify the role that the built environment plays in relation to sedentary pursuits. Objective measurements of built environments and physical activity continue to be needed. Canadian research would also benefit from the use of a set of standard indicators so that built environments can be compared across the country. Finally, it remains unclear if changes in the built environment (e.g., increasing green space) will lead to increased levels of physical activity among children. As 2011 moves forward with the introduction of various community and organization initiatives, it is important that their effectiveness is evaluated so successful intervention strategies can be identified.

Proximity and Availability

2011 GRADE

A-

The grade for Proximity and Availability is an **A-**, which reflects an improvement over the past 2 years. The basis for the grade change is new data from the 2010 PAM, which reveal that the large majority of Canadian children and youth live in communities where the built environment has characteristics that are conducive to physical activity, and are nearby and available.

The indicator has undergone a slight name change. It is now Proximity and Availability instead of Proximity and Accessibility. The new name more accurately represents what the data speak to. Accessibility refers to many things, including the costs of using different facilities in the built environment. However, this indicator is primarily concerned with whether facilities are nearby.

YEAR	GRADE
2005	C
2006	C
2007	C*
2008	B+
2009	B
2010	B
2011	A-

* The 2007 grade reflects both availability and use. In all other years, availability was graded on its own.

KEY FINDINGS

Based on the 2010 PAM, 93% of Canadian parents say public facilities and programs for physical activity and sport are available locally, which is essentially unchanged from the 2005 PAM. More than three-quarters (79%) of parents say private facilities and programs are available locally (up from 72% in 2005), while 94% of parents say parks and outdoor spaces are nearby and available (basically unchanged since 2005). In addition, 78% indicate there are other places to be active in the community such as school yards after hours. Other results from the 2010 PAM include:

- > 73% of parents say a park or playground is less than 1 kilometre from their house.
- > 42% of parents say a park or playground is within 1 or 2 blocks of their house.⁹

While the new data for this indicator are encouraging, disparities still exist and need to be addressed. For example, compared to larger communities, fewer parents in the smallest communities (less than 1,000 residents) say that facilities and programs (public and private), and parks and outdoor spaces are available locally. Whereas 73% of parents across the country have a park or playground that is less than 1 kilometre from their house, parents in the smallest communities say parks and playgrounds are 2 or more kilometers away. Local facilities and programs (public, private, parks and other spaces) also appear to be available for more children and youth from the highest-income households (\$100,000 per year or more) compared to those from lower-income households (less than \$50,000 per year).

HOW WELL ARE FACILITIES AND PROGRAMS MEETING THE NEEDS OF CHILDREN AND YOUTH?

Though programs, facilities, parks and outdoor spaces are nearby for the large majority of Canadian children and youth, there is the question of how these components of the community and built environment are meeting their needs. It is not enough to build an environment that is conducive to physical activity. It must also be tailored to the physical activity needs of the community.

From the 2010 PAM, 65% of parents say public facilities and programs meet the physical activity of their children quite well or very well. This is up from 60% in the 2005 PAM. These numbers were lower for private facilities and programs (46%) and unchanged from 2005 (44%). The majority of parents (62%) say parks and outdoor spaces meet the physical activity needs of their children and youth quite well or very well, which is an improvement (57%). Other places in the community (e.g., schoolyards after hours) appear to meet the physical activity needs of a little under half of children and youth (44%). The upward direction of these results is encouraging, but they highlight the possibility that while characteristics of the community and built environment that promote physical activity are in good supply, they may not be meeting the physical activity demands of children and youth. This is particularly true of 13- to 17-year-olds, who seem to be generally less satisfied with most of these community and built environment opportunities than younger children (5- to 12-year-olds). Possible explanations for this disconnect may be that parts of the community and built environment are not being maintained properly. Maintenance data are needed.

THE IMPORTANCE OF HOW THE COMMUNITY AND BUILT ENVIRONMENT ARE VIEWED

It is possible that children and youth who want to be physically active will see more opportunities for physical activity in the community and built environment than those who are less motivated. A recent research study of teens in the Netherlands found that their perceptions of the built environment were more strongly related to physical activity and sports participation than what was actually available. Those who perceived availability of sport facilities and parks were more likely to participate in sports, as well as walk and bicycle. These results may suggest that strategies that try to change how adolescents view their community and built environment may help improve the adolescents' physical activity.¹⁰³

Usage of Facilities, Programs, Parks and Playgrounds

YEAR	GRADE
2005	—
2006	—
2007	C*
2008	D+
2009	D
2010	D
2011	C

* The 2007 grade reflects both availability and use. In all other years, use was graded on its own.

2011 GRADE

C The grade for Usage of Facilities, Programs, Parks and Playgrounds is a **C** this year, which reflects an improvement over the past 3 years. The basis for the grade change is new data from the 2010 PAM that reveal improvements since 2005.

KEY FINDINGS

According to the 2010 PAM, 61% of Canadian parents say their kids use public facilities and programs for physical activity sometimes, often or very often. This is unchanged from the 2005 PAM. Private facilities and programs do not get the same use (35%); this is unchanged from 2005. Also unchanged from 2005, 69% of children and youth use parks and outdoor spaces at least sometimes. Use of other places such as schoolyards after school is at 51%, again unchanged from 2005.⁹

With these results, it is important to note that the percentage of children and youth who sometimes use facilities, programs, parks and outdoor spaces is nearly the same as those who use them often or very often (Figure 20). So while the overall numbers may be encouraging, there is still a lot of room for improvement to get the children and youth who use these facilities and spaces sometimes to use them more often.

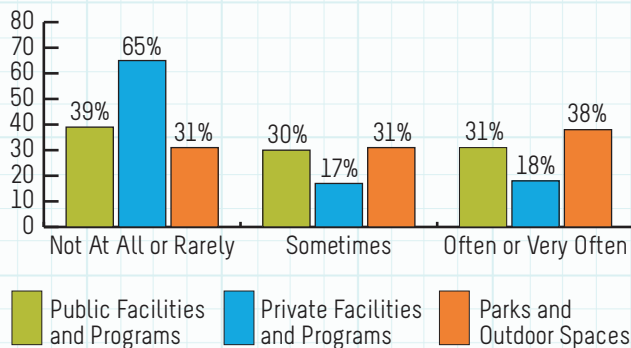


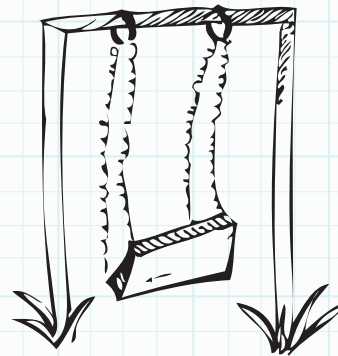
Figure 20: The Proportion of 5- to 17-Year-Olds Who Use Public and Private Facilities, and Parks and Outdoor Spaces, According to Parents (Source: 2010 PAM, CFLRI).

DISPARITIES

Improvements can be made in other areas as well. Data from the 2010 PAM reveal age, gender and socio-economic disparities. For example, substantially more 13- to 17-year-olds rarely or never use facilities and programs compared to 5- to 12-year-olds (public: 49% versus 31%; private: 69% versus 61%). This is also true for parks and outdoor spaces (44% versus 20%) as well as other places such as schoolyards after hours (62% versus 40%). Slightly more boys (34%) than girls (28%) use public facilities and programs often or very often. Finally, more children and youth with parents having a high school education rarely or never use public facilities and programs (46%) compared to kids whose parents have a university education (35%). These disparities highlight groups to target for increased use of the community and built environment.

FACTORS THAT ENCOURAGE PARK USE

Recently, Canadian researchers reviewed qualitative research (involving focus groups, personal interviews or observation) from 6 different countries, including Canada, on the characteristics of parks that influence their use. A total of 21 studies published from 1995 to 2008 were subject to review. Results aligned with quantitative research in that the proximity, look (e.g., dirty, poor upkeep, ground uneven and overgrown, wrecked playgrounds, overflowing garbage bins), amenities (e.g., footpaths, wading pools, picnic tables, water fountains) and safety of the park are all important in encouraging park use.¹⁰⁷



Community Programming

YEAR	GRADE
2005	—
2006	—
2007	—
2008	—
2009	B+
2010	B+
2011	B+

2011 GRADE

B+

The grade for Community Programming is a **B+** for the 3rd year in a row. New data from the 2010 PAM and 2009 Survey of Physical Activity in Canadian Communities (SPACC) inform the grade this year. Overall, it appears that physical activity programming is available for a large majority of Canadians. However, the presence of disparities keeps the grade from moving into the A range.

KEY FINDINGS

The vast majority (93%) of Canadian parents say public facilities and programs for physical activity and sport are available locally, according to the 2010 PAM.⁹ In the 2009 SPACC, 91% of municipalities report that they offer physical activity programs or scheduling specifically for children. This is up slightly from 2000 and 2004 data (Figure 21). However, considerable disparities exist in programming. Only 51% of municipalities offer programs or scheduling that target children and youth at risk. There has been no change since 2004, but is still an increase compared to 2000 (Figure 22). A little under half of municipalities (49%) offer a discounted fee structure on child programming, and only a quarter (24%) have programs and schedules that target Aboriginal peoples.¹⁰⁸

Among municipalities that offer physical activity programs and schedules targeted at specific groups, there has been a shift over time as it pertains to who offers them. It appears there has been a drop in programs and scheduling solely municipally run, or exclusively run by other groups. An increase has occurred in those reporting that programs and schedules are offered by both the municipality and some other group(s). Municipalities now generally report that the programs and schedules in municipal facilities are operated by both the municipality and some other group than by either exclusively (50% or more) with some exceptions.

RESEARCH GAPS

Despite all the new data, research gaps still exist which leave questions about physical activity programming in Canada unanswered:

- How often are programs offered?
- What types of programs are offered?
- At what times of the day are programs offered?

These are all important questions that will provide a clearer picture of community programming in Canada.

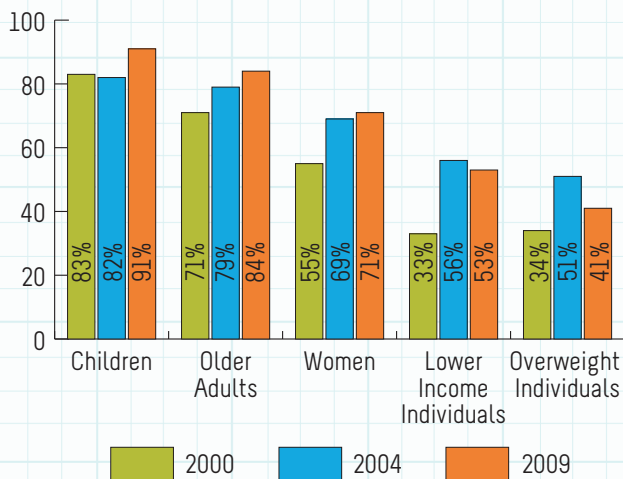


Figure 21: Changes Over Time in the Percentage of Municipalities with Programs and Scheduling That Target Specific Groups (Source: 2000, 2004, and 2009 SPACC, CFLRI).

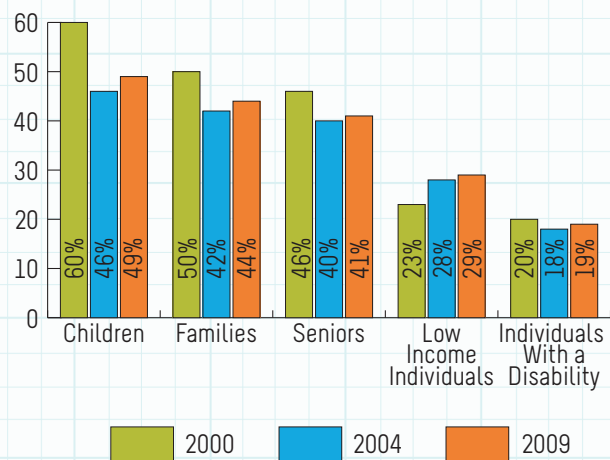


Figure 22: Changes Over Time in the Percentage of Municipalities With Discounted Fee Structures for Specific Groups (Source: 2000, 2004, and 2009 SPACC, CFLRI).

Perceptions of Safety and Maintenance

YEAR	GRADE
2005	—
2006	B
2007	—
2008	—
2009	B
2010	B
2011	B

2011 GRADE

B The grade for Perceptions of Safety and Maintenance is a **B** for the 3rd year in a row. This reflects the lack of new and comprehensive data on how Canadians perceive safety in the community and built environment. Based on the available evidence, well over half of Canadians say their neighbourhoods are safe enough for physical activity.

KEY FINDINGS

From the 2009 PAM, 66% of Canadians 15 years and older report that there are many safe places in their communities to walk, such as sidewalks and walking trails. Only 5% say there are no safe places to walk. Not as many Canadians report many safe places to cycle, such as bike lanes or cycling paths (32%); 19% say there are no safe places to cycle.¹⁰⁹

From the 2007-08 Capacity Survey, 18% of parents agree or strongly agree that safety concerns are an issue in their neighbourhood. 22% agree or strongly agree that there is too much traffic in their neighbourhood.⁷⁹

Though not nationally representative, data from 8- to 10-year-olds living near Montréal highlight how perceptions of safety differ according to time of day. According to the survey, 71% of children say it is usually true or very true that it is safe to walk or bike alone in their neighbourhood during the day. By contrast, roughly half that number (37%), say it is not safe to walk or bike alone in their neighbourhood at nighttime.⁴⁷

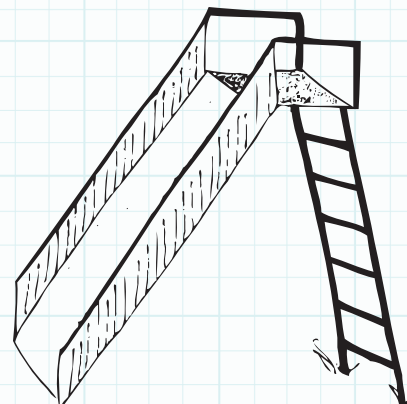
Possible areas to explore in the future for more data on perceptions of safety may be non-traditional sources such as regional police associations and real estate databases.

THE RELATIONSHIP BETWEEN PERCEIVED SAFETY AND PHYSICAL ACTIVITY

Several research studies continue to clarify the relationship between perceived neighbourhood safety and physical activity. An analysis of data from the 2006 HBSC revealed that Canadian students in grades 6 to 10 who have the highest perceptions of safety are more likely to be moderately-to-vigorously active outside of school compared to those with the lowest perceptions of safety.¹⁰⁶ In another study, 8- to 9-year-olds in Australia were much more likely to play on neighbourhood streets if their parents perceived those streets to be safe.¹¹⁰

THE NEED FOR RISK-BENEFIT ANALYSIS IN OUTDOOR PLAY

Adult anxiety about safety is a real barrier to those who want to provide physical activity opportunities to children, particularly in the outdoors. The worry of being sued often causes those who work with children (e.g., teachers, organizations) to offer less adventuresome activities or even remove outdoor activities entirely. Unfortunately, a “zero risk” approach to childhood can actually have the opposite effect of the one intended. When children are kept completely safe from all risks, they are denied experiences that help them grow and develop. There is a growing consensus that society has become preoccupied with the elimination of risk in childhood to the point where it is detrimental to children. In fact, research suggests that overprotecting children can negatively affect their mental health and well-being. In his book, *Nothing Ventured... Balancing Risks and Benefits in the Outdoors*, Tim Gill calls for a balanced approach to safety and play. He makes the case for those who work with children to perform a risk-benefit analysis, an approach that accepts a degree of risk in childhood. Risk-benefit analysis begins by identifying the benefits or goals of an activity. The potential risks are considered next and the responses to these risks reviewed. A conclusion is then reached on what will be done. Similar to traditional risk assessment, everything is recorded in written form to provide an audit trail. Gill's book is available from the English Outdoor Council and can be read online at their website: www.englishoutdoorcouncil.org.



Municipal Policies and Regulations

YEAR	GRADE
2005	—
2006	—
2007	—
2008	D
2009	D
2010	D
2011	D-

2011 GRADE

D-

The grade for Municipal Policies and Regulations is a **D-** this year, which is a drop from the past 3 years. This reflects new data from the 2009 SPACC revealing that very few municipalities have a formal transportation master plan or policies around pedestrian and bike routes in areas being developed or reconstructed.

KEY FINDINGS

According to the 2009 SPACC, only 16% of Canadian municipalities have a formal transportation master plan. This differs drastically by municipality size: 7% of communities with at least 1,000 residents and less than 10,000 report having a master transportation plan; by contrast, 60% of communities with more than 100,000 residents have such a plan.¹¹¹

Only a small number of municipalities (less than 20%) have policies requiring safe walking and biking routes under any of the following conditions: when new areas are under development, roads are being reconstructed and existing communities are being retrofitted (Figure 23).¹⁰⁹

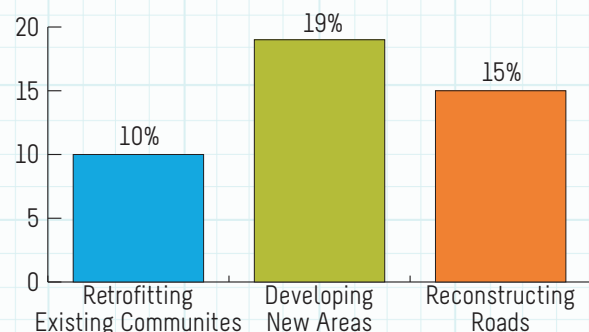


Figure 23: Proportion of Canadian Municipalities With Policies That Require Safe Walking and Biking Routes (Source: 2009 SPACC, CFLRI).

“There are so many different kinds of things that you can get funding for through the new integrated community sustainability plan system. That opens huge doors in terms of infrastructure improvements towards healthy living. The trick toward all of it, though, is that you need to cost-share. A lot of municipalities just aren’t in a position to come up with their portion of the cash to do these projects or even have the personnel to write the grant applications and oversee the projects.”

—Grant et al.¹¹²

RURAL MUNICIPALITIES

In smaller communities across Canada (less than 1,000 residents), only a small percentage report working with other organizations to encourage people to be more physically active:

- Schools, 34%
- Local not-for-profit organizations, 18%
- Health settings, 9%
- Workplaces, 5%
- Other organizations (e.g., recreation centres, clubs for seniors), 19%

These numbers are up slightly since 2000 (Figure 24), but there is still plenty of room for improvement. As well, nearly 80% of small municipalities do not use physical activity guidelines in their physical activity programming, which signals a need for improvement.

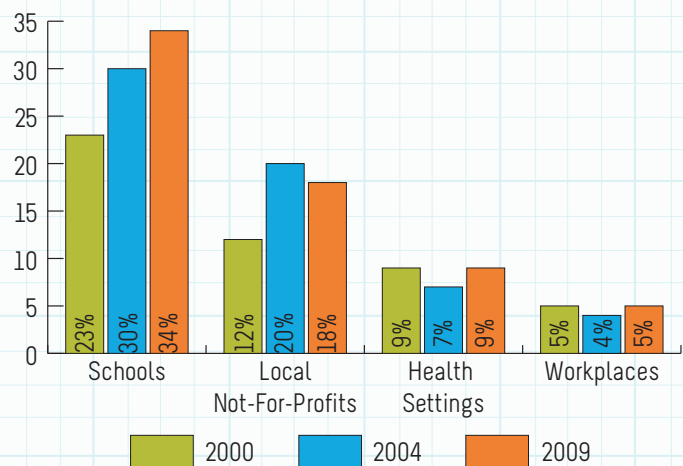


Figure 24: The Proportion of Small Municipalities That Work With Other Organizations to Encourage People to Be Physically Active (Source: 2000, 2004, and 2009 SPACC, CFLRI).

Nature and the Outdoors

YEAR	GRADE
2005	—
2006	—
2007	—
2008	—
2009	—
2010	—
2011	INC

2011 GRADE

INC

The grade for Nature and the Outdoors is **Incomplete** this year due to a lack of data on the quality of physical activity that children and youth are getting in nature and the outdoors. This indicator, which is new to the Report Card, recognizes nature and the outdoors as an important environment and experience for child and youth physical activity.

KEY FINDINGS

Based on the 2010 PAM, 64% of parents say their kids play outdoors in the after-school period. There is a large decline as children and youth age: 80% of 5- to 12-year-olds play outdoors after school, compared to only 43% of 13- to 17-year-olds.⁹

MANY WAYS TO CONNECT WITH NATURE AND THE OUTDOORS

When discussing nature and the outdoors, it is worth noting that there are many ways in which children and youth can play in the outdoors and experience nature. Playing in the outdoors environment does not have to involve travelling into the wilderness or walking on nature trails. It can be as local as a backyard, a playground or a park. (Note: Play structures may not present the greatest opportunity for active play. The design and layout of a playground is a critical factor defining opportunity and motivation for active play.) Similarly, connecting with and experiencing nature can involve camping or backpacking, or be as simple as walking to school, playing outdoors at recess, or playing sports. Figure 25 illustrates the many ways in which children and youth can play in the outdoor environment and experience nature.

BENEFITS OF PHYSICAL ACTIVITY IN NATURE AND THE OUTDOORS¹⁶

Preliminary research suggests that connecting with nature and the outdoors improves the well-being not just of adults but children and youth. A recent review of available research concluded that exposure to nature and the outdoors while walking or running may improve levels of anger, anxiety, energy, fatigue and sadness (Table 4). Not all studies involved children and youth, but they provide some evidence of the possible health benefits for children and youth.

Physical activity in nature and the outdoors is also linked to daily physical activity. Data from CFLRI's 2009-10 CANPLAY reveal that 5- to 19-year-olds who play outdoors between the time school ends and dinner take roughly 2,000 more steps per day than those who don't play outdoors in the after-school period.⁴² To put this in perspective, even if each additional step taken is at a slow speed and covers only 1 metre of ground,¹⁸ those extra 2,000 steps would roughly equate to an additional 2 kilometres of movement each day. Other recent studies reinforce this link. In 1 study, each additional hour outdoors on weekdays and weekend days was associated with an extra 27 minutes of MVPA per week in 10- to 12-year-old girls, and an extra 20 minutes in boys.¹¹⁴ In this same study, the prevalence of children who were overweight was 27-41% lower among those who spent more time outdoors at the start of the study.



Figure 25: The Different Environments of Nature and the Different Ways Children and Youth Can Experience Nature (Adapted From the Child and Nature Alliance).

INDEPENDENT MOBILITY

A common definition of independent mobility is the freedom kids have to move in their neighbourhood or city without adult supervision.²⁴ Playing, reaching a specific destination in the neighbourhood and travelling to meet up with friends, when done without adult supervision, are all examples of independent mobility.

Prior to World War II, sociologists were aware of the changes taking place in childhood. But in the 1960s, this interest intensified as child psychologists examined the factors that affect childhood for better or worse. The unquestioned assumption of the day, however, was that parents were responsible for taking kids to school and various activities in the community. Minimizing risk from threats like traffic and “stranger danger” were thought of as parental responsibilities. The question of whether kids should be free to roam on their trips to school and in the neighbourhood was not of primary concern.

From the 1960s onward, research indicates that children have lost the majority of their independence. In the United Kingdom, for example, only 9% of 7- to 8-year-olds travelled to school on their own in 1990, compared to 80% in 1971. Another British study found that the proportion of 7- to 11-year-olds walking to school dropped by 25% between 1971 and 1990.¹¹⁵ Studies in other parts of the world, such as Australia and Denmark, reveal similar decreases over time in the number of young people travelling to school on their own.¹¹⁶⁻¹¹⁷

Figure 26 depicts the drastic reduction in a child’s home territory (the area where he or she is free to move around unsupervised) over several generations. The contemporary 8-year-old, Ed, is allowed to walk on his own only to the end of his street. By contrast, his mother, Vicky (8 years old in 1979), was allowed to walk to the swimming pool, about 0.8 kilometres away, on her own. Ed’s grandfather, Jack (8 years old in 1950), was allowed to walk on his own to the woods about 1.6 kilometres away. Finally, Ed’s great-grandfather, George (8 years old in 1919), was allowed to walk 9.6 kilometres on his own to go fishing.

These results support the perceptions of adults who sense that childhood experiences have changed over the past couple of generations. Says Tim Gill:

“Many adults have vivid childhood memories of everyday freedom, playing out of doors for hours at a time in places that were exciting and adventurous, often well beyond the anxious gaze of parents or other adults. Children and young people growing up today do not have the same opportunities for everyday adventure. Over the last twenty or thirty years or more, their movements have become more restricted, their free time more curtailed, and their behaviour more closely monitored by adults.”¹¹⁸

Not only does research show that fewer children are travelling to school on their own, fewer children appear to be using public spaces like parks and playgrounds on their own. A study in the United Kingdom found a decline in the independent use of public space by 10- to 11-year-olds from 1970 (94%) to 1990 (54%) to 1998 (47%).¹¹⁹ Other studies in the United States, the Netherlands and Japan also reveal decreased time spent in outdoor play over time.¹²⁰⁻¹²²

Table 4: Changes to Outcomes Following Physical Activity in the Natural Environment (Source: Bowler et al., 2010¹⁶).

OUTCOME	NUMBER OF STUDIES	SUMMARY
ATTENTION	3	No effect
ENERGY	5	Improved
ANXIETY	6	Improved
TRANQUILITY	7	No effect
ANGER	6	Improved
FATIGUE	4	Improved
SADNESS	3	Improved
SYSTOLIC BLOOD PRESSURE	4	No effect
DIASTOLIC BLOOD PRESSURE	3	No effect
CORTISOL	4	No effect

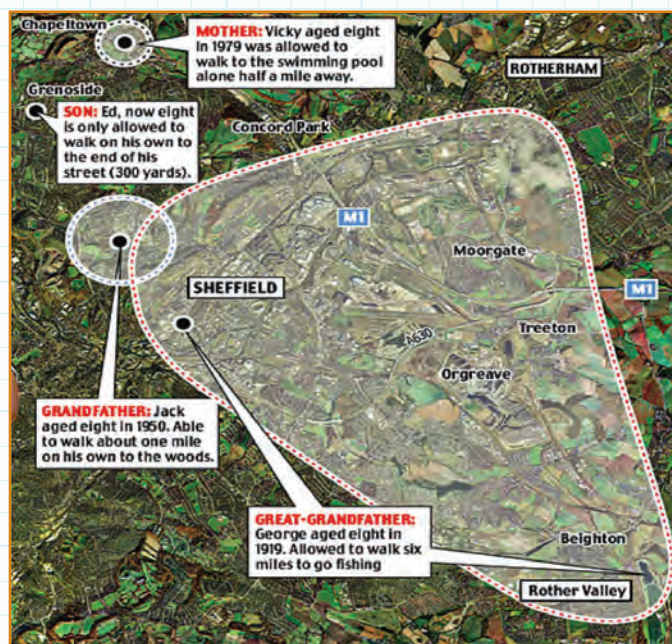


Figure 26: The Drastic Reduction in the Home Territory of 8-Year-Olds Across 3 Generations (Source: the Daily Mail²³).

Interestingly, while the past couple of decades have seen progress made in the rights of children (e.g., The UN Convention on the Rights of the Child, UNICEF's The State of the World's Children), little attention has been paid to the loss of children's independent mobility. Yet independent mobility is an important subject since decreases in childhood mobility and freedom may have a significant effect on childhood growth and development, particularly as it pertains to opportunities to be physically active outdoors.

What is not well understood is the role parenting has played in children's loss of independent mobility. Good parenting today often seems to be equated with a high degree of control so that children are not free to roam. There exists a "zero-risk culture" that bars children from activities exposing them to the smallest amount of danger. According to some thinkers, this philosophy of protection has led to children being reared in virtual captivity. It is argued that important experiences like outdoor play, which make an important contribution to daily physical activity, have largely been denied to this generation of children and youth.¹²⁴

Although the after-school period is a natural time for children to be physically active and independently mobile, getting them active during this period may require a countercultural effort given current parenting trends.

RESEARCH GAPS

- There is a need for research on the quality/dose of physical activity (amount and frequency) during outdoor/nature activities.
- There is a need for annual data that measure children's outdoor/nature time – including a baseline measurement.
- There is also a need for either a novel outcome measure associated with physical activity in nature or an appropriate comparison group (i.e. indoor, structured outdoor facility/space, etc.)
- There is a need for research on the independent mobility of children and youth.

THE HATLEY PARK DECLARATION FOR CHILDREN, FAMILIES AND NATURE

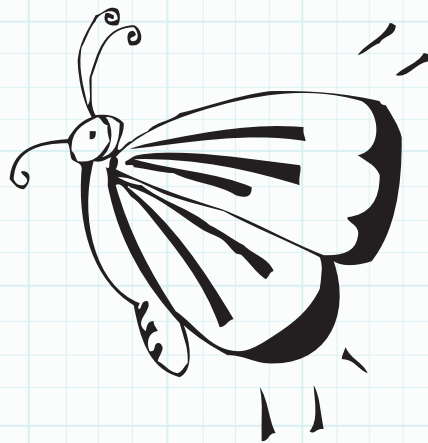
The Hatley Park Declaration for Children, Families and Nature is a document that signifies the launch of the Child and Nature Alliance. It was signed by all of the delegates that participated at the Get Outside! It's in our Nature Forum in March of 2009.

The Declaration states that children have become less connected to nature over the past 30 years. Changes in communities, economies and technologies have inadvertently reduced child and family contact with nature – both local nature as found in their yards, streets and parks, and wilder nature, which is generally found farther afield. It is also stated that this disconnection from nature impacts the health and well-being of children. Research has shown that the simple act of playing in nature results in healthier, happier and more aware children.

The delegates declare that it is essential that governments, non-government organizations, industry and business, individuals, parents and youth act to ensure that children become reconnected to nature by:

- Supporting the creation of a Child and Nature Alliance.
- Building collaboration among sectors.
- Increasing public awareness about the importance of nature in the health and well-being of Canadian children.
- Building child-friendly environments.
- Bringing nature back into education.
- Increasing budgets dedicated to children and nature.

For more information, visit www.childnature.ca/declaration.



Policy

Indicators	Grades	Quick Stats	Recommendations for Action
FEDERAL GOVERNMENT STRATEGIES	C	<ul style="list-style-type: none"> While other countries have national strategies in place to promote physical activity, Canada remains without a comprehensive national strategy, suggesting a low priority in the area. 	<ul style="list-style-type: none"> Complete the development of a comprehensive national physical activity plan. The strategy should include a large-scale awareness campaign to promote physical activity and reduce time spent in sedentary activities; environmental change to make the social and physical environments more supportive of physical activity and less supportive of sedentary pursuits; promotion of active commuting and ensuring that there are safe routes to school; daily PE and daily physical activity at school; opportunities to be active after school in after-school programs, extracurricular programs and community-based programs; access to safe green spaces and play spaces; and inclusive programming to ensure that everyone has the opportunity to be active regardless of motor development, skills, abilities or disabilities, gender age and culture. Revise and update the Canadian Physical Activity and Sport Act to accommodate the multi-level needs identified in the national physical activity plan. Work effectively across departments and ministries in strategic, collective efforts to increase physical activity. Provide sustained funding for evidence-informed policy initiatives. Dramatic, sustained increases in federal spending are required. Regular, transparent disclosure of spending directly on physical activity is required. Economic incentives that encourage sport participation (e.g., income transfers where immediate price reduction when paying memberships, etc.) need to be tested. Look to national physical activity plan in the United States as a model to follow in Canada – Federal leadership is needed on the issue. More investment is needed at the provincial/territorial level and a sustained investment is needed so physical activity strategies can be implemented, maintained and evaluated. More, longer-term partnerships and program sustainability are required.
PROVINCIAL/TERRITORIAL GOVERNMENT STRATEGIES	B+	<ul style="list-style-type: none"> As reported last year, the majority of provinces have developed specific physical activity strategies. 	
FEDERAL GOVERNMENT INVESTMENTS	F	<ul style="list-style-type: none"> As reported last year, federal spending in real dollars per capita is half the amount that it was in 1986. Many physical activity promotion organizations continue to experience cuts. 	
PROVINCIAL/TERRITORIAL GOVERNMENT INVESTMENTS	C-	<ul style="list-style-type: none"> Leading provinces are investing well in health behaviour (BC: \$21.00 per capita; QC: \$16.80 per capita), but there is room for improvement in other provinces and territories. 	
NON-GOVERNMENT STRATEGIES AND INVESTMENTS	C	<ul style="list-style-type: none"> Funding continues to be low due to the economic downturn and fragile recovery. 	

Policy-making around physical activity promotion is a complex process. A helpful way to look at this process is with the stages model of public policy-making. The stages include policy agenda, policy formation, policy adoption, policy implementation, policy evaluation and decisions about the future. Research data are important throughout this process and particularly so near the beginning (when the problem is being identified and options considered), and also near the end of the process (when the policy is being evaluated and decisions are being made about the future of the program under consideration).¹²⁵

Federal Government Strategies

YEAR	GRADE
2005	C-
2006	—
2007	C
2008	C+
2009	C
2010	C+
2011	C

2011 GRADE

C The grade for Federal Government Strategies is a **C** this year. While other countries have national strategies in place to promote physical activity in the population, Canada remains without a comprehensive national strategy on the issue.

The following is a sampling of various national and international physical activity strategies.

The U.S. National Physical Activity Plan

The U.S. National Physical Activity Plan envisions all Americans being physically active and living, working and playing in environments that facilitate physical activity. It is a comprehensive set of policies, programs and initiatives that aim to increase physical activity in all segments of the American population. The Plan is the product of a collaboration of hundreds of organizations in the public and private sectors, which all are working together to change communities so Americans can be physically active.

The U.S. National Physical Activity Plan has recommendations that fall within 8 sectors:

- Business and industry
- Education
- Health care
- Mass media
- Parks, recreation, fitness and sports
- Public health
- Transportation, land use and community design
- Volunteer and non-profit

Each sector presents strategies for physical activity promotion.

For more information, visit www.physicalactivityplan.org/theplan.php.

The Toronto Charter for Physical Activity

The Toronto Charter for Physical Activity: A Global Call to Action was released in May 2010 at the Third International Congress on Physical Activity and Health. The Toronto Charter is an advocacy document that calls for greater commitment to physical activity from all countries, regions and communities. Four actions are outlined in the document: the implementation of a national policy and action plan, the introduction of policies that support physical activity, the reorientation of services and funding that prioritize physical activity, and the development of partnerships. Organizations and individuals interested in promoting physical activity may use this document to unite and influence decision makers. For more information, visit www.globalpa.org.uk/charter/download.php.

Global Strategy on Diet, Physical Activity and Health

The World Health Organization's Global Strategy on Diet, Physical Activity and Health (DPAS) was developed over a 2-year period and endorsed in 2004 at the 57th World Health Assembly. DPAS is a tool that guides the actions of many groups, including non-governmental organizations and the private sector. The goal is to promote and protect the health of populations through physical activity and healthy eating.

The overall purpose of the DPAS School Policy Framework is to guide policy-makers at the national and local levels as they develop and implement policies that promote physical activity and healthy eating in the school setting by making changes to behaviour, the environment and education. To start a national school policy, national strategic leadership is required, and governments are encouraged to do the following:

- Set up a coordinating team that will guide the development, implementation, monitoring and evaluation of school policy.
- Conduct a situation analysis.
- Set goals.
- Develop a work plan and monitoring system.
- Implement the policy.¹²⁶

HEALTH PROMOTION NETWORKS

Many organizations are being called upon to offer physical activity programs to combat the obesity epidemic. Providing these programs is often difficult for organizations that are already stretched for resources. One strategy to offset this challenge has been the formation of health promotion networks and inter-organizational networks of service providers. However, it is not well known whether these networks are effective in non-clinical health settings. Canadian researchers recently studied 31 health promotion networks and found that information sharing was the primary reason organizations collaborated. Resource sharing, marketing and/or fundraising appears to be done more independently and with less ties to the network. This suggests that challenges exist within health promotion networks. While collaboration is a good idea in theory to offset scarce resources, it is not easily accomplished.¹²⁷

Provincial/Territorial Government Strategies

YEAR	GRADE
2005	INC
2006	—
2007	C
2008	C+
2009	C+
2010	B+
2011	B+

2011 GRADE

B+

The grade for Provincial/Territorial Government Strategies remains a **B+** this year, reflecting the fact that the majority of provinces have developed specific physical activity strategies, as noted in last year's Report Card.

WHAT DOES IT TAKE TO MAKE A HEALTHY PROVINCE?

According to a report from the Institute of Clinical Evaluative Sciences (ICES), British Columbia is the leading province for overall population health and health behaviours (e.g., smoking cessation, physical activity, healthy eating) in Canada. Québec is also a leader since it has undertaken major efforts to improve population health in the past 2 decades. In fact, Québec is ahead of many other provinces in terms of residents' life expectancy, and it specifically stipulates physical activity in its provincial health behaviour strategy. Internationally, Sweden has the healthiest population on the planet according to the ICES report, a finding largely attributed to their success in addressing and resolving health inequities.

The ICES report indicates that other jurisdictions can learn from leading provinces and countries. They are not leaders because good health is somehow a result of living within their borders. These jurisdictions are doing something different and they are doing it right.

Five "lessons learned" resulted from the ICES report and are summarized as follows:

- A guiding health imperative must drive overall health strategies.
- The best strategies for improving population health and health-related behaviours arise during the tenure of strong political leaders.
- Government must pay attention to societal attitudes about health and make efforts to understand the prevailing political and social structures.
- To solve broad-based problems, one must seek solutions that can be applied across governments with the participation of the larger civil society.
- Leading jurisdictions act promptly. They do not necessarily wait for conclusive scientific evidence and are often the first to implement innovative interventions.¹²⁸

CHILDREN'S FITNESS TAX CREDIT

As reported last year, in 2007 the federal government implemented the Children's Fitness Tax Credit, which is a non-refundable tax credit available to parents for registration and membership costs of up to \$500 per child for eligible physical activity programs. Several provinces and 1 territory have also offered fitness tax credits. Manitoba has the same fitness tax credit as seen at the federal level. However, beginning this year, the tax credit will be available for 16- to 24-year-olds including young adults with disabilities in Manitoba. In 2009, Saskatchewan implemented the Active Families Benefit, which provides a refundable tax credit of up to \$150 per child (6- to 15-year-olds) for cultural, recreational and sport activities. Since 2005, Nova Scotia has had the Healthy Living Tax Credit, which is a non-refundable tax credit of up to \$500 per child (under 18 years old). Beginning in 2009, this credit was available to all Nova Scotians. The Yukon has the same tax credit as seen at the federal level. The tax credit is also available for children with disabilities.¹²⁹ Other provinces that are contemplating a child fitness tax credit of their own include Ontario and Alberta.¹³⁰⁻¹³¹

Unfortunately, research on the federal Children's Fitness Tax Credit indicates that few parents (16%) believe it has increased their kids' participation in physical activity programs. Parents in the lowest income quartile were less aware and less likely to claim the tax credit than other income groups, suggesting that the tax credit may be underachieving in the most vulnerable income group it was originally designed to help.¹³²

CANCER VIEW CANADA

Cancer View Canada offers online services, information and resources to Canadians regarding cancer control. It is an evolving portal that compiles resources for cancer prevention, screening, treatment and supportive, palliative and end-of-life care. Such resources include physical activity policies, some of which are relevant for children and youth. Cancer View Canada has been made possible through financial support from Health Canada through the Canadian Partnership Against Cancer.

The Prevention Policy Directory on the Cancer View Canada website is a regularly updated, searchable inventory of Canadian policies as well as legal instruments (e.g., legislation, regulations, codes) related to the key modifiable risk factors for cancer and related chronic diseases, including nutrition, physical activity, alcohol consumption, tobacco control, infectious agents, environmental and occupational exposures, and UV/ionizing radiation.

For more information, visit www.cancerview.ca.

Federal Government Investments

YEAR	GRADE
2005	C-
2006	—
2007	C
2008	C+
2009	C
2010	F
2011	F

2011 GRADE

F

The grade for Federal Government Investments is an **F** this year for the second year in a row. As noted last year, spending at the federal level in real dollars per capita is half of what it was in 1986. Decreases in funding are ongoing with important physical activity promotion organizations – such as Active Healthy Kids Canada, the Canadian Society for Exercise Physiology and others – experiencing cuts. Funding limitations have serious implications for policy development, public education and promotion, and tracking progress over time.

There is a disconnect between Federal Government articulation of the importance of the childhood inactivity crisis, and the demonstrable leadership and investment. For more information on this topic, refer to the 2010 Report Card, which included a comprehensive review of trends in federal government strategies and investments since the 1980s.⁸⁵

A DECLARATION ON PREVENTION AND PROMOTION FROM CANADA'S MINISTERS OF HEALTH AND HEALTH PROMOTION/HEALTHY LIVING

In October 2005, Canada's FPT Ministers of Health agreed that: "As a nation, we aspire to a Canada in which every person is as healthy as they can be — physically, mentally, emotionally and spiritually."¹³³

At that time, the ministers also agreed to the Integrated Pan-Canadian Healthy Living Strategy, which defines a healthy nation as one "in which all Canadians experience the conditions that support the attainment of good health."¹³³ The strategy identifies 2 goals: improved overall health and reduced health disparities.

The Declaration reflects the important role that health promotion and disease and injury prevention play in improving the health of Canadians. By working together to support disease prevention and health promotion within and outside the healthcare system, the ministers hope to improve the health and well-being of all Canadians.

More recently (September 2010), Canada's Ministers of Health and Health Promotion/Healthy Living declared that the promotion of health and the prevention of disease, disability and injury are a priority and necessary to the sustainability of the health system. Unfortunately, there has been little substantive follow-through on this Declaration from governments, which recognize the need for partners from within and outside government to work together.

THE CANADIAN ACTIVE AFTER-SCHOOL PARTNERSHIP

The Canadian Active After-School Partnership is a comprehensive, collaborative and multi-dimensional initiative that will establish a program delivery framework targeting all levels of government, decision makers, non-profit and for profit organizations and front line staff as well as others with a commitment in quality after-school programs.

The objective of this initiative is to enhance the delivery of quality after-school programs that involve increased access and opportunity to engage in physical activity and healthy living and nutrition practices with the ultimate goal of increasing physical activity levels and healthy eating practices of Canada's children and youth, and achieving success at reaching or exceeding the 2015 Canadian Physical Activity Targets.

A collaborative of 9 national organizations, coordinated by PHE Canada have been supported and initially funded by the Public Health Agency of Canada to develop and begin implementation of a Pan-Canadian After-School framework initially until 2012.

The aim of this initiative is:

- to influence policy development and enhancements to support better use of facilities, inclusion and equitable access for all;
- knowledge development through social marketing/communication campaigns, better access to resources and support tools, and sharing of best/promising practices;
- Training and capacity building among program leaders.

Provincial/Territorial Government Investments

YEAR	GRADE
2005	INC
2006	—
2007	C
2008	C+
2009	C+
2010	C-
2011	C-

2011 GRADE

C-

The grade for Provincial/Territorial Government Investments is **C-**, which reflects good investment in several provinces but also points to the need for increased spending in other provinces and territories.

INVESTMENT IN LEADING HEALTH JURISDICTIONS

In a report from ICES, it was observed that adequate and sustained investment in population and health behaviour programs was present in leading health jurisdictions. This kind of investment allows governments and their partners to establish and maintain fully implemented strategies.

At present, British Columbia and Québec are the only provinces with well-resourced public health agencies (the Public Health Agency of British Columbia and the Institut National de Santé Publique du Québec). These provinces are spending between 3 and 8 times more on programs compared to Ontario (ranked 3rd) and the other provinces/territories.

Money spent per capita on health behaviour strategies is seen in Figure 27.

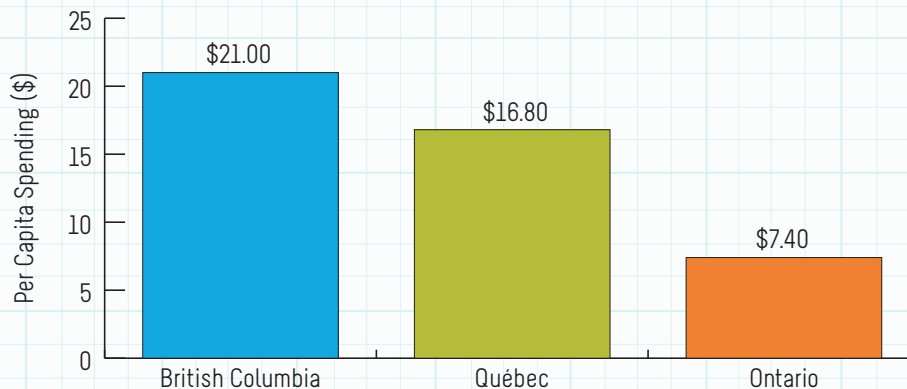


Figure 27: Per Capita Spending on Health Behaviour Strategies by Province (Source: ICES Report¹²⁸).

The following investment numbers were used in the ICES Report to make its calculations:

- In British Columbia: \$665,000 (BC School Fruit and Vegetable Snack program), \$30,000 (Early Years Specialization), \$40 million (LocalMotion), \$1.5 million (Action Schools! BC), \$1.3 million (for schools to purchase sports equipment), \$950,000 (Healthy Schools Network), \$280,000 (Healthy Living for Families booklets), \$17 million (Healthy Kids Program), \$1.27 million (Quit Smoking Now!), \$275,000 (Cooking and Skill Building Project), \$91,667 (Aboriginal Youth FIRST Outdoor Leadership Program), \$50,000 (Get Outdoors Program), \$26,000 (Healthy Ecosystems Healthy People), \$2,500 (Work Bike Program).
- In Québec: \$56.3 million (Investing for the Future – direct government funding), \$40 million (\$20 million from La Fondation Chagnon and \$20 million matched funding from Québec government).
- In Ontario: \$90 million includes funding for Smoke-free Ontario, Healthy Eating Active Living, Communities in Action Fund and some programs directed at chronic conditions; this estimate excludes mandatory public health programs.¹²⁸

Non-Government Strategies and Investments

YEAR	GRADE
2005	—
2006	—
2007	INC
2008	C+
2009	B-
2010	C
2011	C

2011 GRADE

C The grade for Non-Government Strategies and Investments (formerly, Industry, Philanthropic, and Research Investments) is a **C** for the second year in a row. This indicator includes not-for-profit organizations and those belonging to the private sector. The drop in the grade in both 2010 and 2011 reflects the decrease in funding that has occurred in many sectors. This likely continues to be explained in part by the economic downturn and the fragile economic recovery.

The following is a sampling (not comprehensive) of several key non-government strategies and investments.

Chagnon Foundation

The Chagnon Foundation's mission is to help foster and improve health through the prevention of poverty and disease, focusing primarily on parents and children in order to promote the educational success of young Québécois. In 2000, the Chagnon family contributed \$1.4 billion to the Foundation in order to carry out joint, long-term social projects aimed at promoting optimal early childhood development (from conception to age 17) and healthy lifestyles. In more recent years, the Chagnon Foundation has been involved in the following:

- 2005-06: financial guidelines were adopted for 2010, with plans to allocate \$60 million annually to major prevention initiatives that would be implemented primarily by local communities.
- 2006-07: the Foundation reached an agreement with the Québec government to create a joint fund to promote healthy lifestyles. A total of \$400 million would be allocated to this fund over the next 10 years.
- 2008: community organizations were invited to submit projects aimed at helping children acquire healthy eating habits and stay physically active. Project proposals were submitted.

For more information, visit www.foundationchagnon.org.

Canadian Tire Jumpstart®

Strong communities include strong kids. Canadian Tire believes all kids should have the chance to run, skate, play and grow. Canadian Tire Jumpstart® is a community-based charitable program that helps kids aged 4 to 18 participate in organized sports and recreation such as hockey, dance, soccer and swimming, so they can develop important life skills, self-esteem and confidence.

National in scope but local in focus, Canadian Tire Jumpstart® delivers support to children in financial need through a Canada-wide network of local chapters. These chapters are made up of a variety of community leaders committed to helping kids get active, such as Big Brothers and Big Sisters Canada, YMCA and Parks and Recreation organizations.

These community partners are joined by Canadian Tire dealers and petroleum agents, and together the chapters identify children in financial need who would benefit from the program.

To date, there are 299 Canadian Tire Jumpstart® chapters in communities across the country. Since its launch in February 2005, Canadian Tire Jumpstart® has helped give more than 225,000 kids in financial need the chance to play.

In 2010 alone, Canadian Tire Jumpstart® distributed \$10.1 million to help kids in need to participate in sport and recreation programs across Canada. These monies helped Canadian Tire Jumpstart® support 98,000 kids across Canada thanks to the support of their 300 chapters and 800 community partners.

For more information, visit www.canadiantire.ca/jumpstart.



KidSport™ Canada

KidSport™ Canada is a national not-for-profit organization that provides financial assistance for registration fees and equipment to kids age 18 and under. KidSport provides grants so that children and youth can play



a season of sport. One of its primary goals is to support its network of 11 provincial/territorial KidSport chapters and 177 community KidSport chapters across Canada in their fundraising and sport activities.

KidSport Canada believes in the values and benefits of kids playing organized sports, and knows that sport will provide them with the opportunity to:

- Become physically active
- Improve their self-esteem and self-confidence
- Learn lifelong skills
- Improve their academic performance
- Make new friends
- Share and celebrate their culture

Since 1993, over \$18 million has been raised for the kids. Across the country, KidSport assisted more than 50,000 children and youth last year, and made grants totalling several million dollars.

For more information, visit www.kidsportcanada.ca.

CBC Live Right Now

Live Right Now is a national initiative designed to inspire Canadians to join together and change the health of this country. The idea is built around the small steps everyone can take in their life to improve their health. The initiative was launched on January 3, 2011. In the first 9 days, the CBC Live Right Now website was visited by more than 100,000 Canadians, who viewed more than half a million pages of Live Right Now content.



For more information, visit www.cbc.ca/liverightnow.

ParticipACTION

ParticipACTION is a national not-for-profit organization dedicated to inspiring and supporting active living and sport participation for Canadians. Originally established in 1971, ParticipACTION was a pioneer in social marketing, and has become internationally recognized for its compelling communications to promote physical activity. In the late 1990s, core funding from the government began to wane, and without financial support to continue its campaign, ParticipACTION closed its doors in 2001. With start-up support from Sport Canada and the Public Health Agency of Canada, ParticipACTION was revitalized in 2007 as the national voice of physical activity and sport participation in Canada.

Through leadership in communications, capacity building and knowledge exchange, ParticipACTION inspires and supports Canadians to move more.



ParticipACTION is the galvanizing force that moves Canadians to move more. As a catalyst for action, they create change through communications, capacity building and knowledge exchange.

In the area of communications, ParticipACTION delivers messages through multimedia for the purpose of raising awareness, educating and inspiring behavior change. In addition, it works with partners to coordinate communications and ensure consistent, unified messaging across and within the physical activity sector. ParticipACTION's goal is to inspire Canadians to increase their level of activity and to inspire society to make it easier to become more physically active.

In addition to inspiring Canadians, ParticipACTION ensures there are programs to support people. To this end, it helps to build capacity by generating investment and leveraging assets within the sector. It supports and manages the development and /or implementation of programs, while working collaboratively with partners who deliver the programs.

ParticipACTION also ensures that Canadians and partners are informed by gathering, translating and disseminating the most relevant information, data and research on physical activity and sport participation.

In all areas of its work, ParticipACTION's approach is to provide leadership in marshaling resources, facilitating collaborative partnerships and ensuring collective actions influence, support and promote sustainable change.

For more information, visit www.participaction.com/en-us/Home.aspx.

Active Healthy Kids Canada

Established in 1994, Active Healthy Kids Canada strives to be a trusted source for “powering the movement to get kids moving.” It’s a “go to” source for knowledge, insight and understanding that influences thinking and action among issue stakeholders to help them build better programs, campaigns and policies in order to increase physical activity among children and youth.

Advancing knowledge is the cornerstone of our business, providing the evidence base for our communications and issue advocacy work to increase support for quality, accessible and enjoyable physical activity participation experiences for young people across Canada. In an ongoing effort to advance knowledge to effect change, we release the annual Active Healthy Kids Canada Report Card on Physical Activity for Children



The Power to Move Kids™

and Youth, a comprehensive assessment of the current state of physical activity among Canadian children and youth. Our evaluation results of the 2009 and 2010 Report Cards indicate that key stakeholders believe the Report Card is achieving its objectives of increasing awareness about children’s physical activity levels, providing information that supports their organization’s mandate or policies, helping them to keep up with the research in the field, and supporting them with policy and strategy development. Many also use it for advocacy and for briefing senior staff and elected officials, and as a tool in education, training and the development of new partnerships.

We also learned that those in media, government, non-government organizations, industry, philanthropy and the research community want increased breadth and depth in both the content and dissemination of the Report Card. They want a tool that reflects progress across common indicators over time. They also want more content and communications outreach from the provincial/territorial and municipal levels. They also indicated that the Report Card is worth the investment, and that discontinuing it would have a negative impact on awareness about the importance of physical activity for children and youth, and would affect organizations working in this field.

For more information, visit www.activehealthykids.ca.

Right To Play

Right To Play is the leading international humanitarian and development organization using the transformative power of sport and play to build essential skills in children and thereby drive social change in communities affected by war, poverty and disease. Right To Play creates a safe place for children to learn, and fosters the hope that is essential for children to envision and realize a better future.

Right To Play funding comes from various government partners and UN agencies, as well as from the public, corporations and foundations.

In September 2010, a new innovative Canadian research initiative was announced between Right To Play and the School of Human Kinetics at the Faculty of Health Sciences, University of Ottawa. This research initiative is part of a new program developed by Right To Play called Promoting Life-skills in Aboriginal Youth (PLAY). The first communities to benefit from the program will be the Moose Cree First Nation and the Sandy Lake First Nation. The program uses sport and recreation to develop leadership skills and provide youth with opportunities that may not otherwise be available in their communities. It is based on sport and play programs designed and implemented by Right To Play.

Under the leadership of the Director of the School of Human Kinetics, Blaine Hoshizaki, a multidisciplinary research team from the School of Human Kinetics, Right To Play and Canada’s First Nations communities will bring together experts in the field of sport and recreation. Together they will develop programs designed to enrich Canada’s northern communities by emphasizing social inclusion and positive life skills in First Nations youth. The research team will, among other things, measure the consistency and alignment of the program’s goals and outcomes through a stakeholder theory approach. It will undertake research designed to connect existing human, physical and social community assets to support PLAY program objectives. By combining Right To Play’s expertise and motivational power, the knowledge and discipline of University of Ottawa professors and the history and knowledge of First Nations community leaders, the research team will develop meaningful and sustainable programs to support healthy communities in Canada’s north.¹³⁴



For more information, visit www.righttoplay.com/International/Pages/Home.aspx.

The Lawson Foundation

The Honourable Ray Lawson of Oakville, Ontario, established The Lawson Foundation in 1956 as an extension of his personal philanthropy. The Foundation was incorporated to serve the people of Ontario, especially the communities of London and Oakville. The purpose of the Foundation was to better the human condition and quality of life, and to enhance community development.

The Lawson Foundation aspires to become a respected source of support for sustainable community-based programs that positively influence the quality of life for Canadian families. Since the Foundation's inception in 1956, it has awarded \$70 million in grants to charities across Canada.



For more information, visit www.lawson.ca.

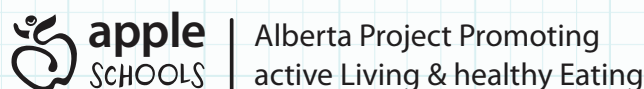
Alberta Project Promoting Active Living and Healthy Eating (APPLE)

Supported by private funds, APPLE Schools aim to make the healthy choice the easy choice by changing school environments. They help to create and sustain supportive physical and social environments that foster lifelong health and learning. Home, school and community work together to improve a child's health. They involve parents, students, staff and community stakeholders to impact students' knowledge, skills, attitudes and behaviours.

APPLE Schools:

- Provide support and training to a school health facilitator in each of 14 participating schools with expansion to 40 schools by September 2011.
- Provide strategies and resources for school communities to support healthy eating and active living.
- Annually track changes in student's health outcomes, parents behaviours and opinions; and the school environment.
- Capture promising practices and policies, and share them with all school jurisdictions in Alberta.

For more information, visit www.appleschools.ca.



Cross-Canada Tour:

Key Challenges and Promising Strategies for Physical Activity in Children and Youth



METHODOLOGY

The Provincial and Territorial Network Partners are non-government organizations and governmental organizations that have partnered with Active Healthy Kids Canada to help inform, distribute and communicate the Report Card in their own jurisdictions. For the 2011 Report Card, Network Partners were asked to contribute content for the following provincial and territorial pages. Each partner was provided with a template to guide the collection of specific information that highlights key initiatives and strategies taking place in each province or territory. Partners were invited to collaborate with other colleagues and organizations within their own jurisdictions to provide Active Healthy Kids Canada with the most robust and up-to-date child and youth physical activity information available, covering both pressing challenges and promising solutions. In addition to Network Partner submissions, Active Healthy Kids Canada also requested input from government contacts through the Interprovincial Sport and Recreation Council (ISRC).

Active Healthy Kids Canada worked with all content contributors to edit the collected information into succinct, consistent reports on the most significant limitations, developments and opportunities in child and youth physical activity in each province and territory across Canada.

Alberta



POLICIES/GUIDELINES TO SUPPORT AFTER-SCHOOL PROGRAMS

Stone Soup: The Recipe for an After School Recreation Strategy in Alberta, ARPA

Alberta Recreation and Parks Association prepared a strategy and recommendations on how to most effectively and sustainably expand after-school recreation programs across Alberta.

The approach proposed by the ARPA reflects the need to strike a balance between ensuring purposeful programs that can achieve measurable outcomes, and the need to recognize the wide range of capacities and interests that exist across the province. So while the framework suggests an optimal balance of programming, there is a strong and necessary emphasis on a community development approach where local partners and parents can shape program components based on their unique circumstances (e.g., facilities, service clubs). Local direction in program development is essential if after-school programs are to build on – and fit within – existing programs and services.

Findings:

- The ARPA scan of existing programs, services and funding streams shows many are closely aligned with the goals of after-school programs and could, with some minor modifications, support various aspects of a provincial strategy.
- A strategy to increase the numbers of children and youth in after-school recreation programs clearly aligns with the business plan and policy goals of the Government of Alberta (GOA), its ministries and departments.
- Any “framework” for high-quality after-school programs requires explicit program goals to create measurable outcomes, but must allow for flexibility in program design, delivery and content to reflect the priorities, abilities and interests of local and rural communities across Alberta.
- There are two prerequisites for sustainable partnerships: a clear and shared set of common or complementary goals; and a framework that recognizes and incorporates the strategic interests and abilities of those who choose to participate.

HIGHFIVE®, ARPA

HIGH FIVE® is a comprehensive quality standard for organizations providing recreation and sport programs to children ages 6 to 12. ARPA is proud to be the Alberta provider of HIGH FIVE® and provide a range of training, assessment tools and resources to ensure that organizations can deliver the highest-quality programs possible.

Fundamental Movement Skills, Alberta Tourism, Parks and Recreation

Based on the Canadian Sport for Life model of long-term athlete development, this NCCP (National Coaching Certification Program) workshop explores the themes of fair play, safety responsibility and communication. The goal is to expose participants to an innovative process that will help them teach children Fundamental Movement Skills (FMS) such as throwing, hopping, jumping, kicking, striking, balancing, catching and agility. Workshops teach leaders of youth how to analyze and improve children’s movement based on development stages.

Note: HIGH FIVE® focuses on emotional, social and cognitive development, while Canadian Sport For Life focuses on physiological development.

AFTER-SCHOOL PROGRAMS

Cool Moves, Boys and Girls Club of Canada

This is an innovative, collaborative, coordinated approach to promoting healthy choices and enhancing the health outcomes of children, youth and families. The program is targeted at neighbourhoods in urban centres with a documented shortage of accessible and affordable services, as well as at rural and isolated communities, First Nations and Aboriginal children and youth, new Canadians, and/or low-income and densely populated neighbourhoods.

Active Y Kids, YMCA

The physical activity program focuses on physical fitness (such as cardiovascular fitness, muscular strength and endurance, flexibility and body composition), age-appropriate training in behavioural skills (e.g., goal setting, progress feedback, positive self-talk), and the importance of healthy eating.

AfterSchool, Calgary

This is a collaborative effort between the City of Calgary and its community partners. Activities such as sports, drama, music, the arts and recreation help children and youth develop good social skills and increase self-confidence, and also help to motivate them to succeed in school.

UpStart School Rental Subsidy, United Way (Calgary)

A new partnership involving UpStart of the United Way, the City of Calgary, Calgary Board of Education, Calgary Catholic School District and Rocky View Schools, is increasing recreational opportunities for children and youth. Through this project, non-profit groups can apply to receive a rental rate subsidy when booking a school facility to offer recreational activities for children and youth. UpStart will cover the cost of these subsidies through a grant received from the provincial government.

British Columbia



AFTER-SCHOOL PROGRAMS

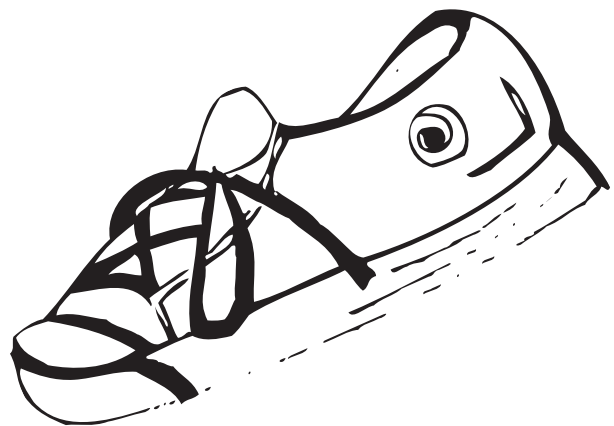
Through the 2010 Sport and Arts Legacy Fund, the B.C. provincial government is investing \$1 million in an Afterschool Initiative supporting after-school sport programs in 17 communities across British Columbia. This initiative is led by the Ministry of Community, Sport and Cultural Development, and involves partners including ministries responsible for child care, education, health and social programs for children and youth, the BC Recreation and Parks Association, the Public Health Agency of Canada, the Directorate of Agencies for School Health (DASH BC), school districts, sport and recreation providers, municipalities and others.

This initiative reduces financial, transportation, cultural and facility access barriers, as the programs are being delivered during after-school hours right at the schools. The schools have been identified by initiative partners as ones that serve populations that often don't have opportunities to participate in sport and physical activity – children and youth from low socio-economic families, new immigrants, First Nations and Aboriginal Peoples, and those at risk.

POLICIES/GUIDELINES TO SUPPORT AFTER-SCHOOL PROGRAMS

- The Ministry of Education's Neighbourhood Learning Centres (NLC) initiative aims to increase community use of school facilities including gyms, fields, classrooms and other spaces for the benefit of children, families and the entire community. Schools involved in the Province's Afterschool Initiative must meet NLC criteria.
- The Ministry of Education is working with DASH BC and the BC Recreation and Parks Association (BCRPA) to build capacity and further better practice/resource development activities. The Public Health Agency of Canada is also working with BCRPA to support schools and local governments in implementing these practices.
- One of the Afterschool Initiative's key policy goals (in addition to reducing barriers to sport and physical activity for children and youth) is to ensure "progressive learning" and physical literacy through its programming. The Initiative has identified and is supporting training and programs that help move participants from fundamental movement skills to fundamental sport skills, to the next level of school and community sport programs that help instill lifelong learning, enjoyment and participation in sport and physical activity.
- As the Afterschool Initiative will benefit other health and social outcomes beyond physical health – such as healthy eating; increased social and communication skills, self-confidence and esteem; decrease in risky behaviours; increased cognizant skills – partners are looking at other policies and resources that help build the school and community capacity to provide sport and recreation programs in the after-school hours. These include funding transportation and/or new equipment, providing healthy snacks, and encouraging private and public subsidy programs to support or revise criteria to better support after-school programs.

This training and programming includes HIGH FIVE® certification, Athletic Canada's Run/Jump/Throw and Gymnastic BC's Kids Can Move, as well as quality training and instruction from several provincial sport organizations.



Manitoba



AFTER-SCHOOL PROGRAMS

1. Manitoba is the first province to partner with Canadian Tire Jumpstart® on the **Canadian Tire Jumpstart Kids Activity Kit**. This Kit helps children and youth from lower-income families to be more active and to have fun.

Community groups receive the Kit at no cost, and hold after-school physical activity sessions. Activities can be played indoors or outdoors and do not require specialized facilities.

The customized Kit consists of a resource guide that helps leaders plan games, and equipment such as balls, yoga mats, compasses for orienteering, parachutes and juggling gear.

2. Manitoba, with the Public Health Agency of Canada, is funding a new project that supports the delivery of quality after-school active recreation, and safe and active school travel planning.

The project is led by Recreation Connections and Green Action Centre, and will:

- Address barriers to participation.
- Engage many partners.
- Build leadership and community capacity to delivery accessible, inclusive and diverse programs.

POLICIES/GUIDELINES TO SUPPORT AFTER-SCHOOL PROGRAMS

Manitoba *in motion* provincial physical activity strategy

After-school physical activity programs get priority for Manitoba ***in motion* Community Physical Activity Grants**.

A family role modelling social marketing campaign, in partnership with CTV, promotes after-school physical activity.

Fitness Tax Credit

Manitoba has the same child fitness tax credit as the federal tax credit.*

Manitoba is extending the Children's Fitness Tax Credit to young adults, 16 to 24 years of age, starting in 2011. This will help young people develop and maintain lifelong physical activity habits, and may be used for after-school physical activity programs.

* The Government of Canada allows a non-refundable tax credit based on eligible fitness expenses paid by parents to register a child under the age of 16 in a prescribed program of physical activity. Parents can claim up to \$500 per child. An additional tax credit is available to an individual for a child with a disability.

New Brunswick



POLICIES

A variety of provincial policies are implicated in after-school activities by virtue of student involvement. These include:

- **Policy 315 School/Community Partnerships and Sponsorships** which establishes the requirements for partnership and sponsorship development between schools and community-based organizations, businesses, governments and other educational institutions;
- **Policy 513 Transportation to and from Off-Site School-Related Extra-Curricular Activities** establishes the requirements for providing safe transport of students to and from off-site school-related extra-curricular activities;
- **Policy 407 Community Use of Schools** policy sets standards for, and facilitates the use of school facilities by the community during times when these facilities are not required for educational purposes;
- **Policy 701 Policy for the Protection of Pupils** is intended to protect pupils from non-professional conduct by adults, ensure that adults in the public education system understand responsibilities entrusted upon them when working with children in the public education system and eliminate non-professional conduct through the defining of acceptable standards of behaviour, prevention and effective intervention;
- **Policy 703 Positive Learning and Working Environment** provides a framework for the Department, school districts and schools to create positive learning and working environments in the public education system by providing an overview of expected student behaviour, setting standards for behaviour and discipline and identifying the responsibilities of all partners in the school system

In addition to these policies, many programs available to support after-school hours opportunities have guidelines encouraging quality and sustainability. The **Active Communities Grant Program** insists on multiple partnerships, shared resources, common goals, growing leadership, addressing barriers and comprehensive evaluation. **School Wellness Grants** require action teams (staff, students, parents and community) who use a comprehensive school health approach to building and delivering data driven action plans. **Go NB** delivers sport initiation programs for children and youth, and reduces barriers for under-represented populations. The **NB Community School Model** used in 69 schools in the province paves the way for after-school hours programming by weaving community into the school environment and the school into the community.

PROGRAMMING

We are building capacity for sustained change in the after school hours through community mobilization. **Wellness Networks** are communities/regions who share resources, expertise and responsibility in enhancing wellness in their area. Moving forward with the relationship building and collaboration inherent in developing wellness networks, we engaged community and organization leaders by hosting an **After-School Hours Stakeholders Forum** from which an alliance of Government and Non Government organizations was formed. An **Action Plan** centered on 4 themes (Accessibility, Affordability, Quality and Communication/Education) was created. We are seeking quality opportunities for all children and youth in the after-school hours that will address all aspects of our **Provincial Wellness Strategy** (Mental Fitness, Healthy Eating, Physical Activity and Tobacco Free Living). A number of programs are in place including:

- **Active Play** (5-6 years) and **Active Youth** (7 years +) are extensions of the Active Kids Toolkit program (ages 0 to 5) and are designed to support quality physical literacy development and daily appropriate physical activity for school aged children. These programs are offered to schools, municipality recreation programs, day cares, etc. They are designed so that the adult leader can safely and effectively use them with little or no experience, using non sport specific readily available resources.
- **Sistema NB** is an award winning after-school orchestral music program that fosters social change. Designed to fight the negative impact of exclusion among children this program builds musical competency, self esteem and pro-social skills in a safe, health enhancing environment. The focus on music becomes the "entry point" and once engaged, the children are eager to be more physically active and participate in other aspects of a healthy lifestyle. This no-cost to participants program is set to expand to 3 school districts / 12 schools throughout the province beginning in September 2011.
- **Le combo du lundi**, is an after school program originating in a small francophone community school. The program helps children experience and enjoy health enhancing behaviours while feeling connected to their community and peers. This popular community created program involves physical activity, art activities, a nutritious snack, and new food experiences through cooking classes.

Newfoundland and Labrador

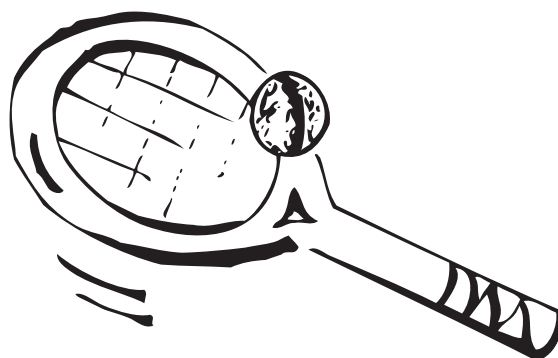


In partnership and consultation with the Recreation and Sport Division, Department of Tourism, Culture and Recreation, Health Promotion Division, Department of Health and Community Services and the Faculty of Human Kinetics and Recreation, Memorial University, Recreation Newfoundland and Labrador is pleased to provide highlights of key "After School" initiatives and strategies for the 2011 Active Healthy Kids Report Card Provincial Profile Page.

Over the past year Newfoundland and Labrador has continued to support and build on many ongoing, established initiatives for school age children. Our School Health Promotion Liaison Consultants continue to work with the school and communities: The Provincial Wellness Plan's provincial and regional grants fund various **after school** related projects. Eat Great and Participate, a bi-lateral project that assists to provide healthy food choices at community recreation and sport settings, has been working with its' partners, School Sport NL, Sport NL and Recreation NL to develop new resources for school age children all across the province. Another bi-lateral, Small Steps...Big Results Physical Activity Campaign with Recreation NL also continues to build on its' school/ community linkage with new developments in its' website enhancements, a school challenge with the Eastern School District and 4 major Physical Activity Demonstration Pilot Sites. At each of these 4 sites, which are actually a cluster of communities ranging from 5 to 19 towns, after school programs and policies are already being developed and implemented.

Plans are now well underway for the development of an After School Program Pilot Funding Initiative by the Provincial Government and its' NGO partners. The Department of Tourism, Culture and Recreation, Department of Education, Department of Health and Community Services and Department of Human Resources, Labour, Employment and Youth, have partnered to provide funding for school/community physical activity initiatives. Funding will be available to support community/school partnerships that result in increased opportunities for children and youth ages 9-15 or grades 4-9, to be physically active. Funding is to be used to help address the barriers (eg. bussing, program fees, etc) that exist in the community that prevent children and youth from accessing existing or new recreation and sport programs. Funding amounts range from \$5,000 to \$25,000 per school year, depending on the scope of the project. A minimum of two key partners (co-applicants) with supporting partners is required. Co-applicants must include community partners and a school or group of schools. Projects can be held at school or the community facility or a combination of both. Partners must be recognized members of a Provincial Sport Organization, Recreation Department/ municipality, Community Youth Network, Regional Wellness Coalition, Health Authorities or not for profit recreation group. A community group affiliated with a Municipal Council or Local Service District can also be an eligible partner. Pilot parameters include at least two opportunities per week to be active in the after school period from 3:00pm to 6:00pm., must include a girl's only component and an inclusion component for all abilities to participate. The anticipated length of this funding initiative is approximately 25 weeks.

Plans are to announce details of this After School Funding Initiative in the next few months.



Northwest Territories



AFTER-SCHOOL PROGRAMS

The Department of Municipal and Community Affairs and the Northwest Territories Sport and Recreation Council are working together to provide *Active After School* funding to schools and community organizations across the NWT. In 2010-2011, 54 projects are being supported in 32 of 33 communities.

Program funding is being used to support a wide range of initiatives under *Active After School Guidelines*. Some programs focus on sport, while others introduce a variety of other physical activities such as yoga, archery, cross-country skiing, Nordic walking, hip hop dance and traditional cultural events like Dene and Inuit Games.

POLICIES/GUIDELINES TO SUPPORT AFTER-SCHOOL PROGRAMS

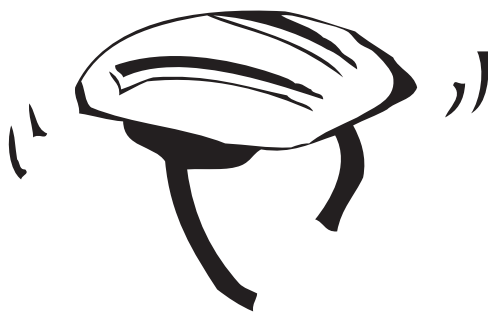
All programs funded by *Active After School* must abide by the following guidelines:

- Participants are active a minimum of 40 out of every 60 minutes.
- Projects target inactive or underactive children and youth.
- Activities allow all children and youth to participate regardless of experience and/or physical activity level.
- Project will engage and train youth in positions of leadership and responsibility.

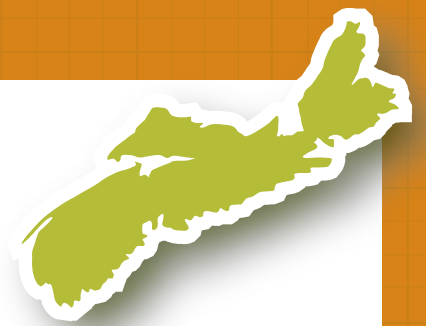
Active After School is supporting new opportunities for youth from across the NWT to be more physically active. The after-school time period is important because youth tend to be less active and under-supervised. *Active After School* programs are introducing new and fun activities to encourage better fitness and a desire to make healthy and active lifestyle choices through all stages of life.

Active After School funding supports schools, and community organizations that work with schools, to create or expand on programs that get school-age children and youth physically active. One of the goals for this fund was to be open to creative and innovative ideas.

Active After School is part of the Government of the Northwest Territories Healthy Choices Framework, a cross-government initiative designed to promote healthy and active lifestyle choices.



Nova Scotia



The after-school time period is the focus of much attention within Nova Scotia, as a result of recent research findings and activity at the federal/provincial/territorial level. A preliminary inventory of after-school programs in the province has identified hundreds of examples and a diversity of approaches. The following provides a short list of activity in this area.

AFTER-SCHOOL PROGRAMS

Annapolis Valley After-School Program

The Annapolis Valley After-School Program offers physical activity to inactive rural youth in 23 schools. The 25- to 30-week program operates 1-3 days/week for minimum 1.5 hours/day, costing approximately \$1,500 per school. Funding partners include municipal recreation departments, school boards and the Department of Health and Wellness. Elements of the program include: no cost to participants, training opportunities for program leaders, and the completion of HIGH FIVE® assessments.

Sport NS After-School Program

Begun in 2005 at 4 sites, the Sport NS After-School Program is now operating in 8 schools within the province. The program is designed to help increase the daily activity level of children in grades 3 to 6, and help improve the health of elementary school children through fun, safe, developmentally appropriate sport and recreation activity. The program specifically targets children who are not already participating in sport and physical activity.

YMCA of Cumberland

The YMCA of Cumberland has recently identified a goal to expand youth physical activity programming outside of their building. Connections were made with local schools, staff were hired and trained, and now the YMCA offers an after-school program rotating among area schools each weekday. To date, the reaction from students, parents and schools seems positive – quality leadership, fun programs and a sustainable model.

POLICIES/GUIDELINES TO SUPPORT AFTER-SCHOOL PROGRAMS

Regional Development Grants

This Department of Health and Wellness funding policy supports activities that respond to the goals and priorities of communities and PASR (Physical Activity, Sport and Recreation) priority areas, including increasing physical activity, sport and recreation opportunities; capacity building; gender equity; volunteer development; children and youth physical activity levels; fair and safe activities; and responding to traditionally underserved populations. Programming in the after-school time period is eligible.

Sport Canada and Public Health Agency of Canada (PHAC) Bilaterals

Funded by bilateral agreements with Sport Canada, Sport Animators work in each of the 9 school boards to create physical activity opportunities in non-curriculum time, including the after-school time period. Sport Futures includes a structured after-school program that trains high school students to be physical activity leaders.

The bilateral agreement with PHAC has 3 components: support for the Micmac Native Friendship Centre to include physical activity programs to off-reserve Mi'kmaq children and youth; after-school programs for girls within the Sport Nova Scotia After-School Program; and a pedometer loan program in partnership with the Heart and Stroke Foundation.

Keeping Pace

Initiated in 2001 and repeated in 2005 and 2009, the Keeping Pace surveillance initiative (formerly PACY) is designed to collect data on physical activity levels and dietary intake of students in grades 3, 7 and 11. During the 2009-10 school year, researchers at Saint Francis Xavier University added 2 questions to the student questionnaire:

- Do you have the opportunity to participate in a program with a physical activity or sports component between 3 and 6 p.m. on weekdays?
- If yes, how many days per week do you attend?

The findings will provide baseline data on participation in after-school programs, and will determine if students who attend them obtain more minutes of accelerometer-measured physical activity.

HIGH FIVE®

Research shows that children's and youths' experiences in programs are enhanced by leaders who receive quality training on the needs of the participants. As a result, children and youth who are having positive experiences in a program are more likely to return to that program and recruit others to join.

Leader training is a key element in the attainment of after-school programming goals. HIGH FIVE® provides frontline training workshops that are regularly being used to train after-school leaders. In the past year, 200 individuals were trained.

Nunavut



THE SUILAAQIVIK AFTER SCHOOL PROGRAM

For children ages 6-12, the Suilaaqivik After School Program offers the children of Apex an opportunity to develop social skills, participate in recreational activities and have a safe and fun place to go after school. Held at Nanook school in Apex, children are served a healthy after school snack before heading to the gym for energizing programming or to the 'quiet room' for homework help. Baking lessons and craft projects are popular activities at Suilaaqivik and allow children the chance to be creative and expand their talents. The program runs Tuesday's and Thursday's, 3:30pm -5:30pm throughout the school year.

MAKKUTTUKKUVIK AFTER SCHOOL SNACK PROGRAM AND COOKING CLUB

The After School Snack Program and Cooking Club offer immediate access to nutritious food as well as an opportunity to learn and master cooking skills in the hope that this new knowledge will be practiced in a home setting. These programs are important as they insure that our patrons are receiving a healthy mid-day snack and obtaining important nutrients that, in some cases, may otherwise not be consumed. Participants of the Cooking Club are invited to develop the necessary skills and confidence to safely prepare nutritious food at home, based on the Nunavut Food Guide. At the end of each cooking session, youth are able to sit down and enjoy the meal they have prepared together. The Cooking Club continues to be in high demand and remains one of the most popular programming options at the Makkuttukkuvik Youth Centre in Iqaluit, Nunavut.

The Sport and Recreation Division (Government of Nunavut) has an extensive list of grants and contribution opportunities available to communities to support them in physical activity, recreation and sport programming, including: the Physical Activity Initiative Grant and the Traditional Activities Grant. The Sport and Recreation Division (Government of Nunavut) offers community funding for Afterschool Physical Activity Program designed to train leaders to implement physical activity programs for children and youth specifically during three to six pm on weekdays.

MAKKUTTUKKUVIK YOUTH CENTRE

The Youth Centre offers a safe place for the youth of Iqaluit. Teenagers ages 13-18 are invited to come to the Youth Centre to get involved, socialize and participate in drop-in and organized activities. Much of what we do at the Youth Centre revolves around staying active and having fun while doing so. Patrons of the Youth Centre have access to their own group skating time twice a week and every Friday there is organized gym time at Aaqarniit Middle School. Our regular programming involves many opportunities to partake in Inuit games and our weekly cooking club is always a big hit. Teens can get involved by participating in Youth Council, the Makkuttukkuvik Justice Committee or taking advantage of volunteer opportunities at the centre. Pool, ping-pong and foosball are all popular activities and our computer station is available for those wanting to write resumes or surf the internet. The Makkuttukkuvik Youth Centre is an excellent resource for the youth of the capital of Nunavut and healthy, active living is what we promote.

IQALUIT SKATE PARK

The Iqaluit Skate Park is a first class indoor skatepark for skateboarding and inline skating. It is operational seasonally from May to October and is located in the curling rink. The skatepark, equipped with a half-pipe, 12 foot quarter pipe, pyramid, flatbanks, rails and more is designed for skaters who are just starting as well as advanced skaters who are looking for a challenge. Skaters can look forward to competitions, BBQ's, camps and other special events throughout the season.

Ontario



AFTER-SCHOOL PROGRAMS

In October 2009, the Ontario Government launched the \$10 million After-School Program to provide Ontario's young people in grades 1 to 12 with access to safe, active and healthy after-school (between 3 pm and 6 p.m.) activities. Programs in each site operate for a minimum of 9 hours to a maximum of 12 hours per week. Programming guidelines require 30% physical activity, 20% nutrition education/healthy snack, and 20% health and wellness. The remaining time is to be used at the organization's discretion. This means all participants are offered a minimum of 162 minutes per week to a maximum of 270 minutes per week of physical activity.

As of December 15, 2010:

- 323 sites currently deliver after-school programs in the province.
- 123 organizations are funded, including 11 First Nation communities.
- More than 18,000 children and youth have been reached. Children range in age from 6 to 18 years.
- 56% of the programs are operating in school sites; the remaining vary from community centres to resource centres to churches to housing complexes.

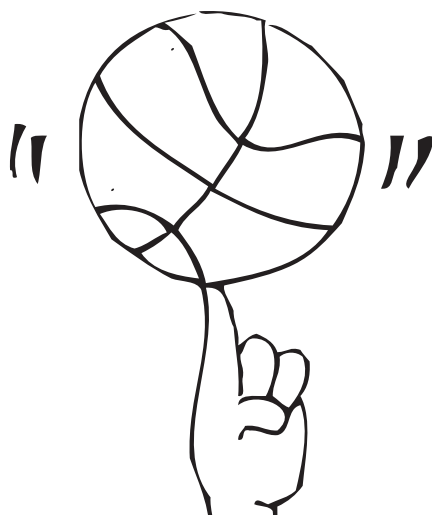
When it comes to types of physical activity practised in the after-school program, the majority (59%) of sites do a variety of movement, sports and games. Organized sport accounted for 21% of the type of physical activity implemented in the program.

The After-School Program links to a number of other Ontario government initiatives. These include the Ministry of Education's Community Use of Schools Program as well as the government's Poverty Reduction Strategy, which was developed to help break the cycle of poverty by giving young people the tools and supports they need to reach their full potential.

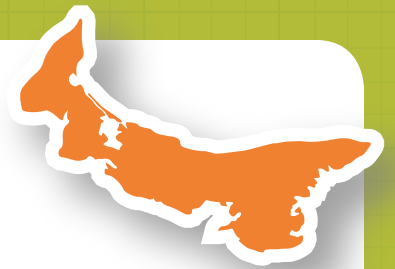
YMCA Ontario and Boys and Girls Clubs of Canada have a long history of providing after-school programs for children and youth. With funding from the Public Health Agency of Canada and the Ontario Ministry of Health Promotion and Sport, these organizations saw an opportunity to enhance physical activity and healthy eating during the after-school period by collaborating to launch the Coordinated Approach to Child Health (CATCH) Program in Ontario. Program evaluation results indicate that the 8,000 program participants from across the province learned a wide variety of health-related information, spent more time in moderate-to-vigorous physical activity, benefited from a wider range of nutritious food choices for snacks, and became more effective in making healthy choices for themselves.

There have also been significant efforts underway in Ontario to provide financial support to children and youth in order to increase access to physical activity, sport and recreation programming. For example, in 2010, Canadian Tire Jumpstart® provided \$244,000 in grants to help 30,800 financially disadvantaged kids participate in more than 65 activities. In addition, KidSport™ was able to provide more than 6,000 kids in Ontario with the opportunity to play and participate in organized sports leagues and clubs after school and on weekends. Specifically, more than 1,800 kids were recipients of KidSport™ registration and equipment grants in 2010.

Recently, key provincial organizations have formed an "after-school collaborative" to implement a series of activities that leverage existing provincial policies, programs and initiatives to enhance the quality of after-school programming in the province with anticipated funding support from the Public Health Agency of Canada.



Prince Edward Island



After-school programming in Prince Edward Island is an area of great interest to the province. Current activities dealing with this area are mainly connected to regulated early childhood centres and licensed after-school programs that are stand-alone programs.

The Province of Prince Edward Island, through the Division of Sport Recreation and Healthy Living, is currently carrying out an environmental scan of after-school programs to determine areas such as curriculum content, amount of time spent on physical activity, types of leadership offered and the training required, costs of programs, and transportation options and challenges.

This information will be used to identify strengths and gaps in the after-school time period that can be used as an opportunity to further advance programming options within the province.

Current after-school program in the province focus on the key areas, in particular the promotion of physical activity and healthy snack options. Many of these programs occur in school facilities or community centres that have access to space for physical activity either within the facility or close by. Many of the programs also offer an opportunity for the children to participate in "homework clubs," where additional support is offered to improve academic performance when they return to the classrooms.

PEI is also very excited about the go!PEI program, which was launched in the last number of months. While this is not directly involved in the after-school programming area at this time, it does provide services that influence the activities of youth.

Go!PEI has been offering free programs across PEI since June 2010 to educate and support all Islanders in making a healthy lifestyle change. It is for people of all ages, and promotes the importance of staying active and eating well for health. Being active and eating healthy go hand in hand, and go!PEI works with 16 community partners to get Islanders going. There is a program for everyone, including Healthy Cooking classes for new moms, Learn to Run programs for beginner runners, and Cycling rodeos for kids. go!PEI is fun, free and aims to reach as many Islanders as possible. For more information, see www.gopei.ca.



Québec



AFTER-SCHOOL PROGRAMS

In Québec, the after-school period of time benefits from different initiatives supporting physical activity. Among other things, Québec en Forme supports more than 110 local clusters of partners who in turn plan and organize activities and policy changes, or adjust their environment so as to facilitate active living and healthy eating among those aged 17 and under. In all, 1,500 organizations have been partners throughout Québec and submit action plans based on inter-sectoral partnerships. The approach of Québec en Forme is based mainly on the mobilization and support of local communities and it is at this level that the analysis of means and activities is the most relevant. At a more macro level, Québec en Forme also supports projects such as Mon école à pied à vélo, implemented by Vélo Québec and its partners, Trotti Bus delivered by the Canadian Cancer Society and partners, as well as Quartiers verts et en santé, a collaborative effort facilitated by the Centre d'écologie urbaine de Montréal. All these projects are designed and built on strong partnerships, and they are useful in the dissemination and appropriation of new knowledge or practices they generate, whether they take place at the local, regional or provincial level. In this sense, opportunities for knowledge transfer and exchange are facilitated at the provincial level and in the regions of Québec.

POLICIES/GUIDELINES TO SUPPORT AFTER-SCHOOL PROGRAMS

Across the province, the Ministry of Health and Social Services is continuing to implement the actions detailed in the government action plan, Investir pour l'avenir. At this level, measures, actions, programs and policies are initiated in municipal affairs, education, transportation, etc. Schools have a policy framework for healthy eating and active living, school corridors, school-municipal agreements to share infrastructure, transport accommodation, etc., and special attention is allowed in order to implement the École en santé approach, one aiming to increase the effectiveness of interventions for health promotion and prevention. When it comes to promotion, tools and campaigns, Kino-Québec offers tools to redesign and stimulate excitement surrounding school grounds and communities so that they are more conducive to physical activity before, during and after school hours. When it comes to school sports, the Federation du sport étudiant disseminates the ISO actif, a ISO type of standard in the school setting. The latter is increasingly popular with schools, and with parents, who can now choose the school their child will attend.

New standards are being established through the promotion of events generating many echoes in the media. Le Grand défi Pierre Lavoie motivates children and their parents to be active by combining cubes of energy (1 cube = 15 minutes); le Tour des enfants (Vélo Québec) and other similar cycling tours in many regions make cycling a family and a highly entertaining event. Plaisir d'hiver et les Rendez-vous d'automne, promoted by Kino-Québec, encourage physical activity in the fall and winter, a time when there is usually a decline in activity. Finally, the International Walk to School day reiterates that walking is an essential function for the development of children.

As a result of all these influences, we now see some trends in different settings not usually engaged in physical activity. For example, in Maisons des Jeunes, teens – often sedentary ones – and young staff are more engaged in physical activity. In rural communities, we see physical activity programs run by young and trained leaders in response to a scarcity of coordinators. The many schools that do not have sports facilities now use municipal facilities or even nearby parks and other green spaces. The municipalities train their day camp instructors specifically in physical activity leadership. To this picture, we must add that the Coalition du poids does not miss an opportunity to reiterate to policy-makers the importance of a physically active lifestyle, while Kino-Québec, with its scientific committee and the Québec National Institute of Public Health, are continuing their outreach efforts and interpreting scientific data so that the public and all sectors of the society feel concerned and informed to take action.

Saskatchewan

AFTER-SCHOOL PROGRAMS

Saskatchewan *in motion*: This is a province-wide movement aimed at increasing physical activity for health, social, environmental and economic benefits. The initiative encourages a minimum of 60 to 90 minutes of daily physical activity for children and youth, and believes this can best be accomplished by a shared responsibility between home, school and community (30 minutes each).

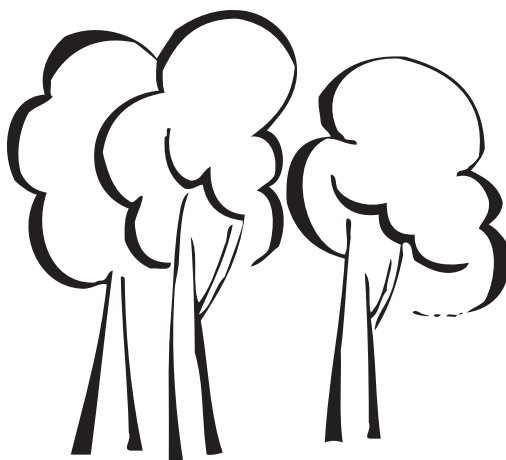
Healthy Kids School Challenge: The Ministry of Education developed this challenge to encourage schools across the province to engage students in daily physical activity over and above what is being taught in the Physical Education curriculum, as well as increase healthy food options in schools. Teachers can register their class online. The challenge officially began on November 1, 2010, and runs for 30 weeks. There are 5 checkpoints during the challenge when teachers can submit their collected class points online. Winners of the challenge will be announced in June 2011. Although the Challenge is primarily geared to the school day, students can earn extra points for additional physical activity at home and in the community.

Spirit Builders is an inter-agency group that runs after-school programs in Balcarres, Saskatchewan. The program was a community response to gang recruitment. Programs are run at Balcarres School from 3:30 to 5:00 p.m., and include Stunt Cheerleading (grades 7-12), Atomic Volleyball-(grades 3-5), Rhythmic Gymnastics (grades 6-12) and Mentoring Basketball (Sr. Boys mentor grades 3-7), which go beyond the school sports teams. All Spirit Builders programs incorporate components regarding healthy eating, healthy choices and staying active.

POLICIES/GUIDELINES TO SUPPORT AFTER-SCHOOL PROGRAMS

School Travel Planning project: This Saskatchewan in motion project works with community stakeholders such as municipal decision makers, school district leaders, public health officials and police to create an environment where walking and biking to school is a viable choice for the greatest number of children possible.

Inspiring Movement – Play Well. Learn Well. Live Well: The Ministry of Education, in partnership with the Ministry of Health and the Ministry of Tourism, Parks, Culture and Sport, developed these Guidelines for Physical Activity in Saskatchewan Schools. Working within a Comprehensive School Community Health Approach, the Guidelines support the commitment of the Ministry of Education to work with school boards to ensure that children and youth engage in 30 minutes of moderate to vigorous physical activity daily. Although the focus is on the school day, the Guidelines recognize that this is as part of the overall goal of 60 to 90 minutes of daily physical activity to be shared at home, at school and in the community. Support materials as well as promising practices are available online at www.education.gov.sk.ca/physical-activity/.



Yukon

SKOOKUM JIM FRIENDSHIP CENTRE (SJFC)

www.skookumjim.com/rec.html

Skookum Jim Friendship Centre's After School Program provides meaningful activity and exercise for Aboriginal and non-Aboriginal children in grades 4 to 7. Since 2003, the program has run from 3:00 – 4:30 PM four times per week with each day in a different Whitehorse school. SJFC's Recreation Coordinator supervises two grade 12 students who provide snacks and lead a blend of afterschool recreational and cultural activities like floor hockey, Arctic Sports and Dene Games, volleyball, basketball, soccer and kickball to a daily average of 20 to 25 children.

RECREATION AND PARKS ASSOCIATION OF THE YUKON (RPAY)

www.rpay.org

RPAY's RHEAL Leader (Rural Healthy Eating Active Living) program has increased efforts to provide activities during afterschool hours. Currently, Yukon's rural students can participate in yoga, aikido, dance, archery and skating. More than 200 rural children and youth developed physical literacy skills through cross-country skiing offered in partnership with Cross Country Yukon.

In 2010-11, CATCH Kids Club (CKC) afterschool programs were offered in Tagish, Faro and Carmacks through RHEAL Leaders. RPAY supported training of 28 CKC leaders in October 2010. Rural CKC leaders may receive a six-month contract from RPAY to provide this active, healthy, afterschool programming for rural Yukon children. (CATCH is the Coordinated Approach to Child Health, www.catchinfo.org)

HEALTHY LIVING BILATERAL AGREEMENT

In 2008, Yukon Government Departments of Health and Social Services and Community Services Sport and Recreation Branch signed a Healthy Living Bilateral Agreement with Canada. The Recreation and Parks Association of the Yukon, a territorial non-government organization and delivery partner to the agreement, provides active, healthy programs and services. In 2010-11, the Healthy Living Bilateral partners focused on supporting active opportunities for rural Yukon children and youth during the afterschool time period.

THE RENEWED YUKON ACTIVE LIVING STRATEGY

Renewal of the Yukon Active Living Strategy in April 2011 prioritizes delivery of quality, accessible afterschool programs designed to increase physical activity amongst children and youth during the afterschool time period. A particular emphasis is placed on the long winter months when activity levels are known to drop.

VIE ACTIVE AT ÉCOLE WHITEHORSE ELEMENTARY SCHOOL

Afterschool programming presents challenges in Canada's Northern communities. One school in Whitehorse is addressing the need for additional physical activity during and outside of school through an initiative which gets students active at the beginning of every day.

École Whitehorse Elementary School (EWES) is the largest elementary and the only French Immersion school in the Yukon. Located in downtown Whitehorse, students from as far as 50 km away are bussed to school. 430 students, one physical education teacher and one gymnasium limits physical education classes to twice per week. With students living distant to school, walking school busses or regular afterschool activities are challenging to implement.

To support physical activity, teachers are creative using Active Living kits for outdoor activities and visiting the local Canada Games Centre for swimming and skating weather and cost permitting.

In 2010-11, EWES added a school goal to address physical well-being and to mandate Vie Active (Active Living) thereby ensuring that all students participate in daily physical activity.

During Vie Active, grades 2-7 staff and students walk, run, skip or play tag around the school's field for 20 minutes at the beginning of each school day. Total laps are calculated as the school "walks" across Canada. Tramping through deep snow provides an additional benefit of increasing the work involved in walking. When the school's cold weather policy of -30°C prevents going outside, students walk the halls and the two flights of stairs. Kindergarten and Grade 1 students do their own activities indoors including Yoga, Aerobic Dancing, Dancing, Scarf Games and running games.

Through Vie Active, the school is working towards its goal of increasing active and healthy living within the curriculum. Students and staff walk at least 1 kilometre per day. Vie Active provides a supportive social context for children to develop attitudes and behaviours leading to a healthy lifestyle.



List of Acronyms

CANPLAY	Canadian Physical Activity Levels Among Youth Survey
CCHS	Canadian Community Health Survey
CFLRI	Canadian Fitness and Lifestyle Research Institute
CHMS	Canadian Health Measures Survey
CP	Cerebral Palsy
CSEP	Canadian Society for Exercise Physiology
CSH	Comprehensive School Health
FPT	Federal, Provincial and Territorial
H&PE	Health and Physical Education
HALO	Healthy Active Living and Obesity Research Group, Children's Hospital of Eastern Ontario Research Institute
HBSC	Health Behaviour in School-Aged Children Survey
ICES	Institute of Clinical Evaluative Sciences
JSCH	Joint Consortium for School Health
MVPA	Moderate-to-Vigorous Physical Activity (e.g., aerobics, jogging, running)
NLSCY	National Longitudinal Survey of Children and Youth
Ophea	Ontario Health and Physical Education Association
PAM	Physical Activity Monitor Survey
PE	Physical Education
SPACC	Survey of Physical Activity in Canadian Communities
TTFM	Tell Them From Me Survey

Methodology and Data Sources

Unlike other report card publications, which often rely on a single data source, The Active Healthy Kids Canada Report Card synthesizes data from multiple data sources, as well as from research literature. The development of indicators and the assignment of grades involve an interdisciplinary Research Work Group, including researchers from across Canada. An annual summary of research data and literature is prepared by staff at the Children's Hospital of Eastern Ontario Research Institute to facilitate the review of the information. Grade assignments are determined based on examination of the current data and literature for each indicator against a benchmark or optimal scenario, assessing the indicator to be an A, B, C, D or F:

A	we are succeeding with a large majority of children and youth
B	we are succeeding with well over half of children and youth
C	we are succeeding with about half of children and youth
D	we are succeeding with less than half, but some children and youth
F	we are succeeding with very few children and youth

Key considerations include trends over time, international comparisons and the presence of disparities. Analysis of trends over time and international comparisons are conducted where possible, as this information is not always available for all indicators. Disparities can be based on disabilities, race/ethnicity, immigration status, geography (provincial/territorial comparisons), socio-economic status, urban/rural setting, gender, age (e.g., adolescence), etc. When evidence of disparities exists, grades are lowered to reflect that we are not reaching the children and youth who may benefit most from physical activity opportunities.

Some indicators are stand-alone, while others are comprised of several components. During the grade assignment meeting, each component of an indicator is assessed. Over the evolution of the Report Card, there has been an attempt to move toward indicators that are broad enough to contain various components in their assessment, so that indicators can become more consistent from year to year.

The following are major data sources used in the 2011 Report Card:

Canadian Fitness and Lifestyle Research Institute (CFLRI;

www.cflri.ca): The CFLRI conducts research, monitors trends and makes recommendations to increase population levels of physical activity and improve the health of all Canadians. Three surveys were included in the Report Card:

- **Canadian Physical Activity Levels Among Youth (CANPLAY)** – Undertaken in partnership with the Public Health Agency of Canada and the Interprovincial Sport and Recreation Council, CANPLAY is designed to collect comprehensive and accurate, objective information on the physical activity levels of Canadian children and youth aged 5 to 19 years (~10,000 children are recruited annually from ~6,000 families). Data are collected using pedometers, which measure the number of steps taken daily. The Report Card includes data collected between 2005 and 2010.
- **Physical Activity Monitor (PAM)** – The PAM was undertaken in partnership with the Fitness/Active Living Unit of the Public Health Agency of Canada, Sport Canada and the Interprovincial Sport and Recreation Council. The PAM is an annual telephone survey that tracks changes in physical activity patterns, factors influencing participation and life circumstances in Canada.

National Longitudinal Survey of Children and Youth (NLSCY): Led by Statistics Canada, the NLSCY is a long-term study of Canadian children that follows their development and well-being from birth to early adulthood. The study is designed to collect information about factors influencing a child's social, emotional and behavioural development, and to monitor the impact of these factors on the child's development over time.

Tell Them From Me (TTFM; www.thelearningbar.com): The TTFM is a School Survey Evaluation System for School Assessment and Evidence-Based Decision-Making. The program offers parent-, teacher- and student-level surveys on a broad range of topic areas. The study is led by Dr. Douglas Willms of the Canadian Research Institute for Social Policy at the University of New Brunswick.

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Acknowledgements

The following individuals have supported and/or contributed to the development of the 2011 Report Card:

Shawna Babcock – KidActive
Michelle Brownrigg – University of Toronto
Tim Gill – Independent writer and researcher, RethinkingChildhood.com
Andrea Grantham – PHE Canada
Becs Hoskins – Child and Nature Alliance
Lynn Lavallée – Ryerson University
Sharon May – PHE Canada
Bob Peart – Child and Nature Alliance
Marlene Power-Johnston – Carp Ridge Forest Preschool

Network Partners

The network partners below have supported and helped circulate The Active Healthy Kids Canada 2011 Report Card on Physical Activity for Children and Youth in each province and territory across Canada:

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Gestion Animation Loisir – Québec
Healthy Eating and Physical Activity Coalition of New Brunswick
Heart and Stroke Foundation of Ontario
Interprovincial/Territorial Sport and Recreation Council
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Nunavut Department of Culture, Language, Elders and Youth, Sport, and Recreation
Ophea
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